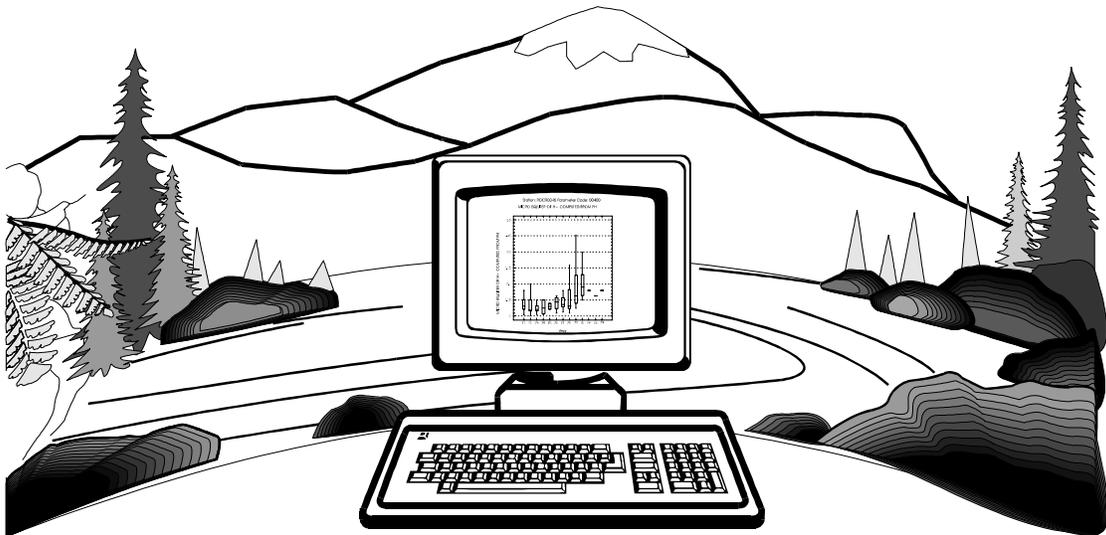

BASELINE WATER QUALITY DATA

INVENTORY AND ANALYSIS

Shenandoah National Park



WATER RESOURCES DIVISION AND SERVICEWIDE INVENTORY AND MONITORING PROGRAM



National Park Service - Department of the Interior
Fort Collins - Denver - Washington

The National Park Service Water Resources Division is responsible for providing water resources management policy and guidelines, planning, technical assistance, training, and operational support to units of the National Park System. Program areas include water rights, water resources planning, regulatory guidance and review, hydrology, water quality, watershed management, watershed studies, and aquatic ecology.

Technical Reports

The National Park Service disseminates the results of biological, physical, and social research through the Natural Resources Technical Report Series. Natural resources inventories and monitoring activities, scientific literature reviews, bibliographies, and proceedings of technical workshops and conferences are also disseminated through this series.

Mention of trade names or commercial products does not constitute endorsement or recommendation for use by the National Park Service.

Copies of this report are available from the following:

Technical Information Center (303) 969-2130
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

U. S. Department of Commerce (703) 487-4650
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

BASELINE WATER QUALITY DATA
INVENTORY AND ANALYSIS
SHENANDOAH NATIONAL PARK

National Park Service
Water Resources Division
Fort Collins, CO 80525

Technical Report NPS/NRWRD/NRTR-2000/264

AUGUST 2000

United States Department of the Interior
National Park Service
Washington, D.C.

EXECUTIVE SUMMARY

This document presents the results of surface-water-quality data retrievals for Shenandoah National Park (SHEN) from six of the United States Environmental Protection Agency's (EPA) national databases: (1) Storage and Retrieval (STORET) water quality database management system; (2) River Reach File (RF3); (3) Industrial Facilities Discharge (IFD); (4) Drinking Water Supplies (DRINKS); (5) Water Gages (GAGES); and (6) Water Impoundments (DAMS). This document is one product resulting from a cooperative contractual endeavor between the National Park Service's (NPS) Servicewide Inventory and Monitoring Program, the National Park Service's Water Resources Division (WRD), and Horizon Systems Corporation to retrieve, format, and analyze surface water quality data for all units of the National Park System containing significant water resources. The primary goal of the project is to provide descriptive water quality information in a manner and format that is both consistent with the goals of the Servicewide Inventory and Monitoring Program and useable by park resource managers. The document provides: (1) a complete inventory of all retrieved water quality parameter data, water quality stations, and the entities responsible for the data collection; (2) descriptive statistics and appropriate graphical plots of water quality data characterizing period of record, annual, and seasonal central tendencies and trends; (3) a comparison of the park's water quality data to relevant EPA and WRD water quality screening criteria; and (4) an Inventory Data Evaluation and Analysis (IDEA) to determine what Servicewide Inventory and Monitoring Program "Level I" water quality parameters have been measured within the study area. Accompanying the report are disks containing digital copies of all data used in the report, as well as all components of the report (tables, figures, etc.).

The results of the retrievals for the study area from the IFD, DRINKS, GAGES, and DAMS databases located 33 industrial/municipal dischargers; ten drinking water intakes; 44 active or inactive U. S. Geological Survey (USGS) and U. S. National Weather Service water gages (including stream, well, and climate); and 22 water impoundments. The results of the STORET retrieval for the study area yielded 234,269 observations for 554 separate parameters collected by the NPS, USGS, EPA, U. S. Forest Service, and Virginia Department of Environmental Quality at 786 monitoring stations from 1930 through 1998. Approximately 49 percent of the 234,269 observations within the study area were entered by the NPS from data collected from 1977 through 1998[†]. Of the 786 monitoring stations, 501 stations were located within the park boundary (see Station Period of Record Tabulation). Thirty-three stations within the study area (one within the park boundary) were established but did not contain data.

Most of the monitoring stations represent either one-time or intensive single-year sampling efforts by the collecting agencies. One-hundred-ninety-one stations within the study area (134 within the park boundary) yielded longer-term records consisting of multiple observations for several important water quality parameters (see Station Period of Record Tabulation). The stations yielding the longest-term records within the park boundary are: (1) Whiteoak Run (SHEN 0185); (2) Madison Run (SHEN 0189); (3) Paine Run (SHEN 0126); (4) Staunton River (SHEN 0333); (5) Piney River (SHEN 0620); and (6) Meadow Run (SHEN 0055). The stations yielding the longest-term records within the study area, but outside of the park boundary, are: (1) South Fork Shenandoah River at Front Royal (SHEN 0756); (2) Hawksbill Creek at the State Route 648 Bridge below Luray (SHEN 0635); (3) South River at the State Route 778 Bridge at Harriston (SHEN 0162); (4) North Fork Shenandoah River approximately 0.1 mile below the U. S. Route 340/522 Bridge (SHEN 0777); (5) South Fork Shenandoah River near the State Route 619 Bridge at USGS gaging station (SHEN 0755)^{††}.

Screening criteria consisting of published EPA water-quality criteria and instantaneous concentration values selected by the WRD were used to identify potential water quality problems within the study area. While the criteria represent important threshold concentrations of pollutants, it is important to remember that criteria may

[†] Approximately 96 percent of the observations entered by the NPS were collected as part of the University of Virginia's Shenandoah Watershed Study (www.people.virginia.edu/~swasftp.html) from 1979 to 1997.

^{††} Water quality station location descriptions are verbatim from STORET. Any misspellings and abbreviations in STORET are replicated in this document.

have been exceeded due to any number of natural or anthropogenic factors, including errors in field, laboratory, and/or recording procedures. The reader is advised to read the Introduction for additional caveats in interpreting the exceeded criteria in this report. The results of the SHEN water quality criteria screen found 21 groups of parameters that exceeded screening criteria at least once within the study area. Dissolved oxygen, pH, chlorine, cyanide, cadmium, copper, lead, mercury, silver, and zinc exceeded their respective EPA criteria for the protection of freshwater aquatic life. Nitrate, nitrite, sulfate, arsenic, cadmium, chromium, lead, mercury, nickel, and methylene chloride exceeded their respective EPA drinking water criteria. Fecal-indicator bacteria concentrations (total coliform and fecal coliform) and turbidity exceeded the WRD screening limits for freshwater bathing and aquatic life, respectively. Alkalinity was below the threshold used by the NPS Air Resources Division for determining potential sensitivity to acid deposition (buffering capacity).

Dissolved oxygen concentrations were measured 5,887 times at 295 monitoring stations from 1967 through 1998. Of the 5,873 observations used in the criteria analysis (see Media Type Screen in the Methodology for explanation), 70 observations at 17 stations, located primarily west of the park boundary, were less than or equal to the 4 milligrams per liter (mg/L) EPA criterion for the protection of freshwater aquatic life from 1967 through 1989.

The pH was measured 16,824 times at 705 monitoring stations from 1945 through 1998. Of the 16,811 observations used in the criteria analysis (see Media Type Screen in the Methodology for explanation), 6,496 observations at 367 stations were outside the pH range of 6.5 to 9.0 standard units (SU) (EPA chronic criteria for freshwater aquatic life) from 1949 through 1998. Five-thousand-nine-hundred-twenty-eight observations were less than or equal to pH 6.5 and 568 observations were greater than or equal to pH 9.0. Approximately 69 percent of the observations outside the criteria were reported from 91 stations within four watersheds, Whiteoak Run, Paine Run, Deep Run, and Madison Run, in the southwest portion of the study area from 1968 through 1998. Of the 6,496 observations outside the criteria, 4,456 observations were reported at 263 stations within the park from 1968 through 1998, including the highest pH of 10.81 SU in East Hawksbill Creek (SHEN 0482) in July 1994. The lowest pH of 1.2 SU was reported in the South River at the State Route 778 Bridge at Harriston (SHEN 0162) in December 1987.

Turbidity was measured 1,527 times at 62 monitoring stations from 1969 through 1998. Of the 1,523 observations used in the criteria analysis (see Remark Code Screen in the Methodology for explanation), 49 observations at 23 stations, located primarily west of the park boundary, equaled or exceeded the WRD screening criterion of 50 Jackson Candle/Formazin/Nephelometric Turbidity Units (JTU/FTU/NTU) from 1969 through 1998. The highest observation of 996 FTU was reported in Hawksbill Creek at the State Route 648 Bridge below Luray (SHEN 0635) in January 1998.

Total coliform concentrations were measured 356 times at 66 monitoring stations outside the park boundary from 1967 through 1977. Two-hundred-twenty-nine concentrations at 52 stations, located primarily west of the park, exceeded the WRD bathing water screening criterion of 1,000 Colony Forming Units/Most Probable Number per 100 milliliters (CFU/MPN/100 ml) from 1967 through 1977. The highest concentration of 460,000 MPN/100 ml was reported twice in Hawksbill Creek at the State Route 648 Bridge below Luray (SHEN 0635) in July 1968 and April 1970. Fecal coliform concentrations were measured 4,252 times at 106 monitoring stations from 1967 through 1998. Of the 4,251 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), 1,915 observations at 85 stations, located primarily west of the park, equaled or exceeded the WRD bathing water screening criterion of 200 CFU/MPN/100 ml from 1967 through 1998. The highest concentration of 160,900 MPN/100 ml was reported twice in the Middle River near the State Route 256 Bridge west of Grottoes (SHEN 0199, SHEN 0200) in July and August 1969.

Total alkalinity was determined by low-level (less than 10 mg/L as CaCO₃) gran analysis 7,837 times at 280 monitoring stations from 1979 through 1997. Seven-thousand-four-hundred-eleven concentrations at 275 stations were less than or equal to the NPS Air Resources Division's 200 microequivalents per liter (µeq/L) threshold, indicating sensitivity to acid deposition, from 1979 through 1997. Approximately 67 percent of these 7,411 observations were reported from 50 stations within four watersheds, Whiteoak Run, Madison Run, Deep Run, and

Paine Run, in the southwest portion of the study area. Of the 7,411 observations less than the NPS threshold, 5,960 observations were reported at 261 stations within the park, including the lowest observation of $-127.2 \mu\text{eq/L}$ in a tributary to Paine Run (SHEN 0156) in March 1993.

Total residual chlorine concentrations were measured 90 times at 16 monitoring stations outside the park boundary from 1974 through 1987. Eight concentrations, ranging from 0.1 mg/L to 0.3 mg/L at seven stations, in the South River (SHEN 0004, SHEN 0162), South Fork Shenandoah River (SHEN 0252, SHEN 0755), Middle River at the State Route 769 Bridge (SHEN 0204), Hawksbill Creek at the State Route 648 Bridge below Luray (SHEN 0635), and North Fork Shenandoah River near the U. S. Route 340/522 Bridge (SHEN 0777), exceeded the acute freshwater criterion of 0.019 mg/L from 1983 through 1985. The highest concentration of 0.3 mg/L was reported at two stations, South Fork Shenandoah River at the State Route 708 Bridge (SHEN 0252) and Hawksbill Creek at the State Route 648 Bridge below Luray (SHEN 0635), in February 1983 and October 1984, respectively.

Total cyanide concentrations were measured 41 times at three monitoring stations outside the park boundary (SHEN 0231, SHEN 0251, SHEN 0786) from 1969 through 1979. One concentration of 0.04 mg/L in the South Fork Shenandoah River at Lynnwood (SHEN 0251) exceeded the acute freshwater criterion of 0.022 mg/L in April 1970.

Nitrate concentrations (including dissolved and total as N and dissolved as NO_3) were measured 12,091 times at 421 monitoring stations from 1930 through 1998. Three total as N concentrations, ranging from 10 mg/L to 22.99 mg/L at three stations, in the South Fork Shenandoah River (SHEN 0252, SHEN 0755) and Middle River at the State Route 769 Bridge (SHEN 0204), equaled or exceeded the drinking water criterion of 10 mg/L for nitrate as N from 1972 through 1989. The highest concentration of 22.99 mg/L was reported in the South Fork Shenandoah River at the State Route 708 Bridge (SHEN 0252) in December 1989.

Nitrite concentrations (including dissolved and total as N and dissolved as NO_2) were measured 4,035 times at 68 monitoring stations from 1968 through 1998. Three total as N concentrations, ranging from 1.859 mg/L to 4 mg/L at three stations, South Fork Shenandoah River at the State Route 708 Bridge (SHEN 0252), Hawksbill Creek at the State Route 648 Bridge below Luray (SHEN 0635), and Happy Creek at Riverton Junction (SHEN 0772), exceeded the drinking water criterion of 1 mg/L for nitrite as N from 1973 through 1982. The highest concentration of 4 mg/L was reported in Happy Creek at Riverton Junction (SHEN 0772) in November 1973.

Sulfate concentrations (including dissolved and total) were measured 10,455 times at 479 monitoring stations from 1930 through 1998. Of the 10,452 observations used in the criteria analysis (see Remark Code Screen in the Methodology for explanation), nine total concentrations, ranging from 259 mg/L to 308 mg/L at two stations in the South Fork Shenandoah River near Front Royal (SHEN 0755, SHEN 0774), exceeded the secondary drinking water criterion of 250 mg/L from 1982 through 1987. Eight of these nine concentrations were reported below the U. S. Route 340/522 Bridge (SHEN 0774), including the highest concentration of 308 mg/L in October 1986.

Arsenic concentrations (including dissolved and total) were measured 312 times at 43 monitoring stations outside the park boundary from 1970 through 1998. One dissolved concentration of 100 micrograms per liter ($\mu\text{g/L}$) in the South Fork Shenandoah River at Lynnwood (SHEN 0251) exceeded the drinking water criterion of 50 $\mu\text{g/L}$ in February 1971.

Cadmium concentrations (including dissolved and total) were measured 425 times at 65 monitoring stations outside the park boundary from 1970 through 1998. Of the 108 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), 20 concentrations at 17 stations exceeded the acute freshwater criterion of 3.9 $\mu\text{g/L}$ and equaled or exceeded the drinking water criterion of 5 $\mu\text{g/L}$ from 1972 through 1980. The highest concentration of 40 $\mu\text{g/L}$ was reported at three stations, North River at Port Republic (SHEN 0231) and South Fork Shenandoah River at Lynnwood (SHEN 0251) in May 1972, and South Fork Shenandoah River below the U. S. Route 340/522 Bridge near Front Royal (SHEN 0774) in October 1979.

Chromium concentrations (including dissolved and total) were measured 645 times at 54 monitoring stations outside the park boundary from 1969 through 1998. Twelve total concentrations at six stations, in Hawksbill Creek near Luray (SHEN 0585, SHEN 0635) and the South River (SHEN 0015, SHEN 0017, SHEN 0033, SHEN 0196), equaled or exceeded the drinking water criterion of 100 µg/L from 1971 through 1976. Eight of these 12 concentrations were reported at two stations in Hawksbill Creek near Luray (SHEN 0585, SHEN 0635) from 1973 through 1976. The highest concentration of at least 16,000 µg/L was reported in the South River at the Broad Street Bridge in Waynesboro (SHEN 0015) in April 1973.

Copper concentrations (including dissolved and total) were measured 642 times at 65 monitoring stations outside the park boundary from 1969 through 1998. Seventy-four concentrations at 25 stations, located primarily west of the park, equaled or exceeded the acute freshwater criterion of 18 µg/L from 1969 through 1979. The highest concentration of 110 µg/L was reported twice in the South Fork Shenandoah River at Lynnwood (SHEN 0251) in February 1971.

Lead concentrations (including dissolved and total) were measured 562 times at 65 monitoring stations outside the park boundary from 1969 through 1998. Fifty-one total concentrations at 23 stations, located primarily west of the park, equaled or exceeded the drinking water criterion of 15 µg/L from 1969 through 1982. The highest concentration of 150 µg/L, reported in the South Fork Shenandoah River near the U. S. Route 33 Bridge (SHEN 0316), also exceeded the acute freshwater criterion of 82 µg/L in February 1977.

Mercury concentrations (including dissolved and total) were measured 589 times at 64 monitoring stations outside the park boundary from 1970 through 1998. Of the 587 observations used in the criteria analysis (see EPA Water Quality Criteria Analysis for Station in the Interpretive Guide To Water Quality Results for explanation), four total concentrations, ranging from 2.2 µg/L to 17.5 µg/L at four stations, in the South Fork Shenandoah River (SHEN 0287, SHEN 0389), Shenandoah River near Front Royal (SHEN 0786), and Happy Creek at the State Route 55 Bridge in Front Royal (SHEN 0750), exceeded the drinking water criterion of 2 µg/L from 1970 through 1979. Three of these four concentrations also exceeded the acute freshwater criterion of 2.4 µg/L. The highest concentration of 17.5 µg/L was reported in the South Fork Shenandoah River near the State Route 649 Bridge (SHEN 0287) in September 1970.

Nickel concentrations (including dissolved and total) were measured 356 times at 43 monitoring stations outside the park boundary from 1969 through 1998. Three concentrations, ranging from 100 µg/L to 150 µg/L at three stations, South River at the U. S. Route 250 (Broad Street) Bridge in Waynesboro (SHEN 0016), South Fork Shenandoah River near the State Route 659 Bridge near Lynnwood (SHEN 0234), and Hawksbill Creek near the Luray Sewage Treatment Plant (STP) (SHEN 0588), equaled or exceeded the drinking water criterion of 100 µg/L during 1973 and 1979. The highest concentration of 150 µg/L was reported in Hawksbill Creek near the Luray STP (SHEN 0588) in May 1973.

Silver concentrations (including dissolved and total) were measured 13 times at 10 monitoring stations outside the park boundary from 1976 through 1998. One total concentration of 10 µg/L in the Shenandoah River at Front Royal (SHEN 0786) exceeded the acute freshwater criterion of 4.1 µg/L in January 1979.

Zinc concentrations (including dissolved and total) were measured 789 times at 65 monitoring stations outside the park boundary from 1967 through 1998. Fifty-four total concentrations at 14 stations equaled or exceeded the acute freshwater criterion of 120 µg/L from 1967 through 1981. Forty-one of these 54 concentrations were reported at five stations near Front Royal (SHEN 0750, SHEN 0755, SHEN 0774, SHEN 0777, SHEN 0784) from 1967 through 1981, including the highest concentration of 860 µg/L in the South Fork Shenandoah River below the U. S. Route 340/522 Bridge (SHEN 0774) in October 1977.

Methylene chloride concentrations were measured once in the Shenandoah River at Front Royal (SHEN 0786) in January 1979. The one concentration of 200 µg/L exceeded the drinking water criterion of 5 µg/L.

The IDEA conducted for SHEN indicates that STORET data exist for all 13 Level I parameter groups in the study area. For three parameter groups (Flow, Chlorophyll, and Toxic Elements), less than 10 percent of the

observations were recorded since 1985. Overall, approximately 63 percent of the observations for Level I parameter groups were recorded since 1985. Data for seven groups (Dissolved Oxygen, Flow, Clarity/Turbidity, Phosphate/Phosphorus, Chlorophyll, Bacteria, and Toxic Elements) were recorded at less than half of the 753 monitoring stations with data. Relative to other parameter groups, data were very limited for the group Chlorophyll. Results for 122 of the 126 EPA priority toxic pollutants (consisting of inorganic and organic parameters, metals, pesticides, and PCB's) were retrieved from STORET.

Surface water resources in the SHEN study area include the South Fork Shenandoah, South, Thornton, Moormans, and many other rivers; Deep, Happy, Hawksbill, Jeremys, Madison, Paine, Whiteoak, and numerous other creeks and runs; Charlottesville Reservoir, Lake Arrowhead, Warren Reservoir, and other impoundments; Big Meadows Swamp; Blackrock, Hogback, Hawksbill, and numerous other springs; and several lakes and ponds. The data inventories and analyses contained in this report indicate that surface waters within the study area appear to have been impacted by natural, exotic, and human activities. Potential natural sources of contaminants include erosion from seasonal storms. Potential exotic sources of contaminants include defoliation from invasive insect infestation. Potential anthropogenic sources of contaminants include industrial and municipal wastewater discharges; quarrying and mining activities; atmospheric deposition; urban and residential development; stormwater runoff; and recreational use.

TABLE OF CONTENTS

EXECUTIVE SUMMARY		v
TABLE OF CONTENTS		xi
I.	INTRODUCTION	1
	Goal	1
	Purpose	1
	Objectives	1
	Document Overview	2
	Caveats	2
	Key Personnel	3
II.	METHODOLOGY	5
	Delineation of Park Study Area	5
	Data Sources	5
	Data Retrieval and Analysis Procedures	7
	Park Unit Databases	8
	Screening Methodologies and Procedures	9
	STORET Edit Criteria	9
	Date Screen	10
	Station Type Screen	10
	Phase 0 Parameter Screen	11
	Phase 1 Parameter Screen	11
	Media Type Screen	11
	Remark Code Screen	11
	Composite Type Screen	13
	Phase 2 Parameter Screen	14
	Observations/Period of Record Screen	15
	Statistical Definitions	17
III.	INTERPRETIVE GUIDE TO WATER QUALITY RESULTS	19
	Overview	19
	Regional Location Map	19
	Water Quality Monitoring Locations Map(s)	19
	Dischargers, Drinking Intakes, Gages, and Impoundments Map(s)	20
	Industrial Facilities Discharges, Drinking Water Intakes, Water Gages, and Water Impoundments Table	20
	Representative Mean Annual Hydrograph for Seasonal Analysis	20
	Contacts for Agency Codes Retrieved	21
	Quantity of Data Retrieved by Agency Code	21
	Station Period of Record Tabulation	21
	Parameter Period of Record Tabulation	22
	Station/Parameter Period of Record Tabulation	22
	Station-By-Station Results	22
	Station Inventory for Station	23
	Parameter Inventory for Station	23
	EPA Water Quality Criteria Analysis for Station	23
	Time Series Plots for Station	24
	Annual Analysis for Station	25
	Annual Box-and-Whiskers Plots for Station	25

	Seasonal Analysis for Station	25
	Seasonal Box-and-Whiskers Plots for Station	26
	EPA Water Quality Criteria Analysis for Entire Park Study Area	26
	NPS Servicewide Inventory and Monitoring Program	
	“Level I” Water Quality Inventory Data Evaluation and Analysis (IDEA)	26
	Water Quality Observations Outside STORET Edit Criteria for Park	28
IV.	WATER QUALITY RESULTS	29
	Overview	31
	Regional Location Map	32
	Water Quality Monitoring Locations Map(s)	33
	Dischargers, Drinking Intakes, Gages, and Impoundments Map(s)	55
	Industrial Facilities Discharges, Drinking Water Intakes, Water Gages, and Water Impoundments Table	61
	Representative Mean Annual Hydrograph for Seasonal Analysis	64
	Contacts for Agency Codes Retrieved	65
	Quantity of Data Retrieved by Agency Code	66
	Station Period of Record Tabulation	67
	Parameter Period of Record Tabulation	79
	Station/Parameter Period of Record Tabulation	87
	Station-By-Station Results	269
	SHEN0001 Upstream of Route 624 Bridge Augusta County	271
	SHEN0002 Route 653 Bridge, South of Waynesboro Augusta Co	273
	SHEN0003 Jones Hollow	278
	SHEN0004 Route 664 Bridge - City of Waynesboro	280
	SHEN0005 South River Near Waynesboro, VA	310
	SHEN0006 Wayne Ave. Bridge	312
	SHEN0007 South R. Wayne St.Br Waynesboro	314
	SHEN0008 South R. Wayne St.Br Waynesboro	315
	SHEN0009 South Riv at Rt 664 059	316
	SHEN0010 Dupont Co. Waynesboro Upstream	318
	SHEN0011 South River at Waynesboro, VA	319
	SHEN0012 Crompton-Shen Waynesboro Otlf 01	320
	SHEN0013 Rt. 684 Bridge	321
	SHEN0014 Jones Hollow	322
	SHEN0015 South Riv at Broad Waynesboro 60	324
	SHEN0016 South R. at Rte 250 Waynesboro,VA	326
	SHEN0017 Route 250 Bypass in Waynesboro - Augusta County	328
	SHEN0018 Vaal521R	335
	SHEN0019 Bridge Street Bridge	337
	SHEN0020 39N 1	339
	SHEN0021 At Hopeman Parkway Bridge	341
	SHEN0022 39Ns 3	343
	SHEN0023 Vaau502R	345
	SHEN0024 Route 811 Bridge	347
	SHEN0025 Sawmill Run Near Dooms, VA	349
	SHEN0026 Downstream Hopeman Parkway	351
	SHEN0027 Sawmill Run	352
	SHEN0028 Sawmill Run	354
	SHEN0029 Sawmill Run	355
	SHEN0030 South R. Rte 611 Br Dooms	356
	SHEN0031 South R. Rte 611 Br Coiners Mill	357
	SHEN0032 South Riv Rt 611 Dooms	358
	SHEN0033 Route 611 Bridge, Near Dooms - Augusta County	360

SHEN0034	Vaal518R	369
SHEN0035	Miles W of Rt 29 Over Moormans R	371
SHEN0036	Vaau504R	372
SHEN0037	Moormans River at Rt 614 Near Whitehall, VA	374
SHEN0038	Porterfield Run Near Crimora, VA	376
SHEN0039	South Fork of Moormans River	379
SHEN0040	Moormans River Near Whitehall, VA	381
SHEN0041	Sugar Hollow Reservoir 50 Ft. Upstream of Dam	382
SHEN0042	S F Moormans River Near Whitehall, VA	383
SHEN0043	Sugar Hollow Reservoir-Lake Center-Albermarle Co	385
SHEN0044	N F Moormans River Near White Hall, VA	389
SHEN0045	Pond Ridge Branch of Moormans River	391
SHEN0046	North Fork of Moormans River	393
SHEN0047	North Fork Moormans River	395
SHEN0048	Mine Branch Near Crimora, VA	396
SHEN0049	North Fork Moormans River	398
SHEN0050	South Riv Near Crimora Rt 612	399
SHEN0051	Rt. 612 Bridge at Crimora	401
SHEN0052	N F Moormans River Bl Big Br Nr Whitehall, VA	408
SHEN0053	Meadow Run Near Crimora, VA	410
SHEN0054	Meadow Run	412
SHEN0055	Meadow Run	414
SHEN0056	Meadow Run	418
SHEN0057	Meadow Run	419
SHEN0058	Meadow Run	420
SHEN0059	Meadow Run Tributary	422
SHEN0060	Meadow Run Tributary	424
SHEN0061	Meadow Run	426
SHEN0062	Meadow Run	427
SHEN0063	Meadow Run Tributary	429
SHEN0064	Meadow Run	431
SHEN0065	Meadow Run Tributary	433
SHEN0066	Meadow Run Tributary	435
SHEN0067	Meadow Run	437
SHEN0068	North Fork Moormans River	439
SHEN0069	Meadow Run Tributary	440
SHEN0070	North Fork Moormans River	442
SHEN0071	Meadow Run	444
SHEN0072	Meadow Run	445
SHEN0073	Big Branch	447
SHEN0074	Big Branch	448
SHEN0075	Big Branch	450
SHEN0076	N F Moormans River Ab Big Br Nr Browns Cove, VA	451
SHEN0077	Big Branch	453
SHEN0078	Meadow Run	454
SHEN0079	Meadow Run	456
SHEN0080	Meadow Run	458
SHEN0081	Meadow Run Tributary	460
SHEN0082	Meadow Run Tributary	462
SHEN0083	Meadow Run	464
SHEN0084	Meadow Run	466
SHEN0085	North Fork Moormans River	468
SHEN0086	North Fork Moormans River	470
SHEN0087	Paine Run Tributary	471

SHEN0088	Paine Run Tributary	473
SHEN0089	Paine Run Tributary	475
SHEN0090	Paine Run Tributary	476
SHEN0091	Paine Run Tributary	478
SHEN0092	Paine Run	479
SHEN0093	Paine Run	481
SHEN0094	Paine Run	482
SHEN0095	Paine Run Tributary	484
SHEN0096	Paine Run Tributary	486
SHEN0097	Paine Run	487
SHEN0098	N F Moormans River Near Browns Cove, VA	488
SHEN0099	N.F. of Moormans River (Blackrock Gap)	490
SHEN0100	Paine Run	492
SHEN0101	Paine Run	494
SHEN0102	Paine Run Tributary	496
SHEN0103	Paine Run Tributary	498
SHEN0104	Paine Run	500
SHEN0105	N.F. of Moormans River (Upper Reach)	501
SHEN0106	Paine Run	503
SHEN0107	Paine Run	504
SHEN0108	Paine Run	506
SHEN0109	Paine Run	508
SHEN0110	Paine Run Tributary	509
SHEN0111	Paine Run Tributary	511
SHEN0112	Paine Run	512
SHEN0113	Paine Run	514
SHEN0114	Paine Run	515
SHEN0115	Paine Run	517
SHEN0116	N F Moormans River Trib Near Browns Cove, VA	518
SHEN0117	Paine Run	520
SHEN0118	Paine Run	522
SHEN0119	Paine Run	524
SHEN0120	Paine Run Tributary	526
SHEN0121	Paine Run Tributary	528
SHEN0122	Paine Run Tributary	529
SHEN0123	Paine Run Tributary	531
SHEN0124	Paine Run Near Harriston, VA	532
SHEN0125	Paine Run	534
SHEN0126	Paine Run	536
SHEN0127	Paine Run	541
SHEN0128	Paine Run	543
SHEN0129	Paine Run	545
SHEN0130	Paine Run	549
SHEN0131	Paine Run	553
SHEN0132	Paine Run	554
SHEN0133	Paine Run	555
SHEN0134	Paine Run	557
SHEN0135	Paine Run Tributary	559
SHEN0136	Paine Run Tributary	561
SHEN0137	Vaal513R	562
SHEN0138	Paine Run Tributary	564
SHEN0139	Paine Run Tributary	566
SHEN0140	Paine Run	567
SHEN0141	Paine Run	569

SHEN0142	Paine Run	570
SHEN0143	Paine Run Tributary	572
SHEN0144	Paine Run Tributary	574
SHEN0145	Paine Run	576
SHEN0146	Paine Run	578
SHEN0147	Paine Run	579
SHEN0148	Doyles River Near Browns Cove, VA	581
SHEN0149	Paine Run Tributary	583
SHEN0150	Paine Run Tributary	585
SHEN0151	Paine Run Tributary	587
SHEN0152	Paine Run	588
SHEN0153	N F Moormans River Trib Near Harriston, VA	590
SHEN0154	Paine Run	592
SHEN0155	Paine Run	594
SHEN0156	Paine Run Tributary	596
SHEN0157	Paine Run	598
SHEN0158	Vaal505R	600
SHEN0159	South R. Rte 778 Br Harriston	602
SHEN0160	South R. Rte 778 Br Harriston	603
SHEN0161	South River at Harriston, VA	604
SHEN0162	Rt. 778 at Harriston	622
SHEN0163	Polecat Draft Near Piedmont, VA	682
SHEN0164	Rt. 776 Bridge (Augusta Co)	685
SHEN0165	Doyles River	691
SHEN0166	Doyles River	692
SHEN0167	Jones Run	693
SHEN0168	Doyles River	695
SHEN0169	Whiteoak Run	697
SHEN0170	Muddy Run Trib Near Boonesville, VA	699
SHEN0171	Whiteoak Run	701
SHEN0172	Whiteoak Run	703
SHEN0173	Whiteoak Run	705
SHEN0174	Luck Run	707
SHEN0175	Whiteoak Run	715
SHEN0176	Whiteoak Run	723
SHEN0177	Luck Run	725
SHEN0178	Whiteoak Run	727
SHEN0179	Whiteoak Run	729
SHEN0180	Whiteoak Run	737
SHEN0181	Whiteoak Run	739
SHEN0182	Whiteoak Run	744
SHEN0183	White Oak Run	746
SHEN0184	Whiteoak Run	748
SHEN0185	Whiteoak Run	750
SHEN0186	Whiteoak Run	775
SHEN0187	Whiteoak Run	776
SHEN0188	White Oak Run Near Grottoes, VA	778
SHEN0189	Madison Run	780
SHEN0190	Madison Run	791
SHEN0191	Madison Run Above White Oak Run Nr Grottoes, VA	793
SHEN0192	Madison Run	795
SHEN0193	Madison Run	796
SHEN0194	Madison Run Near Grottoes, VA	805
SHEN0195	Madison Run	807

SHEN0196	South Riv S of Rt 865 Grottoes63	808
SHEN0197	Big Run	810
SHEN0198	Middle R. Rte 256 Br Wst Grottoe	811
SHEN0199	Middle R. Rte 256 Br W Grottoes	812
SHEN0200	Middle R. Rte 256 Br W Grottoes	813
SHEN0201	Middle River Near Grottoes, VA	814
SHEN0202	Middle River at Rt 256 070	818
SHEN0203	T 769 Br (Formerly Rt 256)	819
SHEN0204	Route 769 Bridge	820
SHEN0205	Eppert Hollow	837
SHEN0206	Ivy Creek Near Boonesville, VA	838
SHEN0207	Big Run	840
SHEN0208	Ivy Creek	841
SHEN0209	Ivy Creek	842
SHEN0210	Deep Run	844
SHEN0211	Deep Run	846
SHEN0212	Ivy Creek	871
SHEN0213	North R. Rte 668 Br NW of Grotto	872
SHEN0214	668 Br	873
SHEN0215	Lower Lewis Run	874
SHEN0216	Rocky Mountain Run	876
SHEN0217	Rocky Mountain Run	877
SHEN0218	Big Run (Upper Reach)	879
SHEN0219	Big Run	881
SHEN0220	Upper Lewis Run Near Lynnwood, VA	882
SHEN0221	Lower Lewis Run	884
SHEN0222	South R. Rte 629 Br Port Republic	885
SHEN0223	South R. Rte 629 Br Port Republic	886
SHEN0224	South Riv at Port Republic 064	887
SHEN0225	Rt. 629 Bridge at Port Republic	888
SHEN0226	Dgif Boat Basin	895
SHEN0227	Lower Lewis Run	897
SHEN0228	Middle R. Rte 629 Br Port Republic	898
SHEN0229	Middle R. Rte 629 Br Port Republic	899
SHEN0230	Big Run	900
SHEN0231	North River at Port Republic, VA	901
SHEN0232	865 Br in Port Republic	906
SHEN0233	North Riv in Port Republic 077	907
SHEN0234	Rt. 659 Bridge Near Lynwood Below Grottoes	908
SHEN0235	Rt. 629/865 Bridge at Port Republic	915
SHEN0236	Lower Lewis Run Trib Near Lynwood, VA	922
SHEN0237	Lower Lewis Run	924
SHEN0238	Lower Lewis Run Near Lynwood, VA	926
SHEN0239	Vage502R	928
SHEN0240	Lower Lewis Run	930
SHEN0241	Vage514R	932
SHEN0242	Big Run (Lower Reach)	934
SHEN0243	Onemile Run	936
SHEN0244	Bearwallow Run (Onemile Run Tributary)	937
SHEN0245	Twomile Run	939
SHEN0246	Twomile Run Tributary	941
SHEN0247	Twomile Run	943
SHEN0248	Twomile Run	945
SHEN0249	Hangman Run Near Rocky Bar, VA	947

SHEN0250	South Fork Shenandoah River Upstream Rt.708 Br.	949
SHEN0251	South Fork Shenandoah River at Lynnwood, VA	950
SHEN0252	Rt. 708 Bridge	953
SHEN0253	S.F.Shen.R. Rte 659 NE Grottoes	971
SHEN0254	S.F.Shen.R. Rte 659 B N Grottoes	972
SHEN0255	Onemile Run	973
SHEN0256	Rt 671 Bridge (Rockingham Co)	974
SHEN0257	Onemile Run	980
SHEN0258	Twomile Run	981
SHEN0259	Twomile Run	983
SHEN0260	Bearwallow Run	985
SHEN0261	Twomile Run	987
SHEN0262	Twomile Run	989
SHEN0263	S F Shenandoah River Near Lynnwood, VA	990
SHEN0264	Onemile Run	992
SHEN0265	Twomile Run	993
SHEN0266	Twomile Run Tributary	995
SHEN0267	Twomile Run	997
SHEN0268	Twomile Run Tributary	999
SHEN0269	Twomile Run	1001
SHEN0270	Twomile Run	1003
SHEN0271	Twomile Run	1004
SHEN0272	Twomile Run	1006
SHEN0273	Twomile Run	1007
SHEN0274	Twomile Run	1009
SHEN0275	Twomile Run	1011
SHEN0276	Twomile Run	1015
SHEN0277	Twomile Run Near MCGaheysville, VA	1016
SHEN0278	Swift Run at Lydia, VA	1018
SHEN0279	Swift Run	1020
SHEN0280	1.3 Miles Upstream of Rt. 649 Bridge	1021
SHEN0281	Vage501R	1022
SHEN0282	Rt. 651 Bridge (Rockingham County)	1024
SHEN0283	Swift Run Near Lydia, VA	1028
SHEN0284	Hawksbill Creek Trib Near Swift Run, VA	1029
SHEN0285	Swift Run	1031
SHEN0286	Swift Run Near Bacon Hollow, VA	1032
SHEN0287	Rt. 649 Bridge	1033
SHEN0288	Rt. 649 Bridge	1040
SHEN0289	Walls Run Near Rocky Bar, VA	1041
SHEN0290	Swift Run Near Swift Run, VA	1043
SHEN0291	Vark505R	1044
SHEN0292	S.F.Shen.R. Rte 649 Br MCGahysvl	1046
SHEN0293	S.F.Shen.R. Rte 649 Br MCGahysvl	1047
SHEN0294	West Swift Run at Swift Run, VA	1048
SHEN0295	South River Near McMullen, VA	1050
SHEN0296	Rt. 613	1052
SHEN0297	Rt. 662 Bridge Madison/Green Counties	1053
SHEN0298	South River	1065
SHEN0299	South River	1067
SHEN0300	Entry Run	1068
SHEN0301	S Fork Shen 2 Mi SW of Elkton	1070
SHEN0302	Vark501R	1072
SHEN0303	Vama501R	1074

SHEN0304	Vark503R	1076
SHEN0305	STP Elkton on Rt 33	1078
SHEN0306	S Fork Shen Rt 33 Elkton	1080
SHEN0307	100 Yds Down From Elkton STP	1082
SHEN0308	Dry Run	1084
SHEN0309	Pocosin Hollow	1086
SHEN0310	Conway River Trib Near Kinderhook, VA	1088
SHEN0311	Route 646 Bridge	1090
SHEN0312	Pocosin Hollow	1092
SHEN0313	Merck&Co,Inc. Elkton Effluent	1093
SHEN0314	S.F.Shen.R. Rte 33 Br Elkton	1094
SHEN0315	S.F.Shen.R. US 33 Br W Elkton	1095
SHEN0316	Rt. 33 Bridge	1096
SHEN0317	S F Shenandoah River at Elkton, VA	1104
SHEN0318	Conway River Near Kinderhook, VA	1108
SHEN0319	Rt. 667	1110
SHEN0320	Big Ugly Run	1111
SHEN0321	S Branch Naked Cr Bl Big Ugly Br Nr Furnace, VA	1113
SHEN0322	Devils Ditch	1115
SHEN0323	Kinsey Run	1117
SHEN0324	Rt. 635 Bridge (Rockingham County)	1119
SHEN0325	Vama502R	1121
SHEN0326	Rapidan River	1123
SHEN0327	Wilson Run (Staunton River Tributary)	1124
SHEN0328	Rapidan River	1126
SHEN0329	Rapidan River Near Graves Mill, VA	1128
SHEN0330	Staunton River Near Graves Mill, VA	1130
SHEN0331	Staunton River	1132
SHEN0332	Staunton River	1133
SHEN0333	Staunton River	1135
SHEN0334	Staunton River	1140
SHEN0335	Staunton River	1144
SHEN0336	Staunton River	1148
SHEN0337	Staunton River	1152
SHEN0338	Staunton River	1153
SHEN0339	Staunton River	1155
SHEN0340	Bush Mountain Stream	1157
SHEN0341	Wilson Run (Staunton River Tributary)	1159
SHEN0342	Wilson Run (Staunton River Tributary)	1161
SHEN0343	Staunton River	1162
SHEN0344	Staunton River Tributary	1164
SHEN0345	Bootens Run	1166
SHEN0346	Staunton River	1168
SHEN0347	Staunton River Tributary	1170
SHEN0348	Staunton River	1172
SHEN0349	Staunton River Tributary	1173
SHEN0350	Staunton River	1175
SHEN0351	Conway River (Upper Reach)	1177
SHEN0352	Rapidan River	1179
SHEN0353	Staunton River	1180
SHEN0354	Staunton River	1181
SHEN0355	Rt. 642 Bridge	1183
SHEN0356	Garth Spring Run (Staunton River Tributary)	1184
SHEN0357	Garth Spring Run (Staunton River Tributary)	1186

SHEN0358	Staunton River Tributary	1187
SHEN0359	Staunton River Tributary	1189
SHEN0360	Staunton River	1190
SHEN0361	Staunton River	1192
SHEN0362	Staunton River	1193
SHEN0363	Staunton River Tributary	1195
SHEN0364	Staunton River Tributary	1197
SHEN0365	Big Creek Near Jollett, VA	1198
SHEN0366	Rt. 603 Bridge (Rockingham/Page County Line)	1200
SHEN0367	Staunton River	1203
SHEN0368	Staunton River Tributary	1205
SHEN0369	Big Creek	1207
SHEN0370	Staunton River	1209
SHEN0371	Rapidan River	1210
SHEN0372	Rt. 649 Bridge	1211
SHEN0373	S Fk Shen Riv at Rt 602 081	1217
SHEN0374	Staunton River	1219
SHEN0375	Rapidan River	1221
SHEN0376	Staunton River	1222
SHEN0377	East Branch Naked Creek Near Jollett, VA	1224
SHEN0378	Rapidan River	1226
SHEN0379	East Branch of Naked Creek	1227
SHEN0380	East Branch Naked Creek	1229
SHEN0381	Rt. 602 Bridge	1230
SHEN0382	S Fork Shen at Rt340 Grove Hill	1237
SHEN0383	S.F.Shen.R. Rte 602 Br Shnandoah	1239
SHEN0384	S.F.Shen.R. Rte 602 Br Shenandoah	1240
SHEN0385	South Fork Shenandoah River Downstream of Rt.602	1241
SHEN0386	Ri. Mi. Near Dam on S Frk Shen. Near Shenandoah	1242
SHEN0387	Vama523R	1253
SHEN0388	West Branch Naked Creek	1255
SHEN0389	STP Shenandoa VA	1256
SHEN0390	Rapidan River	1258
SHEN0391	Laurel Prong	1259
SHEN0392	Mill Prong	1261
SHEN0393	Vama524R	1263
SHEN0394	Rt. 648 (Madison Co)	1265
SHEN0395	Fultz Run	1267
SHEN0396	Fultz Run	1268
SHEN0397	Rose River Tributary	1270
SHEN0398	Rose River Tributary	1272
SHEN0399	Rose River Tributary	1274
SHEN0400	Rose River Tributary	1276
SHEN0401	Rose River	1278
SHEN0402	Rose River	1279
SHEN0403	Rose River	1281
SHEN0404	Rose River	1283
SHEN0405	Rose River	1285
SHEN0406	Rose River	1287
SHEN0407	Rose River Near Syria, VA	1288
SHEN0408	Rose River	1290
SHEN0409	Rose River	1294
SHEN0410	Rose River	1295
SHEN0411	Rose River	1297

SHEN0412	Rose River	1299
SHEN0413	Hogcamp Branch (Rose River Tributary)	1301
SHEN0414	Rose River Tributary	1303
SHEN0415	Hogcamp Branch (Rose River Tributary)	1305
SHEN0416	Rose River & Hog Camp Branch	1307
SHEN0417	Rose River	1309
SHEN0418	Hogcamp Branch	1311
SHEN0419	Hogcamp Branch (Rose River Tributary)	1312
SHEN0420	Rose River	1314
SHEN0421	Rose River	1316
SHEN0422	Hogcamp Branch (Rose River Tributary)	1317
SHEN0423	Vama526R	1319
SHEN0424	Rose River	1321
SHEN0425	Vapa518R	1323
SHEN0426	Rose River	1325
SHEN0427	Ragged Run Near Etlan, VA	1327
SHEN0428	Ragged Run	1329
SHEN0429	Ragged Run	1331
SHEN0430	Vara524R	1332
SHEN0431	Whiteoak System - Cedar Run	1334
SHEN0432	Cedar Run	1335
SHEN0433	Rose River	1337
SHEN0434	Ragged Run	1339
SHEN0435	Ragged Run	1340
SHEN0436	Cedar Run Near Syria, VA	1341
SHEN0437	White Oak Canyon Trib Near Syria, VA	1343
SHEN0438	Whiteoak Canyon Run	1345
SHEN0439	White Oak Canyon (Robinson River)	1347
SHEN0440	Whiteoak Canyon Run	1349
SHEN0441	Whiteoak Canyon Run	1351
SHEN0442	Whiteoak Canyon Run	1352
SHEN0443	Whiteoak Canyon Run	1354
SHEN0444	Rosson Hollow Run Trib Near Etlan, VA	1355
SHEN0445	Berry Hollow Trib Near Nethers, VA	1357
SHEN0446	Whiteoak Canyon Run	1359
SHEN0447	Little Hawksbill	1361
SHEN0448	Berry Hollow	1362
SHEN0449	Whiteoak System - Berry Holl	1364
SHEN0450	Route 613 Bridge	1365
SHEN0451	Whiteoak Canyon Run	1374
SHEN0452	Route 707 (Rappahannock County)	1376
SHEN0453	Whiteoak Canyon Run	1378
SHEN0454	Whiteoak Canyon (Robinson River)	1380
SHEN0455	Negro Run	1382
SHEN0456	Negro Run (Whiteoak Canyon Run Tributary)	1384
SHEN0457	Little Hawksbill Creek Trib Near Ida, VA	1386
SHEN0458	Whiteoak Canyon Run	1388
SHEN0459	Negro Run (Whiteoak Canyon Run Tributary)	1390
SHEN0460	Whiteoak Canyon Run	1392
SHEN0461	Whiteoak Canyon Run	1394
SHEN0462	Old Rag Run	1396
SHEN0463	Brokenback Run Tributary	1398
SHEN0464	Brokenback Run	1400
SHEN0465	Brokenback Run	1402

SHEN0466	Brokenback Run Tributary	1404
SHEN0467	Negro Run (Whiteoak Canyon Run Tributary)	1406
SHEN0468	Brokenback Run	1408
SHEN0469	Brokenback Run	1410
SHEN0470	Brokenback Run	1412
SHEN0471	Route 600 (Madison County)	1414
SHEN0472	Brokenback Run	1416
SHEN0473	Brokenback Run	1420
SHEN0474	Brokenback Run	1421
SHEN0475	Brokenback Run	1422
SHEN0476	Brokenback Run Near Nethers, VA	1424
SHEN0477	Brokenback Run	1426
SHEN0478	Whiteoak Canyon Run	1427
SHEN0479	Brokenback Run	1429
SHEN0480	Vama528R	1431
SHEN0481	Hughes River Near Nethers, VA	1433
SHEN0482	East Hawksbill Creek	1435
SHEN0483	Brokenback Run	1436
SHEN0484	Whiteoak Canyon Run	1438
SHEN0485	Negro Run (Whiteoak Canyon Run Tributary)	1440
SHEN0486	Brokenback Run	1442
SHEN0487	Brokenback Run	1444
SHEN0488	Whiteoak Canyon Run	1446
SHEN0489	Whiteoak Canyon Run	1448
SHEN0490	Hughes River	1449
SHEN0491	Rocky Run at Nethers, VA	1450
SHEN0492	Vara525R	1452
SHEN0493	Whiteoak Canyon Run	1454
SHEN0494	Whiteoak Canyon Run	1456
SHEN0495	Negro Run (Whiteoak Canyon Run Tributary)	1458
SHEN0496	Negro Run (Whiteoak Canyon Run Tributary)	1460
SHEN0497	Whiteoak Canyon Run	1462
SHEN0498	East Hawksbill Creek Near Ida, VA	1464
SHEN0499	Newport Dgif Boat Launch	1466
SHEN0500	Rt. 618	1468
SHEN0501	Vapa515R	1470
SHEN0502	Hughes River	1472
SHEN0503	Hannah Run	1473
SHEN0504	Hughes River	1475
SHEN0505	Hughes River	1477
SHEN0506	Broad Hollow	1478
SHEN0507	Broad Hollow Run	1480
SHEN0508	Hannah Run	1481
SHEN0509	Route 681 - Rappahannock County	1482
SHEN0510	Sams Run (Hazel River Tributary)	1483
SHEN0511	Hazel River	1485
SHEN0512	Hazel River	1487
SHEN0513	Hazel River	1491
SHEN0514	Hazel River Near Nethers, VA	1492
SHEN0515	Hazel River	1494
SHEN0516	Sams Run (Hazel River Tributary)	1495
SHEN0517	Sams Run (Hazel River Tributary)	1497
SHEN0518	Hazel River	1499
SHEN0519	South Fork Dry Run	1501

SHEN0520	Sams Run	1502
SHEN0521	Hazel River	1504
SHEN0522	Hazel River	1506
SHEN0523	Sams Run (Hazel River Tributary)	1508
SHEN0524	Hazel River Tributary	1510
SHEN0525	North Fork Dry Run Tributary	1512
SHEN0526	North Fork Dry Run	1514
SHEN0527	North Fork Dry Run	1516
SHEN0528	North Fork Dry Run	1518
SHEN0529	North Fork Dry Run	1520
SHEN0530	Hazel River	1522
SHEN0531	North Fork Dry Run	1524
SHEN0532	Hazel River Tributary	1526
SHEN0533	Hazel River Tributary	1528
SHEN0534	Hazel River Tributary	1530
SHEN0535	North Fork Dry Run	1532
SHEN0536	Hazel River	1534
SHEN0537	Hazel River Tributary	1535
SHEN0538	Hazel River	1537
SHEN0539	Hazel River Tributary	1539
SHEN0540	North Fork Dry Run	1540
SHEN0541	S F Dry Run Near Fairview, VA	1542
SHEN0542	Rt. 640 Bridge (Page County)	1544
SHEN0543	Hazel River Tributary	1546
SHEN0544	Hazel River	1548
SHEN0545	North Fork Dry Run	1550
SHEN0546	Hazel River	1552
SHEN0547	Hazel River	1554
SHEN0548	Hazel River	1555
SHEN0549	Hazel River Tributary	1557
SHEN0550	Hazel River	1559
SHEN0551	Hazel River	1561
SHEN0552	North Fork Dry Run	1562
SHEN0553	Hazel River	1564
SHEN0554	North Fork Dry Run	1566
SHEN0555	Hazel River	1568
SHEN0556	North Fork Dry Run	1570
SHEN0557	NF of the Dry Run	1571
SHEN0558	North Fork Dry Run	1580
SHEN0559	Hazel River Tributary	1582
SHEN0560	North Fork Dry Run	1584
SHEN0561	Hazel River	1586
SHEN0562	Hazel River	1587
SHEN0563	Hazel River	1589
SHEN0564	Hazel River	1591
SHEN0565	Hazel River	1593
SHEN0566	Lake Arrowhead - Station 100' From Dame Page Co.	1595
SHEN0567	N F Dry Run Near Thornton Gap, VA	1598
SHEN0568	Route 620 Bridge	1600
SHEN0569	Pass Run Near Thornton Gap, VA	1605
SHEN0570	Pass Run	1607
SHEN0571	South Fork Thornton River	1608
SHEN0572	Pass Run	1609
SHEN0573	Rt. 600	1610

SHEN0574	Hawksbill Cr. Off US 340 S Luray	1612
SHEN0575	Vara501R	1613
SHEN0576	South Fork Thornton River	1615
SHEN0577	Vara510R	1616
SHEN0578	Pass Run	1618
SHEN0579	Rt. 522 Bridge	1619
SHEN0580	Pass Run	1625
SHEN0581	Va. Oak Tannery Luray Upstream	1626
SHEN0582	Hawksbill Ck Rt 675Upstream STP	1627
SHEN0583	Route 675 Bridge in Luray	1629
SHEN0584	South Fork Thornton River	1637
SHEN0585	Immediately Below Town of Luray STP	1638
SHEN0586	Rt. 612	1645
SHEN0587	STP Lury Off Rt 340 And	1648
SHEN0588	Town of Luray STP	1650
SHEN0589	Rt. 211 Bridge	1652
SHEN0590	Vapa501R	1653
SHEN0591	Rocky Branch Near Thornton Gap, VA	1655
SHEN0592	Hawksbill Ck Off Rt 340 N of STP	1657
SHEN0593	Hawksbill Cr. Off US 340 N Luray	1659
SHEN0594	NF Thornton River Tributary	1660
SHEN0595	NF Thornton River	1662
SHEN0596	North Fork Thornton River	1666
SHEN0597	NF Thornton River	1667
SHEN0598	North Fork Thornton River	1669
SHEN0599	N F Thornton River Near Sperryville, VA	1671
SHEN0600	NF Thornton River	1673
SHEN0601	NF Thornton River Tributary	1675
SHEN0602	FCWA, Occoquan Reservoir	1677
SHEN0603	NF Thornton River	1678
SHEN0604	NF Thornton River Tributary	1680
SHEN0605	North Fork Thornton River	1682
SHEN0606	NF Thornton River Tributary	1683
SHEN0607	Piney River Near Sperryville, VA	1685
SHEN0608	NF Thornton River	1687
SHEN0609	NF Thornton River Tributary	1689
SHEN0610	NF Thornton River Tributary	1691
SHEN0611	North Fork Thornton River	1693
SHEN0612	NF Thornton River	1694
SHEN0613	Piney River	1696
SHEN0614	Piney River	1698
SHEN0615	Piney River	1700
SHEN0616	Piney River	1702
SHEN0617	Piney River	1704
SHEN0618	Piney River	1705
SHEN0619	NF Thornton River	1707
SHEN0620	Piney River	1709
SHEN0621	Piney River	1714
SHEN0622	Piney River	1718
SHEN0623	Piney River	1722
SHEN0624	North Fork Thornton River	1724
SHEN0625	Piney River Tributary	1725
SHEN0626	Piney River Tributary	1727
SHEN0627	Jeremys Run Tributary	1728

SHEN0628	Piney River	1730
SHEN0629	Jeremys Run Tributary	1732
SHEN0630	Rt. 626 Bridge	1734
SHEN0631	Rt. 658 Bridge	1736
SHEN0632	S Fk Shen Rt 675 Near Luray	1738
SHEN0633	Hawksbill Ck Rt 648Near Mouth	1739
SHEN0634	NF Thornton River	1741
SHEN0635	Route 648 Bridge Below Luray	1743
SHEN0636	NF Thornton River Tributary	1806
SHEN0637	North Fork Thornton River	1808
SHEN0638	NF Thornton River Tributary	1809
SHEN0639	Jeremys Run Tributary	1811
SHEN0640	Jeremys Run Tributary	1813
SHEN0641	Piney River	1815
SHEN0642	NF Thornton River	1817
SHEN0643	Jeremys Run Tributary	1819
SHEN0644	Piney River	1821
SHEN0645	Jeremys Run	1822
SHEN0646	Jeremys Run	1824
SHEN0647	Jeremys Run	1826
SHEN0648	Jeremys Run	1828
SHEN0649	Jeremys Run	1829
SHEN0650	Jeremys Run	1831
SHEN0651	Routes 211/522 Bridge	1832
SHEN0652	Jeremys Run	1838
SHEN0653	Vapa502R	1840
SHEN0654	Jeremys Run	1842
SHEN0655	Jeremys Run Tributary	1844
SHEN0656	Jeremys Run Tributary	1846
SHEN0657	NF Thornton River Tributary	1848
SHEN0658	Jeremys Run Tributary	1850
SHEN0659	Rush River at Washington, VA	1852
SHEN0660	Jeremys Run	1853
SHEN0661	Jeremys Run	1855
SHEN0662	Jeremys Run	1856
SHEN0663	Jeremys Run	1858
SHEN0664	Jeremys Run	1859
SHEN0665	Jeremys Run	1861
SHEN0666	Jeremys Run	1865
SHEN0667	Piney River	1866
SHEN0668	NF Thornton River	1868
SHEN0669	NF Thornton River Tributary	1870
SHEN0670	NF Thornton River	1872
SHEN0671	Jeremys Run	1874
SHEN0672	Piney River	1876
SHEN0673	Piney Branch/Piney Ridge	1877
SHEN0674	Jeremys Run Tributary	1878
SHEN0675	Piney River	1880
SHEN0676	Jeremys Run Near Oak Hill, VA	1882
SHEN0677	Jeremys Run Tributary	1884
SHEN0678	Route 211 (Rappahannock County)	1886
SHEN0679	Jeremys Run	1888
SHEN0680	Jeremys Run	1890
SHEN0681	NF Thornton River	1891

SHEN0682	Piney River	1893
SHEN0683	NF Thornton River Tributary	1895
SHEN0684	NF Thornton River	1897
SHEN0685	Jeremys Run	1899
SHEN0686	Piney River	1901
SHEN0687	Jeremys Run	1902
SHEN0688	Jeremys Run	1904
SHEN0689	Piney River	1906
SHEN0690	Piney River	1908
SHEN0691	Piney River	1909
SHEN0692	Piney River Tributary	1911
SHEN0693	Piney River Tributary	1913
SHEN0694	Rush River at Rt 622 Near Washington, VA	1914
SHEN0695	Jeremys Run	1916
SHEN0696	Piney River	1918
SHEN0697	Piney River	1920
SHEN0698	Piney River	1921
SHEN0699	Piney River	1923
SHEN0700	Piney River	1925
SHEN0701	Piney River Tributary	1926
SHEN0702	Piney River Tributary	1928
SHEN0703	Jeremys Run Tributary	1929
SHEN0704	Jeremys Run	1931
SHEN0705	Jeremys Run	1933
SHEN0706	Piney River Tributary	1934
SHEN0707	Jeremys Run	1936
SHEN0708	Jeremys Run	1938
SHEN0709	Rush River	1940
SHEN0710	Jeremys Run	1942
SHEN0711	Piney River	1944
SHEN0712	Whitig Tract Pond	1946
SHEN0713	Piney River Tributary	1947
SHEN0714	Jeremys Run	1949
SHEN0715	Piney River	1951
SHEN0716	Piney River Tributary	1953
SHEN0717	Jeremys Run	1955
SHEN0718	Vapa505R	1957
SHEN0719	Route 522 (Rappahannock County)	1959
SHEN0720	Route 522 (Rappahannock County)	1961
SHEN0721	Greasy Run Near Browntown, VA	1963
SHEN0722	Overall Run	1965
SHEN0723	Route 522 (Rappahannock County)	1966
SHEN0724	Phils Arm Run Trib Near Browntown, VA	1968
SHEN0725	Phils Arm Run Near Browntown, VA	1970
SHEN0726	Overall Run	1972
SHEN0727	Overall Run	1973
SHEN0728	Bolton Branch	1975
SHEN0729	Bolton Branch	1977
SHEN0730	Smith Creek Near Browntown, VA	1978
SHEN0731	Bolton Branch	1980
SHEN0732	Vawa505R	1981
SHEN0733	Lands Run Near Browntown, VA	1983
SHEN0734	Lands Run	1985
SHEN0735	Lands Run	1986

SHEN0736	Lands Run	1988
SHEN0737	Lands Run	1989
SHEN0738	Gooney Run Near Glen Echo, VA	1991
SHEN0739	Happy Creek Trib Near Glen Echo, VA	1993
SHEN0740	No Name	1995
SHEN0741	No Name	1996
SHEN0742	Mill Run Tributary	1997
SHEN0743	Mill Run	1999
SHEN0744	Karo Landing	2001
SHEN0745	S Fork Shen at Rt 619 Front Royal	2002
SHEN0746	S Fork Shen at Rt 619 Front Royal	2003
SHEN0747	Approx. 1 Mi. Upstream of Rt. 619 Bridge	2005
SHEN0748	Happy Creek at Front Royal, VA	2007
SHEN0749	Vawa519R	2009
SHEN0750	Route 55 Bridge at Front Royal	2011
SHEN0751	Front Royal Upstrm of FMC, Etc.	2019
SHEN0752	S.F.Shen.R. Luray Av Br Frnt Ryl	2020
SHEN0753	S.F.Shen.R. Luray Av Br Frnt Ryl	2021
SHEN0754	Dgif Boat Launch Luray Ave - Warren County	2022
SHEN0755	Rt. 619 Bridge at Gaging Station	2024
SHEN0756	S F Shenandoah River at Front Royal, VA	2082
SHEN0757	FMC Corp. Front Royal Otl #01	2147
SHEN0758	FMC Corp. Front Royal Otl 002	2148
SHEN0759	Front Royal Municipal Tap Water	2149
SHEN0760	Happy Creek Rt 647 Front Royal	2150
SHEN0761	FMC Corp. Front Royal Otl 003	2152
SHEN0762	Happy Creek at Crosby Stadium at Front Royal, VA	2153
SHEN0763	FMC Corp. Front Royal Otl 004	2156
SHEN0764	Allied Chem Co Front Royal of 01	2157
SHEN0765	Front Royal STP on Happy Creek	2158
SHEN0766	Old VA, Inc. Front Royal Otl 01	2160
SHEN0767	SF Shenandoah River Bl Cabin Run at Front Royal	2161
SHEN0768	S Fork Shen Rt 340 Front Royal	2163
SHEN0769	Happy Creek Near Mouth	2165
SHEN0770	S.F.Shen.R. Rte 340 Br Frnt Ryl	2167
SHEN0771	S.F.Shen.R. US 340 Br Frnt Royal	2168
SHEN0772	At Riverton Junction	2169
SHEN0773	Right Side at Three Islands - Warren County	2178
SHEN0774	Approx. 0.4 Mile Below Rt340/522 Bridge	2179
SHEN0775	Approx. 0.4 Mile Below Rt340/522 Bridge	2201
SHEN0776	N Fork Shen Rt 340 Front Royal	2213
SHEN0777	Approx. 0.1 Mile Below Rt. 340/522 Bridge	2214
SHEN0778	N.F.Shen.R. Rte 340 Br Frnt Ryl	2274
SHEN0779	N.F.Shen.R. US 340 Br Front Ryl	2275
SHEN0780	Upstream From Dam	2276
SHEN0781	Power Pool (Warren Co)	2279
SHEN0782	Shenandoah R. Pepco Dam Frnt Ryl	2281
SHEN0783	Riverton Corp. Bridge	2282
SHEN0784	Opposite Front Royal Country Club	2297
SHEN0785	Downstream of Front Royal Country Club	2306
SHEN0786	Shenandoah River at Front Royal	2307
EPA Water Quality Criteria Analysis for Entire Park Study Area		2312
NPS Servicewide Inventory and Monitoring Program		
“Level I” Water Quality Inventory Data Evaluation and Analysis (IDEA)		2316

	<u>Water Quality Observations Outside STORET Edit Criteria for Park</u>	2324
V.	<u>APPENDICES</u>	2327
A.	<u>Computer Files Transmitted With Park Baseline Water Quality Data Inventory and Analysis</u>	A-1
B.	<u>Water Quality Database File Structures</u>	B-1
	<u>Parameter Data File</u>	B-1
	<u>Water Quality Station Data File</u>	B-4
	<u>Industrial Facilities Discharges File</u>	B-6
	<u>Drinking Water Intakes File</u>	B-9
	<u>Water Gage File</u>	B-12
	<u>Water Impoundment File</u>	B-14
	<u>RF3 Structure File</u>	B-18
	<u>RF3 Trace File</u>	B-22
	<u>Catalog Unit Boundary File</u>	B-23
	<u>Encyclopedia File</u>	B-24
C.	<u>STORET Water Quality Control/Edit Checking</u>	C-1
D.	<u>STORET Administrative Parameters</u>	D-1
E.	<u>STORET Parameters Not Suitable for Statistical Analysis</u>	E-1
F.	<u>National EPA Water Quality Criteria Summary</u>	F-1
G.	<u>Inventory Data Evaluation and Analysis (IDEA) Servicewide Inventory and Monitoring Program “Level I” Parameter Groups</u>	G-1
H.	<u>Literature Cited</u>	H-1
I.	<u>Selected General Water Quality References</u>	I-1

INTRODUCTION

The National Park Service's (NPS) Organic Act of 1916 states that the mission of the NPS is to promote and regulate the use of national parks, monuments, and other units "... to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." One task embodied by this mission is preserving and protecting water resources and water dependent environments in parks. Ensuring the integrity of park water quality, due to its importance in sustaining natural, aquatic park ecosystems and supporting human consumptive and recreational use, is fundamental to successfully addressing this task. The first step in ensuring the integrity of park water quality is defining historic and extant water quality.

This document represents one product of an ongoing effort by the NPS Water Resources Division (WRD) and the Servicewide Inventory and Monitoring Program to characterize baseline water quality using existing data at park units containing significant natural resources. This effort was initiated in 1993 by the award of a contract to Horizon Systems Corporation to retrieve, format, and analyze surface water quality data from the Environmental Protection Agency's (EPA) Storage and Retrieval (STORET) database system. The scope of work identified in the Request For Proposals outlined several sequential, interrelated project phases, including, but not limited to: (1) determining the water quality retrieval/query area around each park; (2) downloading and assessing the quality of the data from STORET; (3) generating basic water quality summary statistics and graphic plots; (4) reformatting water quality data for compatibility with the park-based Water Quality Data Management System presently under-development; and (5) providing recommendations concerning possible hardware, software, and personnel options for storing combined park databases in a centralized NPS water quality database. This report documents the results of phases one through four of this effort for this park unit.

Goal

The goal of this document is to provide descriptive water quality information in a format usable for park planning purposes (eg. Water Resources Management Plans, Resource Management Plans, and General Management Plans). The report is designed to characterize baseline water quality rather than assess specific water quality problems at a park. This is consistent with the Servicewide Inventory and Monitoring Program's goal of obtaining basic, "Level I", water quality parameters for key waterbodies at each park (National Park Service 1993). Consequently, this report is best used as a reference document to help design new goal-driven water quality monitoring programs rather than as conclusive evidence of previous or existing water quality problems.

Purpose

The purpose of this report is to inventory existing park water quality data; establish baseline water quality at the park; identify potential water quality problems; and establish a park water quality database. This report is intended to enable park resource managers to compare and contrast water quality data collected as part of ongoing inventory and monitoring programs with historical water quality trends. Additionally, this report is intended to foster better designed park-based water quality inventory and monitoring programs in the future. The water quality databases which accompany this report will also lay the groundwork for establishing a NPS water quality database that will allow Regions and Washington Offices to generate regional and national assessments of park water quality.

Objectives

Specific objectives of the study documented in this report are to:

1. Retrieve water quality and related data from the EPA's STORET and other database systems;
2. Develop a complete inventory of all retrieved data;

3. Produce descriptive statistics and appropriate time series and box-and-whiskers plots of water quality data to characterize period of record, annual, and seasonal central tendencies and trends;
4. Compare water quality data with relevant national EPA water quality criteria on a station-by-station and study area basis;
5. Determine the presence and/or absence of the Servicewide Inventory and Monitoring Program's "Level I" water quality parameters within the study area; and
6. Reformat water quality and other related data for use in the park-based Water Quality Data Management System, presently under-development, and other appropriate analytical tools.

Document Overview

This report is comprised of five chapters. The first chapter, this Introduction, provides a brief statement of the study's background; goal, purpose, and objectives; and the key personnel who helped produce the document. This chapter also contains this brief overview of the document's contents and important interpretive caveats to consider when referring to and using this document. The second chapter focuses on the methods, procedures, and databases that were employed to retrieve and analyze water quality data for the park. The third chapter is the user's interpretive guide to chapter four. Chapter three explains how to interpret all the tables and figures presented in chapter four. Chapter four, which likely comprises the majority of the document (unless there isn't much water quality data for the park), contains detailed inventories, descriptive statistics, graphics, and national EPA water quality criteria comparisons characterizing the park unit's water quality data on a station-by-station basis and over the entire study area. This chapter also contains a comparison of park water quality data with the Servicewide Inventory and Monitoring Program's "Level I" water quality inventory parameters and a listing of water quality observations that were outside the STORET edit criteria range. Chapter five, the Appendices, contains more specialized materials such as the file names and database structures included on floppy disk(s) with this report; STORET edit criteria; national EPA water quality criteria; Servicewide Inventory and Monitoring Program's "Level I" water quality inventory parameters; selected water quality references; and other materials which provide background on the methods, procedures, and databases used or produced by this study.

The water quality and other related data referenced in this report accompany the document on floppy disk. The water quality parameter data file is in DBASE III+¹ format and will be useable in the park-based Water Quality Data Management System presently under-development. The water quality stations, industrial facilities discharges, drinking water intakes, water gages, water impoundments, and River Reach databases are also in DBASE III+ and/or ASCII format for ready-use in Geographic Information Systems (GIS), Computer-Aided Design Systems, or Desktop Mapping Systems.

Caveats

While intended primarily as a reference document, it is important that users peruse the first three chapters and Appendices of this report to better understand and interpret the results presented in chapter four. As a means for identifying potential areas for more intensive study, comparisons of the park's water quality data with relevant national EPA water quality criteria for appropriate designated uses² and with the Servicewide Inventory and

¹The use and/or mention of specific proprietary hardware or software packages is for informational purposes only and is not intended to connote or denote an endorsement.

²The Environmental Protection Agency's Quality Criteria for Water 1995 Final Draft (Silver Book) was the primary source of water quality criteria. In the spirit of the other caveats offered in this section, it is important to recognize that water quality criteria are often revised when new or better information become available.

Monitoring Program's "Level I" water quality inventory parameters have been made. Extreme caution must be exercised in interpreting the results of these comparisons. Observations that exceed water quality criteria may have occurred due to any number of natural or anthropogenic factors, as well as other reasons. For example, STORET is a "user-beware" water quality database system. While there is some rudimentary edit (bounds) checking of any data entered in STORET (See Appendix C), users are basically free to enter their own data. Beyond data entry errors, the possibility of inaccurate data entering the system due to inappropriate measurement techniques, sample mistreatment, and other reasons is a serious concern. Consequently, if observations for a particular parameter frequently exceed the EPA water quality criterion over a prolonged time period, the best approach is to examine in detail the data exceeding the criterion. Questions which should be asked regarding the data include: What water source(s) are manifesting the problem? Does the data make sense? Was it collected by a reputable organization following a sound study plan and employing accepted techniques? If the answers to these questions still cause concern, a specific cause and effect water quality investigation focusing on the parameters of concern may be warranted. Similarly, the absence of particular Servicewide Inventory and Monitoring Program "Level I" water quality parameters from the park only means that no entity or organization has collected and entered this data into the EPA's STORET database. Too frequently, data that are collected in and around NPS units never make it into the EPA's national water quality database. These data may exist in published or unpublished reports, file cabinets, or other databases. Before definitively concluding that no baseline data exist for a particular parameter, these alternative resting grounds for data should be investigated. Such a detailed exploration, however, was beyond the scope of this study.

Key Personnel

Many individuals contributed to the design and implementation of this project. The primary contributors and their roles in the project are briefly mentioned below.

National Park Service, Water Resources Division:

Dean Tucker was the Contracting Officer's Technical Representative responsible for designing, coordinating, and implementing all aspects of this effort.

Mike Matz coordinated and managed the team which prepared all components of the report.

Gary Rosenlieb provided administrative oversight and was involved in quality control for all tasks related to this project.

Barry Long and Roy Irwin reviewed technical tasks and provided water quality expertise related to data analysis.

Gary Smillie provided hydrologic expertise in the determination of hydrologic seasons.

Clint Bassett and Amy Benton helped prepare reports and write the Executive Summaries.

Elizabeth Eisenhauer, Bill Folsom, Scott Ratchford, Jeff Ketcham, and Valdete Celaj provided digital cartographic support, both in determining retrieval/query areas and producing maps and graphics.

Kelli O'Connor, J. Chris Echohawk, Adam Henson, Ryan Shy, Lisa Dummer, Eric Lord, Adriane Petersen, Ronda Burns, Aria Brissette, Nancy O'Keeffe, Brett Atkinson, Paul Sorek, and Cara Ellis uploaded water quality data to STORET prior to report preparation.

Jacque Nolan designed the cover.

Horizon Systems:

Cindy McKay served as Project Manager for Horizon Systems, performed the initial requirements analysis, and was involved in all quality control tasks related to the project.

Alan Cahoon was responsible for automating the procedures which produced the water quality databases and Water Quality Results chapter.

Sue Hanson, P.E., provided technical advice for writing this document.

Dr. Jim Loftis was the data quality analyst for the project.

Armando F. Ballofet, P.E., served as the local technical liaison between Horizon Systems and the NPS.

Other National Park Service:

Several other individuals provided invaluable technical review, comments, administrative support, and/or other assistance, including: Dan Kimball, Bill Jackson, Mark Flora, Gary Williams, John Karish, Brendhan Zubricki, Richard Hammerschlag, Randy Ferrin, Gary Vequist, Mike Martin, Kevin Berghoff, and Dyra Monroe.

METHODOLOGY

This section provides an overview of the procedures and criteria used to retrieve and analyze water quality data for each park unit. Generating baseline water quality data inventories and analyses for all NPS units is a monumental task. To accomplish this undertaking given a very limited budget, the procedures employed to produce each report had to be as generic and automated as possible. Consequently, customization of reports to individual park needs and issues was not feasible. Moreover, such customization was beyond the scope of this effort which was simply intended to produce baseline water quality data inventories for all parks rather than customized issue-driven reports. During the procedure-development stages of the project, specifications for the final product evolved, within the context of the aforementioned resource constraints, to focus on comprehensive water quality baseline data inventories and concise, descriptive statistical examinations of the available water quality data for each park unit. Detailed below are the data sources and final methods and procedures that were used to create the baseline water quality inventories, analyses, databases, and other products for each park unit. A thorough understanding of the limitations of the data sources and procedures described in this chapter and the next (Interpretive Guide to Water Quality Results) is a prerequisite to intelligent use of the results presented in this document.

Delineation of Park Study Area

The first step in retrieving water resources-related data for each park was deciding on a procedure to determine the study area boundary. Since water flows through parks, utilizing the park boundary as a simple query/study area was deemed inadequate. On the other end of the continuum, using the entire watershed as the study area was considered superfluous given: (1) the areal extent of certain park watersheds (eg. the entire Mississippi River); (2) the sheer volume of potentially irrelevant data such a large study area could generate; and (3) the resources required to specify the watershed for each park unit. The approach which was ultimately adopted - a modified hydrologic boundary - reflects a compromise between the park boundary and the entire watershed. Thus the study area employed for each park is an area extending at least three miles upstream and one mile downstream from the park boundary. Although these distances are somewhat arbitrary, this approach is easy to automate and was felt to limit the data retrieved, in most instances, to that of most importance to the park. Extending the query area one mile downstream of the park was intended to capture any data immediately downstream of the park which may reflect the quality of the water in the park. A current (as possible) copy of each park's boundary was obtained in digital format directly from the park or digitized from Regional land status maps, U.S. Geological Survey (USGS) quadrangles, or other sources. Using GIS techniques, the boundary was used to create the three miles upstream, one mile downstream buffer. For a few parks with which WRD water quality specialists were very familiar with potential water quality threats and/or valuable sources of data that may lie just outside the study area, the study area may have been tweaked (enlarged) to cover these areas of concern or interest. Unfortunately, a customized study area was not feasible for all park units. Hence, the three miles upstream, one mile downstream buffer was the primary study area employed for most parks. This study area was transferred to the EPA mainframe computer and used as the basis for all water resources-related data retrievals from the data sources described below.

Data Sources

The EPA maintains many mainframe data systems related to national water resources (U.S. Environmental Protection Agency 1992). Six of these data systems were used for this project:

- STorage and RETrieval System (STORET) - water quality parameter data, locations of sampling stations, descriptive elements about stations and parameters;
- Industrial Facilities Discharge (IFD) - locations of industrial and municipal point source discharge facilities;

- Drinking Water Supplies (DRINKS) - locations of intake pipes for drinking water supplies;
- Water Gages (GAGES) - locations of USGS and other water gages;
- Water Impoundments (DAMS) - locations of most large water impoundments (greater than 10,000 acre feet at normal pool volume) and many smaller impoundments; and
- River Reach File, Version 3 (RF3) - 1:100,000 scale geographical representation of surface waters (rivers, lakes, etc.) with a unique identifier assigned to each surface water segment and connectivity information useful for routing and navigation.

STORET is the national water quality data repository (U.S. Environmental Protection Agency 1989). Water quality data is entered in STORET by public agencies (federal, state, or local) that collect water samples and/or perform laboratory analysis. As such, STORET is a "user-beware" data system. Although the EPA manages the STORET data system and, since November 1983, has imposed some minimum quality control criteria on the data (See Appendix C), data are generated and input to STORET by the "owner" agencies. Consequently, the EPA does not certify any data within STORET. Currently, there are over 800,000 active and inactive sampling stations and more than 225 million observations covering in excess of 13,000 water quality parameters entered in STORET. The earliest data dates back to the turn of the century. Using the bi-monthly update cycle, user agencies may store results of recent monitoring activities in STORET. Included in STORET is USGS WATSTORE water quality data, which is updated on a monthly basis. Although STORET contains a phenomenal amount of data, it is important to note that data exist in STORET only if the collectors decide to upload their data to the system. Since many agencies and researchers do not upload their data to STORET, the absence of water quality data in the system for a particular area doesn't mean that there has never been any water quality data collected for the area. The data may exist in published or unpublished reports, file cabinets, or in agency-specific databases. Identifying and retrieving these other sources of data were beyond the scope of the present effort. All parameter data and water quality station location data downloaded from STORET within the park's study area are included in DBASE III+ format files on disk(s) accompanying this report (See Appendices A and B).

The data within the IFD database are extracted from the EPA's Permit Compliance System (PCS). IFD contains the facility locations of all industrial and municipal dischargers which require a National Pollutant Discharge Elimination System (NPDES) permit to operate. Over 7,100 municipal, federal, and industrial facilities discharging into the waters of the United States are tracked by PCS and IFD. If any industrial facilities discharges exist within the study area, a file in DBASE III+ format documenting a variety of information about each discharge accompanies this report on disk (See Appendices A and B).

The EPA DRINKS database identifies locations of drinking water supply intakes. This file contains data for 850 supplies which serve more than 25,000 people, and 6,800 supplies which serve between 1,000 and 25,000 people. If any drinking water intakes exist within the study area, a file in DBASE III+ format documenting a variety of information about each intake accompanies this report on disk (See Appendices A and B).

The GAGES data originates primarily with the USGS and copies are maintained on the EPA mainframe computer for ease of integration with other EPA national data systems. Although other agency's water gages, as well as some artificial gages, may appear in GAGES, the vast majority of gages are stream gages belonging to the USGS. The GAGES database contains approximately 36,000 records for both active and inactive gaging stations. If any USGS or other agency stream gages occur within the study area, a file in DBASE III+ format documenting several fields of information about each gage accompanies this report on disk (See Appendices A and B).

The Water Impoundment database was originally compiled by the U.S. Army Corps of Engineers in response to a Congressional inquiry on dam safety hazards (GKY and Associates 1990). The EPA subsequently modified the database for use in water quality investigations. Of the 68,155 dams in the database, 2,125 are considered large (impounding 10,000 acre feet or more at normal pool volume). It is important to note that while the database includes entries for 66,030 smaller dams, estimates place the actual number of dams in the U.S. at several million

(including small farm ponds). If any water impoundments occur within the study area, a file in DBASE III+ format documenting several fields of information about each impoundment accompanies this report on disk (See Appendices A and B).

The RF3 data system is a hydrologic database of surface water features across the U.S. (excluding, at present, Idaho, Oregon and Washington, which currently operate a different system - although this data is expected to be converted to RF3 soon, Alaska and Hawaii). RF3 was created primarily from 1:100,000 scale USGS Digital Line Graph data. RF3 is made up of over 3,000,000 individual "reaches". A reach is generally defined as a portion of surface water between two confluences (U.S. Environmental Protection Agency 1993). The linework underlying RF3 contains over 95,000,000 coordinate points. RF3 is designed to facilitate hydrologic routing, identifying upstream and downstream elements, and specifying the exact location of any point on a stream network. RF3 data exists as a series of traces with associated attributes. The EPA project which is producing RF3 is being conducted in three phases: Compilation, Assessment, and Revision. The Compilation phase is complete except for Idaho, Washington, Oregon, and Alaska. The Assessment phase was completed during the first half of 1994; while the Revision phase was begun in March 1994. One important outcome of the Revision phase is that the reach codes which uniquely identify each surface water feature will change. Consequently, these codes should not be used, at this time, as keys for relating other data to RF3. The RF3 data provided with this document is provisional and should be used only to provide a geographic backdrop for the park's water quality data. RF3 data covering each USGS catalog unit (a geographic area representing a single or multiple drainage basin(s), or some other distinct hydrologic feature (U.S. Geological Survey 1982)) touched by the park's study area is included in ASCII export and DBASE III+ formats on the disk(s) accompanying this report (See Appendices A and B).

For additional information on any of these data systems, contact the EPA Office of Water at (202) 260-7028.

Data Retrieval and Analysis Procedures

The six EPA data systems discussed above reside on the EPA mainframe computer located in Research Triangle Park, N.C. Horizon Systems used a dedicated, leased telephone line with a data transfer rate of 9600 bits per second to download data occurring within the park's study area from all the databases. The bisynchronous communication software and hardware provided error checking during all data transfer procedures.

As described above, the park study/query area boundary was used to select the water quality stations, industrial facilities discharges, drinking water intakes, water gages, water impoundments, and river reaches associated with the park unit. For various reasons, screening criteria (described later in this section) were employed to select appropriate water quality stations, parameters, and observations. Horizon Systems wrote several mainframe programs to automate, to the greatest extent feasible, the STORET data retrieval and storage procedures. Once the data were extracted from the EPA data systems, they were downloaded to a microcomputer for statistical analyses and reformatted into DBASE III+ compatible format.

Specifically, once on the PC, the data were processed to:

- (1) Reformat the data into DBASE III+ format and other database structures;
- (2) Eliminate questionable data outside the STORET edit criteria ranges (See Appendix C);
- (3) Display on a map the location of water quality monitoring stations and other water resources themes;
- (4) Determine the frequency of water quality observations by station, parameter, and station/parameter;
- (5) Generate descriptive period-of-record water quality statistics in a tabular format;
- (6) Generate appropriate descriptive annual and seasonal analyses of the water quality data in a tabular format;
- (7) Plot appropriate period of record time series and annual and seasonal box-and-whisker graphs;
- (8) Compare the water quality data against relevant EPA national criteria; and

- (9) Compare the water quality data against the NPS Servicewide Inventory and Monitoring Program's "Level I" water quality parameters.

Special customized microcomputer programs (primarily written in Clipper and Microsoft Professional BASIC) and procedures were created to address each of these tasks. All reformatted database files are included on disk(s) accompanying this document. The contents of these databases are described briefly below. Complete database structures are included in Appendices A and B. The descriptive water quality tabular statistics (see "Statistical Analyses" below) were computed based upon NPS specifications. Command or batch files were generated to drive STATGRAPHICS 7.0 in order to produce all the time series and box-and-whiskers plots.

Park Unit Databases

Up to seven digital databases in DBASE III+ and other formats have been created for the park by querying the water resources-related data sources described above. The disk(s) containing these databases accompany the report. The contents of each of these databases are discussed briefly below. More detailed documentation of these databases is included in Appendices A and B.

- (A) Water Quality Parameter Data: This database includes all the water quality parameter data downloaded from STORET that passed the STORET Edit Criteria, Date, Station Type, and Phase 0 Parameter screens (described below) and is summarized tabularly and graphically in this document. This constitutes the park's baseline water quality data. Since it is already in digital format, more sophisticated analysis of the data is possible than the descriptive statistics and graphics presented here.
- (B) Water Quality Station Locations: This database consists of the STORET header information describing each station where water quality data was collected. As the latitude and longitude of the station are included in the database, this file is easily imported into the park's GIS.
- (C) Industrial Facility Discharge Locations: This database includes any industrial or municipal point source discharges located within the park's study area. As the latitude and longitude of each discharge facility are included in the database, this file is easily imported into the park's GIS.
- (D) Drinking Water Intake Locations: This database includes any drinking water intakes located within the park's study area. As the latitude and longitude of each intake are included in the database, this file is easily imported into the park's GIS.
- (E) Water Gage Locations: This database includes water (stream, lake, estuary, well, spring, climate, or other) gages located within the park's study area. Most of the gages will likely be stream gages belonging to the USGS. As the latitude and longitude of each gage are included in the database, this file is easily imported into the park's GIS.
- (F) Water Impoundment Locations: This database includes any water impoundments (dams) located within the park's study area. As the latitude and longitude of each impoundment are included in the database, this file is easily imported into the park's GIS.
- (G) River Reach Data: This database includes all stream traces (1:100,000 scale) and attributes for reaches falling within any USGS catalog unit that touches the park's study area. The traces are geo-referenced in ASCII format. The attributes are in both ASCII export and DBASE III+ formats. This information is also readily incorporated into the park's GIS.

The absence of any of these seven files from the disk(s) accompanying the report indicates that there was either no data of this type within the park's study area or the data was unavailable. Several other files are included on the disk(s) accompanying this report, including digital copies of all the figures and tables contained in the document and some other items. Refer to Appendices A and B for detailed documentation of these files. Not included on

disk is an Encyclopedia File (for WRD reference) that documents the minimum and maximum values for each water quality parameter and the parks in which those values were recorded. When Baseline Water Quality Data Inventory and Analysis reports have been completed for all parks, this Encyclopedia File will be available upon request from the NPS WRD.

Screening Methodologies and Procedures

Developing automated or semi-automated procedures to produce baseline water quality inventories and analyses for all national park units required constant testing and debugging of procedures. Three parks, Rock Creek Park, Yellowstone National Park, and Indiana Dunes National Lakeshore, were used to pilot test and refine the automated procedures. It became evident, after a preliminary analysis of all the downloaded STORET data, especially for Indiana Dunes National Lakeshore, that the specifications for the graphical analyses could generate hundreds (possibly thousands) of plots, many of which would not necessarily be useful. Also, there were many stations; parameters; and/or observations downloaded that were not part of the study's objectives; not overly useful; or of dubious quality. In order to reduce the number of graphical plots (time series, annual and seasonal box-and-whiskers) to fit within project resources, various screening criteria were investigated. Ultimately, a comprehensive set of screening criteria were developed to reduce the number of graphical plots. After initial counts of the total number of possible time series and annual and seasonal box-and-whiskers plots were generated, these counts were used to decide which screening criteria would be applied to limit the number of these plots produced for the park unit. Additional screening criteria were employed to restrict the tabular descriptive statistics results to only those deemed useful to the park. Table A provides the categories of screening criteria and to which analyses the screens were applied. A "yes" entry in the table means that the screening category eliminated or prevented data from appearing in certain tables and plots contained in the document. Consequently, in understanding how data from STORET was used in this report, it may be helpful to keep in mind the three general types of screening criteria: (1) screens that apply to stations; (2) screens that apply to certain parameters at stations; and/or (3) screens that apply only to particular observations of parameters at stations. A detailed description of each of the screening criteria categories follows this table. *It is important to note that statistics in "Inventory" reports may not be consistent with statistics in "Overview" reports since different categories of screening criteria were applied.* Also, if attempting to replicate the results of the statistical and graphical analyses presented in this document, be sure to follow the same screening methodologies.

STORET Edit Criteria

As mentioned previously, STORET is a "user-beware" data system. As the EPA doesn't certify any data in STORET, public agencies enter and are responsible for the quality of their own data. Only data entered since November 1983 have been subjected to any rudimentary edit/bounds checking. Agencies entering data since this date can elect to override the edit/bounds checking for individual observations. USGS WATSTORE water quality data is entered into STORET without any EPA edit/bounds checking to ensure data integrity between WATSTORE and STORET. Unfortunately, during the course of our pilot tests, erroneous USGS and EPA water quality data values were discovered. In order to eliminate as much "bad" data as possible, all water quality data downloaded from STORET was subjected to automatic edit/bounds checking (STORET Edit Criteria contained in Appendix C) for the 190 most common parameters. Observations falling outside the STORET Edit Criteria were documented (See the Water Quality Observations Outside STORET Edit Criteria for Park section in the Water Quality Results chapter) and then retained or discarded from the database and all tables and plots based on whether the value was judged as being in the realm of possibility. Although the STORET Edit Criteria screen likely removed some "bad" data for these common parameters, the probability of other erroneous data in the database is high. Be sure to consult the Caveat section in the Introduction.

Table A. Categories of Screening Criteria and to Which Output Products They Apply (A "yes" Entry Means the Screening Category Eliminated or Prevented Data From Being Used in the Product):							
Screening Category	Data Download	Overview Tables	Inventory Tables	Annual Tables	Seasonal Tables	Standards Tables	Plots (All)
STORET Edit Criteria	yes	yes	yes	yes	yes	yes	yes
Date	yes	yes	yes	yes	yes	yes	yes
Station Type	yes	yes	yes	yes	yes	yes	yes
Phase 0 Parameter	yes	yes	yes	yes	yes	yes	yes
Phase 1 Parameter	no	no	yes	yes	yes	yes	yes
Media Type	no	no	yes	yes	yes	yes	yes
Remark Codes	no	no	yes	yes	yes	yes	yes
Composite Type	no	no	yes	yes	yes	yes	yes
Phase 2 Parameter	no	no	no	no	no	no	yes
Observations/Period of Record	no	no	no	yes	yes	no	yes

Date Screen

Every water quality observation in STORET typically has a sampling date associated with it. Unfortunately, STORET does not prevent users from entering incorrect dates. Consequently, any water quality observation with an incorrect and/or suspect date (eg. a month greater than 12; a day greater than 31; or a sample date later than the STORET retrieval date) were discarded.

Station Type Screen

STORET contains data from a wide variety of stations classified by the type of waterbody in which samples were collected. As this project's purpose was to inventory and analyze surface-water quality, the following surface-water station types were retrieved (clarification provided in parentheses):

Station Types Included In Retrieval

- (a) STREAM
- (b) CANAL
- (c) LAKE
- (d) RESERV (Reservoir)
- (e) SPRING
- (f) FWTLND (Fresh Water Wetland)
- (g) SWTLND (Salt Water Wetland)
- (h) ESTURY (Estuary)
- (i) OCEAN

Ground water and/or other station type data may have been retrieved if the entering agency classified the station type incorrectly. Rectifying this error was beyond the scope and resources of this project.

Phase 0 Parameter Screen

Nearly all water quality parameters associated with each station type listed above were retrieved. The only exception to this was the exclusion of most of the STORET administrative parameters. A complete list of STORET administrative parameters is included in Appendix D. The few administrative parameters that were included in the retrievals are as follows:

<u>Code</u>	<u>STORET Administrative Parameter Description</u>
00027	Code No. for Agency Collecting Sample
00028	Code No. for Agency Analyzing Sample
00063	Sampling Points, Number of In a Cross Section
00111	Ratio of Fecal Coliform to Fecal Streptococci
00115	Sample Treatment Code (1=Raw, 2=Treated)
34772	NPDES Number, Cross Reference
45580	Method of Analysis
74065	Stream Flow Class
74066	Annual Runoff
74067	Soil Classification
74068	Water Quality Designated Use Classification

Phase 1 Parameter Screen

Some of the data retrieved from STORET was not suitable for statistical or graphical analysis. Consequently, this screening criterion eliminated all parameters which were not suitable for statistical or graphical analysis within the context of this project. The full list of these parameters is presented in Appendix E. Examples of parameters excluded from statistical and graphical analysis include the administrative parameters mentioned above, land use acreage, encoded values, dates, latitude/longitude, etc. Excluded parameters do, however, appear in the Parameter Period of Record and Station/Parameter Period of Record (two of the "Overview" Tables), as well as in the water quality parameter file included on disk(s) accompanying this report.

Media Type Screen

Water quality samples can be taken in a variety of aqueous media. Water quality data were retrieved from STORET only if the media were WATER or VERT (vertically integrated). WATER and VERT samples comprise the overwhelming majority of samples in STORET. The media screen eliminated the following water quality sampling media:

<u>Media Screen</u>	<u>Description</u>
BOTTOM	Sampled At the Bottom
DREDGE	Sampled By Dredge
PORE	Pore Sample
CORE	Core Sample

Remark Code Screen

STORET enables the agency collecting water quality samples to provide a qualifying remark for each parameter observation. These remarks provide additional information about the measured or observed value entered into STORET (See Appendix B - Parameter Data File for a complete listing and description of all remark codes). Based on the STORET remark codes, two potential screens were applied to water quality observations based on whether the measured value was used in subsequent analyses: (1) Elimination or (2) Modification/Inclusion.

Elimination:

Non-composite water quality parameters with the remark codes presented in Table B were eliminated from the period of record, annual, and seasonal descriptive statistics and graphics. Not including observations with these remarks was justified by the fact that most of the remarks: (A) indicate either less confidence in the measured value; (B) are remarks for nominal or categorical data that doesn't lend itself to statistical analysis; or, (C) complicate the statistical analysis beyond the scope of this effort. Observations containing these remark codes comprise a very small fraction of the data. Although statistical analyses weren't undertaken on this data, all water quality observations, regardless of remark code, are included on disk(s) accompanying this report. If you re-analyze this data in order to replicate the results presented here, be sure to eliminate all non-composite observations with the remark codes presented in Table B.

Table B. Non-composite Parameters With the Following Remark Codes Were Eliminated From Statistical and Graphical Analysis:	
Remark Code	Description of STORET Remark Code
F	Female Species.
J	Estimated, Not the Result of Analytic Measurement.
M	Presence Verified, But Not Quantified, Below Quantification Limit. For Species, Male. For Oxygen Reduction Potential, Indicates Negative Value.
N	Presumptive Evidence of Presence.
O	Analysis Lost.
V	Analyte Was Detected In Sample and Method Blank.
W	Less Than Lowest Value Reportable Under Remark "T".
Z	Too Many Colonies Were Present to Count (TNTC), Value Represents Filtration Value.

Modification/Inclusion:

Water quality parameter observations with the remark codes presented in Table C were halved prior to inclusion in period of record, annual, and seasonal descriptive statistics and graphics. These remark codes deal with observations that were below the detection limit for the parameter. The common water quality data analysis convention for these remark codes is to use half of the detection limit in statistical analyses (Ward, Loftis, and McBride 1990; Gilbert 1987). Although this is a somewhat defensible treatment of observations below the detection limit, the statistics that may be computed using these halved values may not be defensible. Consequently, any computed statistics in inventory, annual, or seasonal tables that are comprised of 50% or more K, T, and U remark codes are footnoted "Computed with 50% or more of the total observations as values that were half the detection limit." This will provide the user with some caution in using and interpreting these results. Water quality data included on disk(s) accompanying this report that may have these remark codes are stored as the original entry (detection limit). If you re-analyze this data in order to replicate the results presented here, be sure to substitute half the detection limit value in the database whenever these remark codes are encountered.

Table C. The Value of Water Quality Parameters With the Following Remark Codes Were Halved (Half of the Detection Limit Entered In STORET) Prior to Inclusion In Descriptive Statistics and Graphics:	
Remark Code	Description of STORET Remark Code
K	Off-scale Low, Actual Value Not Known, But Known to Be Less Than Value Shown.
T	Less Than Detection Criteria.
U	Analyzed For But Not Detected, Value is Detection Limit For Process Used. If Species, Undetermined.

Composite Type Screen

Sometimes data entered in STORET represent something other than a single measurement at one location at one point in time. These samples are typically referred to as composite samples due to the fact that they vary temporally and spatially. Consequently, the observation entered into STORET for composite data is typically a computed value that summarizes the data over time and/or space. Such data complicate statistical and graphical analyses and must be handled separately. Such treatment was beyond the scope of this study; although composite values typically represent only a fraction of STORET observations. The composite type screen eliminates all composite observations from statistical and graphical analyses, except those with a composite type code of "A" that have a one day or less sampling period and those with a composite type code "D". All water quality observations, regardless of composite type code, are included on disk(s) accompanying this report. If you re-analyze this data in order to replicate the results presented here, be sure to exclude all composite observations except those with a code of "A" that have a one day or less sampling period and those with a code of "D". Table D presents a list of possible STORET composite type codes.

Table D. Possible STORET Composite Type Codes	
Composite Type Code	STORET Composite Type Description
A	Average
H	Maximum
L	Minimum
N	Number of Observations
#	Number of Observations
S	Standard Deviation
U	Sum of Squares
V	Variance
C	Coefficient of Error
X	Coefficient of Variance
E	Skewness
F	Kurtosis
Z	Number of Obs. That Exceed An Established Limit
%	Precision
\$	Accuracy
B	N/A
D	Indicates Replicate Sample

Phase 2 Parameter Screen

Due to budgetary limitations, the number of graphical plots (time series, annual and seasonal box-and-whiskers) produced had to be manageable - typically no more than 100 total plots. After scrutinizing the results of the pilot tests and the Baseline Water Quality Data Inventory and Analysis Reports produced for the first group of parks, the 19 parameters which, typically, were the most frequently measured at nearly all stations were water temperature, stage, discharge, and various meteorological measurements (See Table E). Consequently, most of the graphical plots produced would be of water temperature, stage, discharge, and meteorological conditions. Although these are important parameters, particularly in conjunction with other water quality parameters, it was felt that plotting resources would be better allocated to other water quality parameters. Consequently the STORET parameter codes listed in Table E never generated graphical plots. It is important to note, however, that these parameters are included in all other aspects of the project, including all applicable period of record, annual, and seasonal descriptive statistics tables.

Table E. Frequently Measured STORET Codes That Were Prevented From Generating Plots	
STORET Parameter Code	STORET Parameter Description
00003	Sampling Station Location, Vertical (Feet)
00010	Water Temperature (Degrees Centigrade)
00020	Temperature, Air (Degrees Centigrade)
00021	Temperature, Air (Degrees Fahrenheit)
00025	Barometric Pressure (MM of HG)
00032	Cloud Cover (Percent)
00035	Wind Velocity (Miles Per Hour)
00036	Wind Direction in Degrees from Trun N (Clockwise)
00040	Wind Direction (Azimuth)
00045	Precipitation, Total (Inches Per Day)
00046	Precipitation, Total (Inches Per Week)
00052	Humidity, Relative (Percent)
00061	Stream Flow, Instantaneous (CFS)
00065	Stream Stage (Feet)
81903	Depth of Bottom of Water @ Sample Site (Feet)
82553	Rainfall In 1 Day Inclusive Prior to Sample (Inches)
82554	Rainfall In 7 Days Inclusive Prior to Sample (Inches)
82371	Rainfall In 3 Days Inclusive Prior to Sample (Inches)
82372	Rainfall In 14 Days Inclusive Prior to Sample (Inches)
85599	Precipitation, Total/Period-Rain Equivalent (Cm/Sample)

Observations/Period of Record Screen

Despite never plotting water temperature, stage, discharge, and meteorological measurements, the number of plots generated by some parks still exceeded the 100 plot limit. Also, some rationale was needed to plot only those parameters with sufficient data density to make a meaningful statistical graphic. For example, time series plots comprised of only a few observations or annual or seasonal box-and-whiskers plots with limited observations and/or data in only one or two years or seasons are not very informative. Consequently, a number of plotting criteria were developed to limit the number of time series and box-and-whiskers plots to, at most, 100 informative graphics by using each parameter's number of observations and period of record. Similar, albeit less stringent criteria, were used for including results of annual and seasonal analyses in descriptive statistics tables. Consequently, there are more summaries of annual and seasonal results in tables than in graphics. Whenever an entry in an annual or seasonal table generated a plot, this entry was footnoted to notify the reader of the presence of the graphic. Due to differing quantities of data at parks, different screening criteria were employed. The same

criteria for appearance in seasonal and annual tables were used for all parks. Table F presents the least stringent plot screens.

Table F. Least Stringent Plot Screening Criteria Used to Limit the Number of Plots Generated

<p>Time Series:</p> <p>To generate a time series plot, a station/parameter combination must have a period of record of at least 2 years and a total of at least 8 observations.</p> <p>Annual Analysis:</p> <p>To generate an annual box-and-whiskers plot, a station/parameter combination must have at least 9 observations in each of at least 4 years. The years do not have to be consecutive.</p> <p>Seasonal Analysis:</p> <p>To generate a seasonal box-and-whiskers plot, a station/parameter combination must have at least 9 observations in each of 2 seasons and a period of record of at least 6 years and observations in at least 3 of the 6 years. The years do not have to be consecutive.</p>
--

The exact three plot screens used varied by park unit and are documented in the Overview section of the Water Quality Results chapter. If your park's plotting criteria deviated from these least stringent criteria, it is because too many plots would have been generated using these criteria.

The criteria used for appearance of station/parameter combinations in annual and seasonal analysis tables are presented in Table G. These tabular criteria, which are actually the least stringent plotting criteria, were constant from park to park.

Table G. Criteria Used for Generating Entries in Annual and Seasonal Analysis Tables

<p>Annual Analysis:</p> <p>For an entry to appear in an annual table, a station/parameter combination must have at least 9 observations in each of at least 4 years. The years do not have to be consecutive.</p> <p>Seasonal Analysis:</p> <p>For an entry to appear in a seasonal table, a station/parameter combination must have at least 9 observations in each of 2 seasons and a period of record of at least 6 years and observations in at least 3 of the 6 years. The years do not have to be consecutive.</p>
--

Statistical Definitions

Since this report is intended only to characterize historical and/or existing water quality at the park rather than address specific water quality problems, only simple descriptive statistics are presented. Inferential and non-parametric statistical analysis to examine relationships and trends were beyond the scope of the study. The complete water quality dataset is provided on disk accompanying this report to afford the opportunity for more detailed exploratory data analysis. The descriptive statistics are included in the inventory, annual, and seasonal tables. Table H provides a brief definition of each descriptive statistic provided for each parameter at a station.

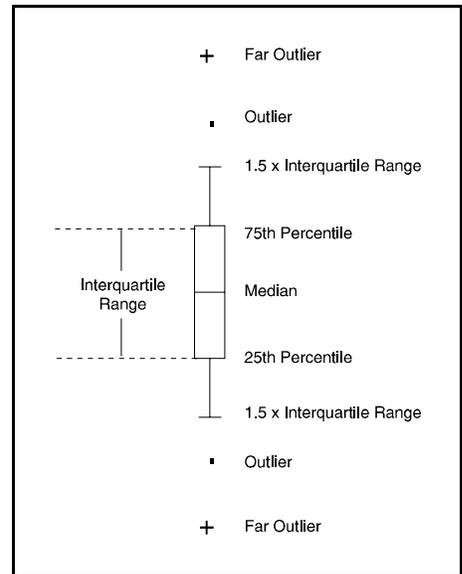
Table H. Definition of Descriptive Statistics Contained in Inventory, Annual, and Seasonal Tables

Observations:	The number of samples collected.
Median:	The median is the 50th percentile or the value in a dataset sorted in ascending order that exceeds 50% of all observations, yet is also exceeded by the remaining 50% of all observations.
Mean:	The sum of all observations collected divided by the number of observations.
Maximum:	The maximum value observed.
Minimum:	The minimum value observed.
Variance:	This is a measure of variability or dispersion of the observations; or, in other words, describes how many observations are close (or far), from the mean. It is calculated as the weighted average of the squared deviations from the mean.
Standard Deviation:	The positive square root of the variance.
10th Percentile:	The value in a dataset sorted in ascending order that exceeds 10% of all observations, yet is itself exceeded by the remaining 90% of all observations.
25th Percentile:	The value in a dataset sorted in ascending order that exceeds 25% of all observations, yet is itself exceeded by the remaining 75% of all observations. The 25th percentile is also known as the first quartile.
75th Percentile:	The value in a dataset sorted in ascending order that exceeds 75% of all observations, yet is itself exceeded by the remaining 25% of all observations. The 75th percentile is also known as the third quartile.
90th Percentile:	The value in a dataset sorted in ascending order that exceeds 90% of all observations, yet is itself exceeded by the remaining 10% of all observations.

As with the tabular descriptive statistics, the scope of the project limited the generation of exploratory graphics to time series plots and annual and seasonal box-and-whiskers plots. Plots were only generated, however, provided the parameter met or exceeded the relevant plotting criteria specified in the previous section.

Time series plots display the parameter concentration on the Y-axis and the date on the X-axis. This provides the user with a visual feeling for not only the parameter's concentration and variability over time, but also the density of data in different time periods. The time series plots provide a visual representation of the data in the basic station inventory. Due to software limitations, a line connects each measured value in sequence regardless of the time period between samples. Readers are cautioned not to assume that the concentration of the parameter between any two data points can be represented by a straight line. It is likely that the concentration varied between any two observations, particularly if the observations are separated by a significant time period.

The annual and seasonal box-and-whisker plots provide a graphical overview of the measured data and give the user a better understanding of the data's distribution and possible outliers. In essence, the box-and-whisker plots provide a visual representation of the data contained in the annual and/or seasonal tables. The interpretation of the boxes is provided in the figure to the right. Each box encompasses the middle 50 percent of measured values (from the 75th to 25th percentiles). The difference between the 75th and 25th percentiles is also known as the interquartile range. The horizontal line inside each box is the median or 50th percentile. The lines which extend out from each end of the box are the whiskers. The whiskers extend out from first quartile (25th percentile) and third quartile (75th percentile) to the smallest data point within 1.5 interquartile ranges from the first and third quartiles. Observations that extend beyond the whiskers are known as outliers. Far outliers are observations whose values lie more than three interquartile ranges below the first quartile or above the third quartile. These are designated with plus signs.



INTERPRETIVE GUIDE TO WATER QUALITY RESULTS

This interpretive guide discusses each of the products presented in the next chapter - Water Quality Results. This chapter highlights how each of the tables and figures were prepared and how they can be used. Each subheading in this chapter corresponds to a particular product in the subsequent Water Quality Results chapter.

Overview

The Overview provides a brief one-page summary of the results of the various database retrievals for both the study area and the park. The study area results include the park results since the study area encompasses the park and all lands and waters within at least 3 miles upstream and 1 mile downstream of the park. Thus, the GIS estimated acreage of the study area should always be greater than the park acreage. The park acreage was computed from the digital boundary that was obtained for the park. More than likely this acreage will differ, perhaps significantly, from the "official" published acreage for the park due to the spatial and temporal accuracy of the digital boundary, treatment of inholdings, and other concerns. The number of STORET stations is the number of locations within the study area and park where an agency monitored (or intended to monitor) water quality. The number of stations with no data reveals the number of stations created in STORET for which water quality data were never entered. The number of stations with no statistical analysis reports the number of stations in the study area and park that contain data not amenable to normal parametric statistics. The number of longer term stations indicates the number of stations in the study area and park with at least 6 parameters having periods-of-record extending 2 years with an average of at least 1 observation per year over the period-of-record. The date of STORET retrieval is the calendar date when Horizon Systems downloaded all the data from STORET. Thus, the report documents all data entered in STORET prior to the retrieval date. Keep in mind that an agency can upload archival data at any time. Consequently, a retrieval date only guarantees that as of that date, this report contains all the data that had been entered into STORET. The period of record is the earliest date for which water quality data exist in STORET for the study area and park up to the date when the most recent data were entered prior to the retrieval date. The number of parameters measured is the number of unique water quality parameters measured within the study area and park and entered in STORET. The number of water quality observations is the sum of the total number of observations across all parameters within the study area and park. The number of industrial/municipal facilities discharges, drinking water intakes, water gages, and water impoundments are the number of each of these entities found within the study area and park. The number of time series, annual, and seasonal plots are the number of these different types of graphics produced by station/parameter combinations within the study area and park using the plotting criteria described in the previous chapter. The hydrologic seasons, described below, are the seasons used for the seasonal water quality data analysis. The time series, annual, and seasonal criteria are the plot and tabular screening criteria described in the previous chapter.

Regional Location Map

The Regional Location Map provides a small scale, general representation of the park and study area location within the United States. Digital, reproducible copies of this graphic are included on the disk(s) accompanying this report.

Water Quality Monitoring Locations Map(s)

The Water Quality Monitoring Locations Map(s) usually provides a larger scale representation of the park and study area than the Regional Location Map. This map indicates the locations within the study area where water quality has been monitored and the data entered into STORET. The water quality monitoring stations are labelled sequentially with the rightmost significant digits. The station names were assigned in numerically ascending order by latitude (for parks with a greater north-south extent than east-west) or longitude (for parks with a greater east-

west extent than north-south). Thus, this map serves as a visual index to the water quality data contained in the report. Since the 1:100,000 scale hydrography (from the River Reach File Ver. 3.0 or other sources) is displayed on the map, users can refer to the map to locate the station number on the reach in which they are interested and then find the appropriate section in the report that documents the water quality at that station. If the scale allows, USGS catalog units are also displayed on the map to provide an approximation of drainage basins. More than one Water Quality Monitoring Location map may be presented if the scale requires breaking the area into multiple maps for legibility. If multiple maps are necessary, an index map showing the geographic extent of each sub-map or panel will be present. Digital, reproducible copies of this graphic are included on the disk(s) accompanying this report. The digital, geo-referenced data files documented in Appendices A and B will allow the park to create water quality monitoring stations as a coverage in their GIS.

Dischargers, Drinking Intakes, Gages, and Impoundments Map(s)

The Dischargers, Drinking Intakes, Gages, and Impoundments Map(s) displays the same information as the Water Quality Monitoring Location Map(s) except the water quality stations are replaced by industrial/municipal facilities discharges, drinking water intakes, active and inactive gage locations, and water impoundments. This map also serves as a visual index allowing the user to determine the identification code of each discharger, drinking intake, gage, or impoundment. This number can then be used to obtain additional information about the entity on the following page of the report or to refer to the more detailed database files accompanying the report on disk. These more detailed database files are geo-referenced (See Appendices A and B), thus allowing the park to create these coverages in their GIS. More than one Dischargers, Drinking Intakes, Gages, and Impoundments map may be presented if the scale requires breaking the area into multiple maps for legibility. If multiple maps are necessary, an index map showing the geographic extent of each sub-map or panel will be present. Digital, reproducible copies of this graphic are also included on the disk(s) accompanying this report.

Industrial Facilities Discharges, Drinking Water Intakes, Water Gages, and Water Impoundments Table

This table provides some additional information about each of the discharges, drinking intakes, water gages, and water impoundments displayed on the previous map(s). This information generally includes the site identification number; the station or facility name; an address or some other indication of location; and some other pertinent information. More detailed information about each of these entities is contained in the database files on disk accompanying the report (See Appendices A and B).

Representative Mean Annual Hydrograph for Seasonal Analysis

One component of the water quality data analysis contained in the document is a seasonal analysis of the data (where adequate data exist). In order to undertake this analysis, some representation of the park's seasons was required. Seasons can be based on many factors (eg. hydrologic, climatic, recreational use, etc.). Since project resources did not allow us to contact every park and discuss with resource management staff what appropriate seasons may be for the park, WRD staff elected to adopt primarily a hydrologic/climatic definition of the seasons which uses a process of hydrograph separation to glean seasons from stream discharge patterns. The procedure employed to make these determinations was as follows:

- (1) Find the nearest USGS Hydro-Climatic Data Network (HCDN) station (U.S. Geological Survey 1992) to the park that is most representative of streamflow conditions at the park. The HCDN is basically a subset of USGS streamflow stations, including only those stations that are unaffected by artificial diversions, storage, or other disruptions of the natural channel. All HCDN stations generally have at least a 20 year period of record. Consequently, discharge patterns at these stations should reflect only hydrologic and climatic influences. For the most part, selected HCDN sites were typically within 15-20 miles of the park. In some parks where WRD staff were aware of the existence of a stream gage located within the park that would be more representative of park waters even though it wasn't an HCDN site, this gage was selected.

- (2) Retrieve the daily discharge values for the selected station from the USGS Daily Values File and generate a mean annual hydrograph and a box-and-whiskers plot of daily flows by month.
- (3) Interpret the plots based on our knowledge of the hydrologic regime at these parks and assign seasons.

This approach, used for the majority of parks, assumes that most water quality data at the park will be found in streams and that the discharge pattern of the selected stream is representative of the seasons for all park waterbodies. Although this assumption may be weak for certain parks, project resources did not allow a more thorough investigation. For parks where there wasn't any stream gage (HCDN or otherwise) deemed representative of park waters, precipitation records from a nearby meteorological station were obtained from the National Climatic Data Center. Plotting daily average precipitation and box-and-whiskers of monthly precipitation sums allowed WRD hydrologists to make a rough approximation of climatic seasons for use in analyzing the water quality data.

Again, it is important to note the many ways of defining "seasons" and thus the limitations of the seasonal analysis contained in this document. For certain parks it may be more useful to perform a seasonal analysis with seasons defined by recreational use patterns or some other natural or anthropogenic factor. This option is available to the park since all the water quality data analyzed in this document is contained on disk(s) accompanying this report. Digital, reproducible copies of this seasonal analysis graphic are also included on the disk(s) accompanying this report.

Contacts for Agency Codes Retrieved

This table provides a list of the organizations who have entered data into STORET. A contact name at the organization and a phone number are also supplied. The agency code in the first column is the key for identifying which stations belong to that agency. This code will appear in the first line of each station's inventory. Although the agencies listed in this table are potential partners for future water quality monitoring or management endeavors, don't be surprised if the name of the contact and/or the telephone number is out of date. This information is entered when an agency first creates a station. The agency may not update this information when the initial contact moves on or the telephone number changes. Nonetheless, it is likely that the contact or someone else at the agency may be able to provide you with project reports or other information relative to the agency's data. A digital copy of this table accompanies this report on disk (See Appendices A and B).

Quantity of Data Retrieved by Agency Code

This table displays the period-of-record; numbers of water quality stations, longer-term stations, and stations without data; total number of water quality observations; and the number of unique water quality parameters measured by each agency within the study area and park boundary. Using this table, a park can quickly determine which agencies collect the most data in and around the park and whether they have monitored recently. A digital copy of this table accompanies this report on disk (See Appendices A and B).

Station Period of Record Tabulation

The Station Period of Record Tabulation provides a quick overview of the names of all the stations within the study area where water quality has been monitored and data entered into STORET. It also furnishes the total number of observations taken at each station and the frequency of observations between certain dates: (1) 01/01/85 until the most recent date data were measured; (2) 01/01/75 - 12/31/84; and (3) prior to 01/01/75. The station identification number, the four character park abbreviation code followed by a four digit number, provides the means to jump from a particular station in the table to the statistical and graphical analyses for this station contained in the Station-By-Station Results section. The Station Period of Record Tabulation reveals which water

quality stations were situated within the park as defined by the park's GIS boundary. The Station Period of Record Tabulation also footnotes longer-term water quality stations. Longer-term stations are those that have at least 6 parameters with an average of one or more observations per year for those parameters during a period of record extending at least two years. Note that although a station may not be flagged as longer-term, it can still harbor much important data (albeit for only a few parameters or over a very long term with just a few observations). A digital copy of this table accompanies this report on disk (See Appendices A and B).

Parameter Period of Record Tabulation

The Parameter Period of Record Tabulation provides a complete listing of every water quality parameter ever measured in the study area and entered into STORET. This table is a summation of all the water quality observations for each parameter across all stations in the study area. Like the Station Period of Record Tabulation, the total number of observations for each parameter and the frequency of observations between: (1) 01/01/85 until the most recent date data were measured; (2) 01/01/75 - 12/31/84; and (3) prior to 01/01/75 are provided. This table is handy for quickly assessing whether particular parameters have been measured in the study area. The Parameter Period of Record Tabulation also shows how many in-park (and total) water quality stations contained data for each parameter. Some administrative parameters and parameters not suitable for statistical analysis within the context of this project (as discussed in the Screening Methodologies and Procedures section of the Methodology chapter) are listed in the Parameter Period of Record Tabulation, but not in the Station-By-Station Results section. A digital copy of this table accompanies this report on disk (See Appendices A and B).

Station/Parameter Period of Record Tabulation

The Station/Parameter Period of Record Tabulation combines the information found in the Station Period of Record Tabulation and the Parameter Period of Record Tabulation. This table provides a listing of all the stations where a particular water quality parameter was measured in the study area and the data entered into STORET. The table provides the start and end dates of the period of record of each parameter at each station; the number of years of measurement (computed from the start and end dates); whether the station/parameter combination occurred within the park boundary; the total number of observations for each parameter at each station, and whether a time series (T), annual (A), and/or seasonal (S) plot was generated for the station/parameter combination in the Station-By-Station Results section. This table is very useful when you need to determine at which locations within the study area (or park) particular parameters were monitored and how much data was collected there. Some administrative parameters and parameters not suitable for statistical analysis within the context of this project (as discussed in the Screening Methodologies and Procedures section of the Methodology chapter) are listed in the Station/Parameter Period of Record Tabulation, but not in the Station-By-Station Results section. A digital copy of this table accompanies this report on disk (See Appendices A and B).

Station-By-Station Results

Probably the most voluminous portion of the document is the Station-By-Station Results. Here the results of the water quality analyses for each station are presented in sequence. The results include the station inventory; parameter inventory; EPA water quality criteria analysis; and, as applicable, time series graphics and annual and seasonal tables and box-and-whiskers graphics. Each of these products are discussed below.

Station Inventory for Station

Each station's data commences with its Station Inventory. The Station Inventory provides the descriptive attributes about each water quality monitoring station contained in STORET. This includes a variety of locational information such as a verbal description, the Federal Information Processing codes for county and state, latitude and longitude, and other items; the station type (stream, spring, estuary, etc.); monitoring agency; creation date; indices to the River Reach File; whether the station lies within the park boundary; and several other attributes. This water quality station location data is also contained on disk(s) accompanying the report (See Appendices A and B).

Parameter Inventory for Station

Following the descriptive attributes about a station is the Parameter Inventory for the station. The Parameter Inventory provides a complete inventory and descriptive summary of all the water quality parameter data for the station. This table furnishes the parameter STORET code and name; the period of record for this parameter at this station; and the descriptive statistics defined in the Statistical Definitions in the previous chapter. Three different footnotes can appear on a parameter's descriptive statistics. Two asterisks (**) in the 10th, 25th, 75th, or 90th percentile columns indicates that there was insufficient data to compute these statistics for this parameter. Percentiles were not computed unless the parameter had at least 9 observations. Two number signs (##) next to the number of observations indicates that more than 50 percent of the observations entered into the computations as values that were taken to be half the detection limit. Caution should be employed in interpreting and using statistical results when more than half the values are set to half the detection limit. The letter "p" following a numeric STORET parameter code in the Parameter Inventory indicates that a time series plot was produced for this parameter at this station. Digital, reproducible copies of the Parameter Inventory tables are contained on the disk(s) accompanying this report.

Two downloaded parameter groups, pH and bacteriological, received special treatment whenever descriptive statistics were computed in the Parameter Inventory (as well as subsequent annual and seasonal tables). Whenever pH appears in a descriptive statistics table, the entry is increased to 3 entries: (1) the original pH entry; (2) pH computed from conversion to and from $\mu\text{eq/l H}^+$; and (3) $\mu\text{eq/l H}^+$. The reason for these conversions is that pH is actually the negative logarithm of the hydrogen ion concentration. To be technically correct in computing descriptive statistics, pH values must be converted to $\mu\text{eq/l H}^+$ (Kunkle and Wilson 1984). Once the descriptive statistics are computed using the pH values expressed as $\mu\text{eq/l H}^+$, the results can be converted back to pH. The three pH entries in the descriptive statistics table will all have the same STORET code.

Whenever a bacteriological parameter appears in a descriptive statistics table, the entry is increased to 3 entries: (1) the original bacteriological entry; (2) an entry computed using the log of each measured value; and (3) an entry that simply reports the geometric mean. The reason for converting to logs and displaying the geometric mean is convention. Bacteriological water quality standards typically reference the geometric mean rather than the arithmetic. The three bacteriological entries in the descriptive statistics tables will all have the same STORET code.

EPA Water Quality Criteria Analysis for Station

The EPA Water Quality Criteria Analysis table follows the Parameter Inventory. This table presents a comparison between the station's STORET water quality data and applicable national water quality criteria for freshwater and marine aquatic organisms; drinking water; and other concerns. Comparison against applicable State water quality criteria was not feasible given project resources. Appendix F provides the relevant national EPA water quality criteria values. In most cases, the EPA water quality criteria values are single sample concentrations that can be directly compared to single sample STORET entries. There are, however, two notable exceptions to this single sample/single value comparison: ammonia and fecal-indicator bacteria. For these two parameters, criteria are either derived from or depend on the results of other chemical characteristics of the water or require a time series statistical treatment of multiple samples to determine whether the criterion has been exceeded. The EPA ammonia criterion is pH and temperature dependent. To calculate the criterion for each ammonia sample value was beyond

the scope of this project. Consequently, ammonia criteria were not included in Appendix F or the EPA Water Quality Criteria Analyses. Un-ionized ammonia criteria can be determined from formula table values included in the EPA Silver Book (Environmental Protection Agency 1995).

For the purposes of this project, fecal-indicator bacteria data were flagged as exceeding criteria when their concentrations exceeded 200, 1000, 126, and 33 (fresh)/35 (salt) colony forming units or most probable number for single samples of fecal coliform, total coliform, E. coli, and enterococci, respectively. These values represent only approximations of the criteria for primary contact recreation waters where criteria are typically expressed in terms of a geometric mean computed with no less than 5 samples during a given month. When a fecal-indicator bacterial observation exceeds a criterion in the EPA Water Quality Criteria Analysis section, the reader should refer to the corresponding geometric mean calculations in the preceding Parameter Inventory. Long-term geometric means that exceed the respective water quality criteria for multiple samples are more indicative of chronic bacteriological problems than single sample values.

Water quality observations carrying non-detection or below-detection limit remark codes (K, T, and U) required special treatment in the EPA Water Quality Criteria Analysis. As with the statistics in the Parameter Inventory, half the detection limit was the value used in the EPA Water Quality Criteria Analysis. For certain observations, however, half the detection limit may exceed a water quality criterion. For those observations it would be inappropriate to classify them as exceeding a criterion since the actual value wasn't known. Thus, it was decided that any below detection limit or non-detect observations that exceed a water quality criterion using half the detection value would be excluded from the EPA Water Quality Criteria Analysis. If non-detect or below detection limit values are excluded from the EPA Water Quality Criteria Analysis for a particular parameter, the total observations for that parameter will be footnoted with an ampersand (&). This will also explain the difference between the total observations in the Parameter Inventory and the EPA Water Quality Criteria Analysis. Non-detect or below detection limit values are included in the EPA Water Quality Criteria Analysis, however, if half the detection limit doesn't exceed the parameter's criterion.

The EPA Water Quality Criteria Analysis for each station lists the parameter; the standard type and value; the total number of observations for the parameter at this station; the number of observations that exceeded the standard value; and the proportion of observations that exceeded the standard value. Water quality observations are considered as having exceeded a criterion regardless of whether the criterion represents a maximum acceptable value or a minimum acceptable value. The table also breaks down the water quality criteria analysis on a seasonal basis to allow the reader to discern whether parameter observations tend to exceed criteria during only certain seasons or year round. Although the EPA Water Quality Criteria Analysis table is a good starting point for assessing potential water quality problems at the station, the reader is strongly encouraged to read the caveat section in the Introduction concerning drawing conclusions about water quality problems from this table. Digital, reproducible copies of these tables accompany the report on disk (See Appendices A and B).

Time Series Plots for Station

Following the EPA Water Quality Criteria analysis will be any Time Series Plots for each parameter that met the time series plot screening criterion selected for the park unit. If a time series plot is generated for a particular parameter at a station, a "p" will appear next to the STORET parameter code in the Parameter Inventory. If no time series plots are present for the particular station, the data did not meet the time series screening criterion listed in the Overview section of the Water Quality Results chapter. The x-axis on these plots is the period of record, listing only the 2-digit calendar year for clarity (i.e. 1983 is presented as 83). The y-axis is the concentration of the selected parameter in its measurement units. In general, the units for a given parameter are given either on the y-axis or in the parameter description in the subtitle of the graph. Subtitle and/or y-axis parameter descriptions may be truncated on the plots so as to not exceed the maximum number of plotting characters. Y-axis values less than zero are sometimes shown for better representation of the entire plot. The station identification code, parameter description, and parameter STORET code are presented in the main title. The footnote provides a descriptive location name. Observations on the plot are represented as squares. Lines are drawn connecting each successive observation. As mentioned previously in the Statistical Definitions section of the Methodology chapter, the interconnecting line is drawn only for ease of reading and provides no indication of what the actual parameter

values were between the two observed measurements. Digital, reproducible copies of all time series plots accompany the report on disk (See Appendices A and B).

For time series plots of pH, the original pH values are plotted. For time series plots of bacteriological data, the log of the measured value is plotted. Hence, the y-axis of a time series plot for bacteriological parameters is log-linear.

Annual Analysis for Station

If more than 9 observations exist in each of at least 4 years for a particular parameter at a station, an Annual Analysis table will be generated. Entries will be made in the table for each parameter having more than 9 observations in each of at least 4 years. The Annual Analysis presents the same descriptive statistics as the Parameter Inventory table, except that it provides the statistics by year, rather than the entire period of record. Although some of the years may not contain 9 observations, these years still have an entry in the table. A parameter needs only to have 9 observations in any 4 years of its period of record to qualify for the Annual Analysis table. Like the Parameter Inventory, percentiles with fewer than 9 observations are not computed and entries computed with greater than 50 percent of the data values set to half the detection limit are flagged. Entries in the Annual Analysis table that also meet the annual analysis box-and-whisker plot screening criterion will be flagged with a "p" next to the STORET code. Digital, reproducible copies of these tables accompany the report on disk (See Appendices A and B).

Annual Box-and-Whiskers Plots for Station

Entries in the Annual Analysis table that meet the annual box-and-whisker plot screening criterion will generate Annual Box-and-Whiskers Plots. The interpretation of box-and-whiskers plots is explained in the Statistical Definitions section of the Methodology chapter. A box is generated for each year of the period of record, even if less than 9 observations were recorded in the year. The axis labeling and plot titling is the same as for the time series plots. Digital, reproducible copies of these graphics accompany the report on disk (See Appendices A and B).

For annual box-and-whiskers plots of pH, $\mu\text{eq/l H}^+$ are plotted. For annual box-and-whiskers plots of bacteriological data, the log of the measured value is plotted. Hence, the y-axis of an annual box-and-whiskers plot for bacteriological parameters is log-linear.

Seasonal Analysis for Station

As explained above, a park's hydrologic seasons for seasonal water quality analysis were determined using a process of hydrograph separation and other techniques. If a parameter has more than 9 observations in each of 2 seasons with a period of record of at least 6 years and observations in at least 3 of the 6 years, a Seasonal Analysis table will be generated for the station. The Seasonal Analysis presents the same descriptive statistics as the Parameter Inventory table, except that it provides the statistics by season, rather than the entire period of record. Although certain parameters for a season at a station may not contain 9 observations, these parameters can still have an entry in the table. A parameter needs only to have 9 observations in each of 2 seasons with a period of record of at least 6 years and observations in at least 3 of the 6 years to qualify for the Seasonal Analysis table. Consequently, some of the parameters could have fewer than 9 observations in a particular season but still generate a table entry. Like the Parameter Inventory and Annual Analysis, percentiles with fewer than 9 observations are not computed and entries computed with greater than 50 percent of the data values set to half the detection limit are flagged. Entries in the Seasonal Analysis table that also meet the seasonal analysis box-and-whisker plot screening criterion will be flagged with a "p" next to the STORET code. Digital, reproducible copies of these tables accompany the report on disk (See Appendices A and B).

Seasonal Box-and-Whiskers Plots for Station

Entries in the Seasonal Analysis table that meet the seasonal box-and-whisker plot screening criterion will generate Seasonal Box-and-Whiskers Plots. The interpretation of box-and-whiskers plots is explained in the Statistical Definitions section of the Methodology chapter. A box is generated for each season of the period of record, even if less than 9 observations were recorded in the season. On the x-axis, the seasons are labeled 1 through the number of seasons defined for the park through hydrograph separation. The actual calendar dates that correspond to these numerically labeled seasons exist in the Overview section and the Seasonal Analysis tables in the Water Quality Results chapter. The axis labeling and plot titling are the same as for the time series and annual box-and-whiskers plots. Digital, reproducible copies of these graphics accompany the report on disk (See Appendices A and B).

For seasonal box-and-whiskers plots of pH, $\mu\text{eq/l H}^+$ are plotted. For seasonal box-and-whiskers plots of bacteriological data, the log of the measured value is plotted. Hence, the y-axis of a seasonal box-and-whiskers plot for bacteriological parameters is log-linear.

EPA Water Quality Criteria Analysis for Entire Park Study Area

This table essentially summarizes all the individual station-by-station EPA water quality criteria analyses in the study area. (Refer to the EPA Water Quality Criteria Analysis for Station section above for more detailed information on the treatment of special cases in the EPA Water Quality Criteria Analysis for Entire Park Study Area.) This table presents a comparison between the study area's STORET water quality data and applicable national water quality criteria for freshwater and marine aquatic organisms; drinking water; and other concerns. Comparison against applicable State water quality criteria was not feasible given project resources. Appendix F provides the relevant national EPA water quality criteria values. The EPA Water Quality Criteria Analysis for the Entire Park Study Area lists the parameter; the standard type and value; the total number of observations for the parameter at this station; the number of observations that exceeded the standard value; and the proportion of observations that exceeded the standard value. Water quality observations are considered as having exceeded a criterion regardless of whether the criterion represents a maximum acceptable value or a minimum acceptable value. The table also breaks down the water quality criteria analysis on a seasonal basis to allow the reader to discern whether parameter observations tend to exceed criteria during only certain seasons or year round. Although the EPA Water Quality Criteria Analysis for the Entire Park Study Area is a good starting point for assessing potential water quality problems at the park, the reader is strongly encouraged to read the caveat section in the Introduction before drawing conclusions about water quality problems from this table. A digital, reproducible copy of this table accompanies the report on disk (See Appendices A and B).

NPS Servicewide Inventory and Monitoring Program

Level I Water Quality Inventory Data Evaluation and Analysis (IDEA)

One of the objectives of this Baseline Water Quality Data Inventory and Analysis project is to perform an IDEA - an Inventory Data Evaluation and Analysis - to determine the presence and/or absence of Servicewide Inventory and Monitoring Program "Level I" water quality parameter groups in the park's study area. The Strategic Plan for Conducting Baseline Natural Resource Inventories in the National Park Service (National Park Service 1993) identified the basic water quality parameters displayed in Table I as the parameters that all parks must have for "key" waterbodies (determined on the basis of size, uniqueness, threats, etc.) within park boundaries. Since these parameters can be measured in different ways and with different units, there are multiple STORET codes associated with each parameter; hence the concept of parameter groups. The Strategic Plan distinguishes between those parameter groups required for all parks and parameter groups required only on a case-by-case basis.

The IDEA basically compares the parameters listed in the Parameter Period of Record Tabulation and Station/Parameter Period of Record Tabulation with the "Level I" Servicewide Inventory and Monitoring water quality parameter groups, listed in Table I and in Appendix G, and notes, not only the presence or absence of each parameter group, but the total number of observations for each parameter present in the group; the number of

observations between certain time periods; and the total number of stations within the study area at which the parameter was measured. The total number of different (unique) stations measuring parameters for the group is in parentheses on each parameter group's summary line.

The first page of the IDEA lists the missing Servicewide Inventory and Monitoring Program "Level I" groups. If a parameter group appears on this list, no data for any of the parameters defining the group (See Appendix G) was retrieved for it within the study area. So-called non-priority parameter groups may appear in the missing list. Non-priority parameters are park-specific parameters (case-by-case) which may not be applicable to your park. Consequently, if you believe a particular parameter, not included in IDEA (See Appendix G), to be important for your park, you will have to consult the Parameter and Station/Parameter Period of Record Tabulations to determine the presence or absence of this parameter for the park. Although considered a "Level I" parameter, biological data, obtained through rapid bioassessment or other means, is not considered in this report which deals specifically with surface water chemistry. Following the Missing Level I Group list is the Present Level I Group list which displays the summary results for each Servicewide Inventory and Monitoring "Level I" water quality parameter group that was found.

Table I. Basic "Level I" Water Quality Parameters Identified as Required and Optional By the Servicewide Inventory and Monitoring Program for "Key" Park Waterbodies

<p><u>Required Parameter Groups:</u></p> <ul style="list-style-type: none">(1) Alkalinity(2) pH(3) Conductivity(4) Dissolved Oxygen(5) Rapid Bioassessment Baseline (EPA/State protocols, involving fish and macroinvertebrates)(6) Temperature(7) Flow <p><u>Case-By-Case Parameters Groups:</u></p> <ul style="list-style-type: none">(8) Toxic Elements(9) Clarity/Turbidity(10) Nitrate/Nitrogen(11) Phosphate/Phosphorus(12) Chlorophyll(13) Sulfates(14) Bacteria

The last page of the IDEA summarizes the information from the Missing and Present Level I Group lists. This page provides information on the temporal and spatial distributions of the data. Included in this table are the total number of observations for each parameter group; the number of observations since January 1, 1985; the percent of the total observations since January 1, 1985; the number of stations measuring each parameter group; the percent of the total number of stations with data measuring the parameter group; the number of observations per station with data; the period-of-record for this parameter group; and the average number of observations per year of the period-of-record.

In interpreting the results of the IDEA, the reader should first consult the Missing Level I Group list. For the parameter groups listed, there was no baseline water quality data within the study area entered in STORET. Consequently, these parameter groups could be a higher priority for data collection. It is important, however, to realize that data within these parameter groups may have been already collected but not entered into STORET. The resources for this project did not enable us to pursue thorough literature and file cabinet reviews to dredge up

every last iota of data. If data exists for certain Servicewide Inventory and Monitoring Program "Level I" water quality parameter groups in a park's file cabinet, it is the park's responsibility to factor that data into their IDEA. Consequently, the listing of a parameter group on the Missing "Level I" Group list is not a WRD endorsement to launch a study to collect these data. The IDEA is intended to simply note that no data exist for these parameter groups in STORET for the park. It is the park's responsibility to ascertain whether such data has already been collected by the park or other entities before embarking on a new study. In fact, in the future the WRD will require that any park study plan proposing to collect baseline water quality data show that they have consulted their Baseline Water Quality Data Inventory and Analysis report and searched in other locations (file cabinets, published literature, etc.) for the data they propose to collect. A similar interpretation springs from the Present "Level I" Group list. Insufficient data density in certain time periods for particular parameter groups is not necessarily cause for launching a new inventory and/or monitoring program. The park should still consult with other potential sources of data. Again, the IDEA is designed to provide only a quick check on data in STORET for the Servicewide Inventory and Monitoring Program "Level I" water quality parameter groups.

Water Quality Observations Outside STORET Edit Criteria for Park

STORET data entered after November 1983 were subjected to rudimentary edit/bounds checking for 190 common parameters (See the STORET Edit Criteria in Appendix C). None of the data entered into STORET prior to that time has been subjected to edit/bounds checking. Moreover, to maintain exact comparability with USGS WATSTORE data, WATSTORE data entered into STORET has never been subjected to the EPA edit/bounds checking. During the pilot test phase of this project, obviously incorrect data was identified from both USGS and other agency data in STORET. As a consequence, all data downloaded from STORET was filtered through the STORET edit criteria to identify parameter observation values that fall outside any edit criterion ranges. This section documents the station name, parameter, date, time, parameter value, agency, and STORET station name of every observation that fell outside the range of an edit criterion. Not all data falling outside an edit criterion are necessarily incorrect. Such data may represent unique or special conditions. Consequently, every observation falling outside a STORET edit criterion was scrutinized to determine, in our best professional judgement, whether the value was in the realm of possibility or obviously incorrect. Water quality observations that appeared to be obviously incorrect are marked with an "X" in the Disposition column of this table. These values were not retrieved or included in any of the inventory tables or graphs. Water quality values outside a STORET edit criterion but within the realm of possibility were retained and included in inventory tables and graphs. The Water Quality Observations Outside STORET Edit Criteria for Park table documents all values that were outside an edit criterion range. This documentation is also necessitated by the fact that agencies can override the STORET edit criteria for individual observations. Although the edit criteria eliminate some potentially "bad" data from the report, the probability of other incorrect data, for both the 190 parameters that are edit/bound checked and all the other STORET parameters that aren't error checked, is high. Readers should consult the Caveat section in the Introduction for guidelines on the use and interpretation of STORET data. The responsibility for correcting these observations rests with the collecting agency.

WATER QUALITY RESULTS

OVERVIEW FOR SHEN

Study Area Boundary Description

The study area includes the park and all areas within at least 3 miles upstream of the park unit boundary and at least 1 mile downstream.

	<u>Study Area</u>	<u>Park</u>
GIS Estimated Acreage:	738758	193522
# STORET Stations:	786	501
# Stations With No Data:	33	1
# Stations With No Stat. Analysis:	0	0
# Longer Term Stations:	191	134
Date of STORET Retrieval:	01/11/00	01/11/00
Period of Record:	09/04/30-12/21/98	03/27/68-08/03/98
# Parameters Measured:	554	89
# Water Quality Observations:	234269	95214
# Industrial/Municipal Facilities:	33	0
# Drinking Water Intakes:	10	0
# Water Gages:	44	13
# Water Impoundments:	22	0
# Total Plots:	244	13
# Time Series:	98	0
# Annual:	56	13
# Seasonal:	90	0

Hydrologic Definition of Seasons:

1. July 1 - October 14
2. October 15 - March 19
3. March 20 - June 30

Time Series Plot Criteria:

To be included in the time series plots, a station/parameter combination must have at least 20 years and at least 120 observations.

Annual Analysis Criteria:

To be included in the annual box-and-whisker plots, a station/parameter combination must have at least 9 observations in each of at least 18 years.

To be included in the annual analysis tables, a station/parameter combination must have at least 9 observations in each of at least 4 years.

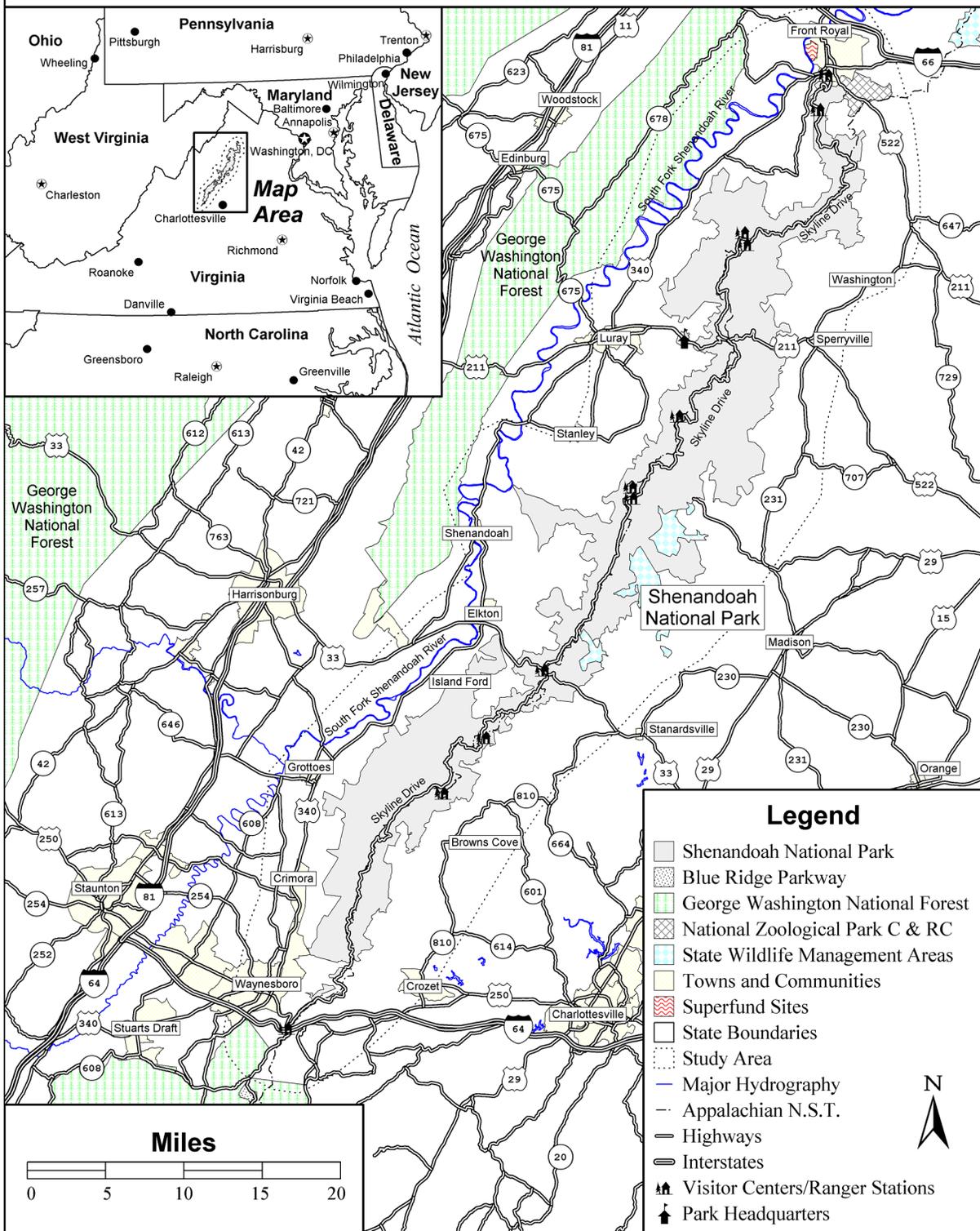
Seasonal Analysis Criteria:

To be included in the seasonal box-and-whisker plots, a station/parameter combination must have at least 9 observations in each of 2 seasons and a period of record of at least 25 years and observations in at least 4 of the 25 years.

To be included in the seasonal analysis tables, a station/parameter combination must have at least 9 observations in each of 2 seasons and a period of record of at least 6 years and observations in at least 3 of the 6 years.

Shenandoah National Park

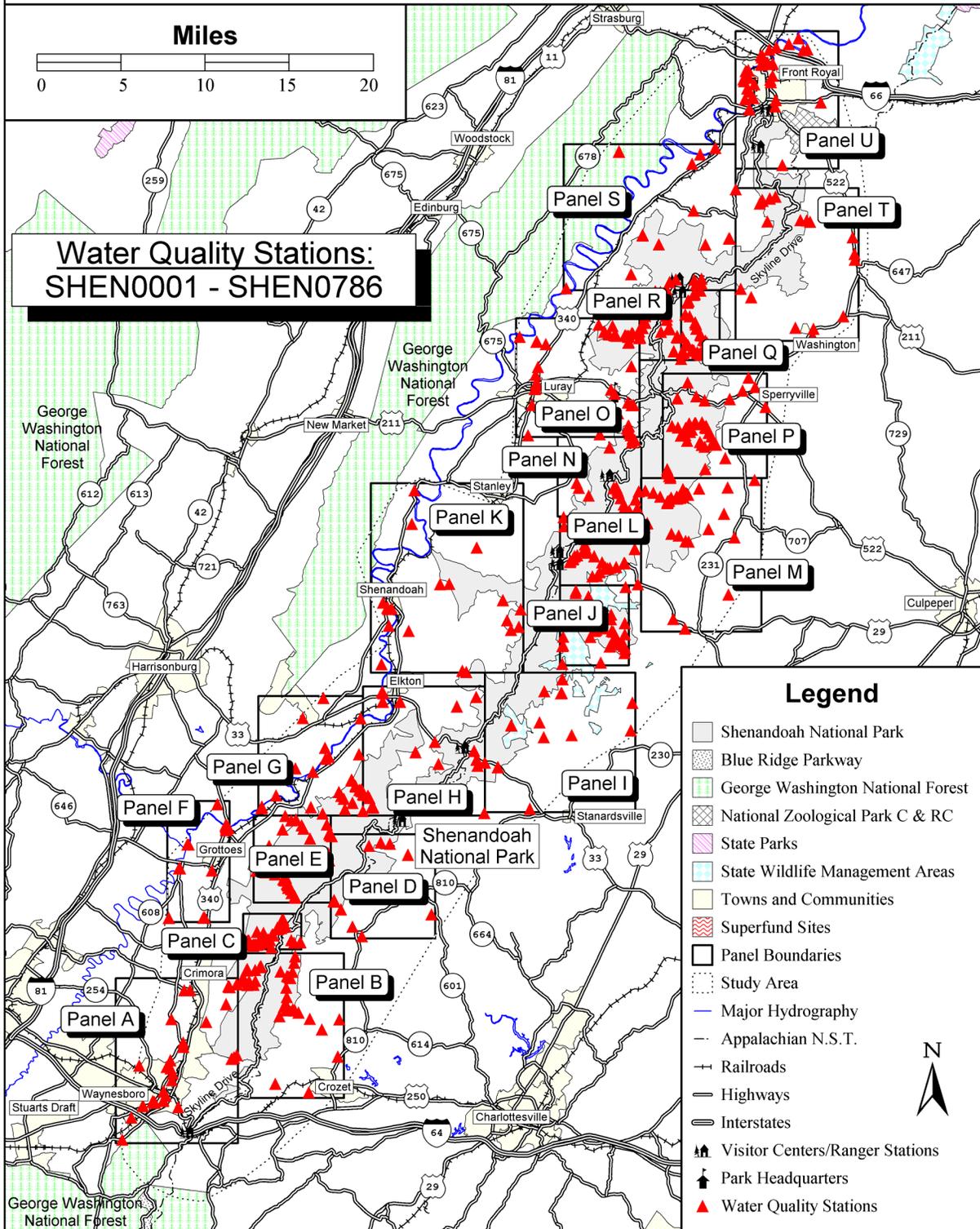
Regional Location Map



Shenandoah National Park

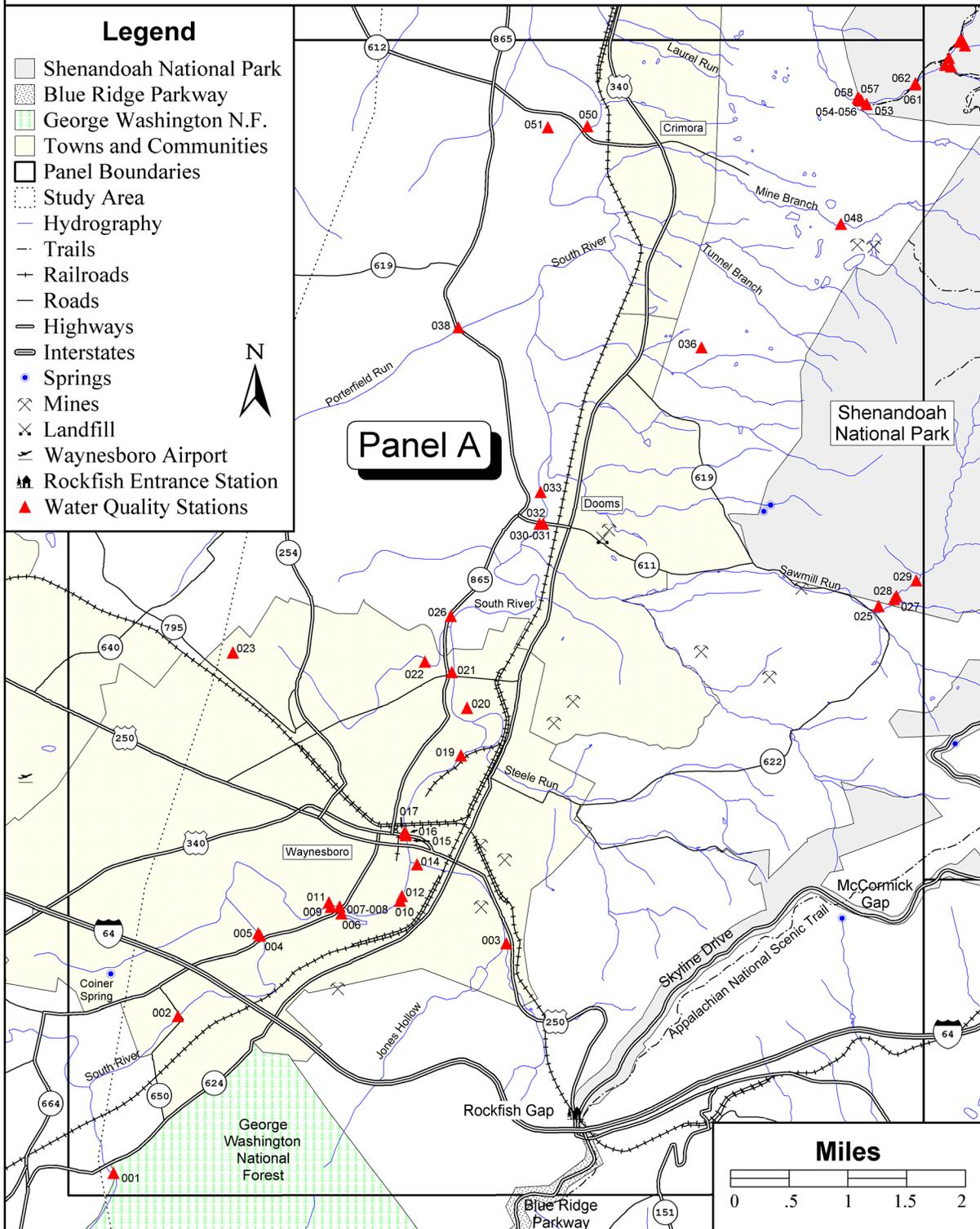
Water Quality Monitoring Locations

Graphic Panel Index



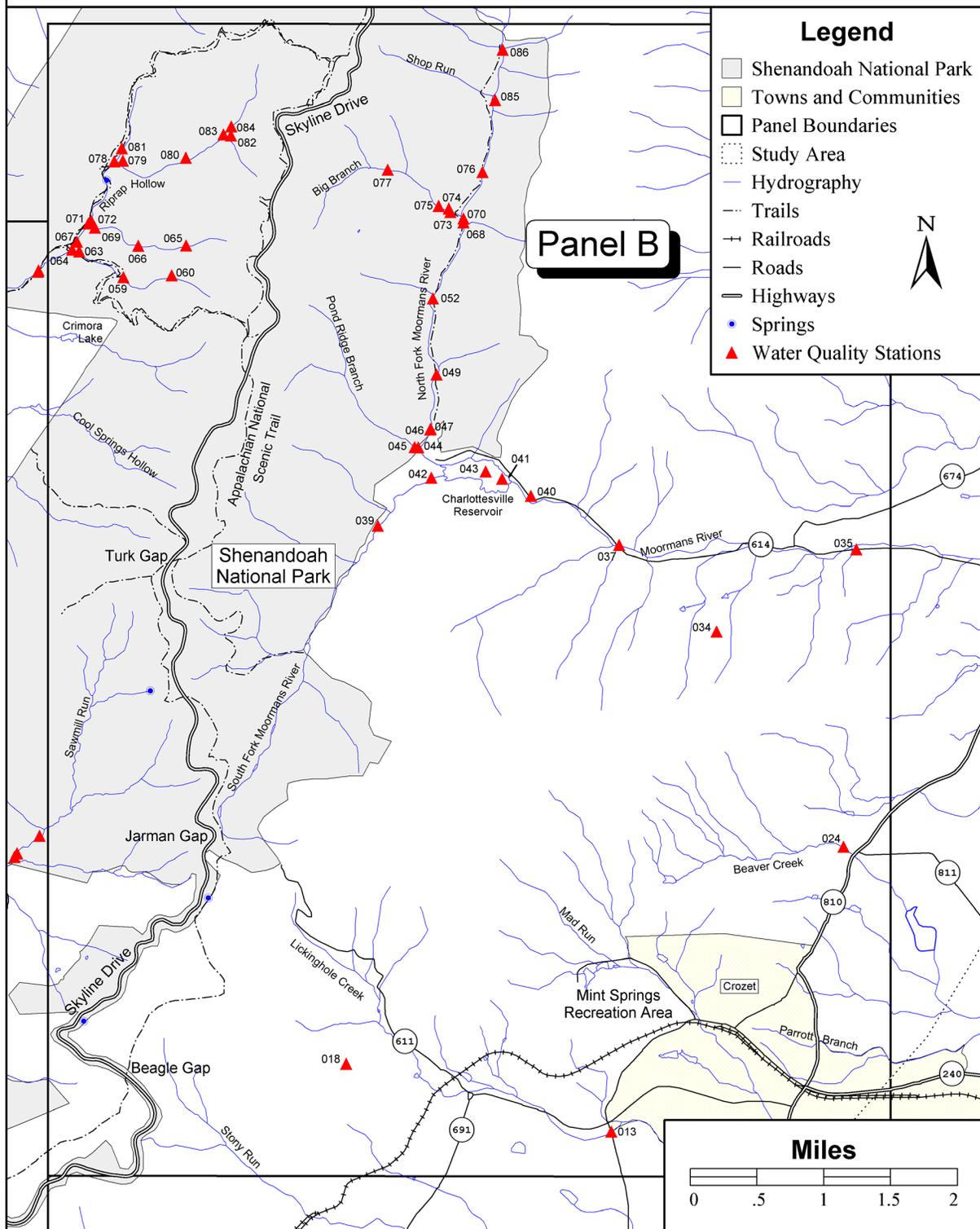
Shenandoah National Park

Water Quality Monitoring Locations



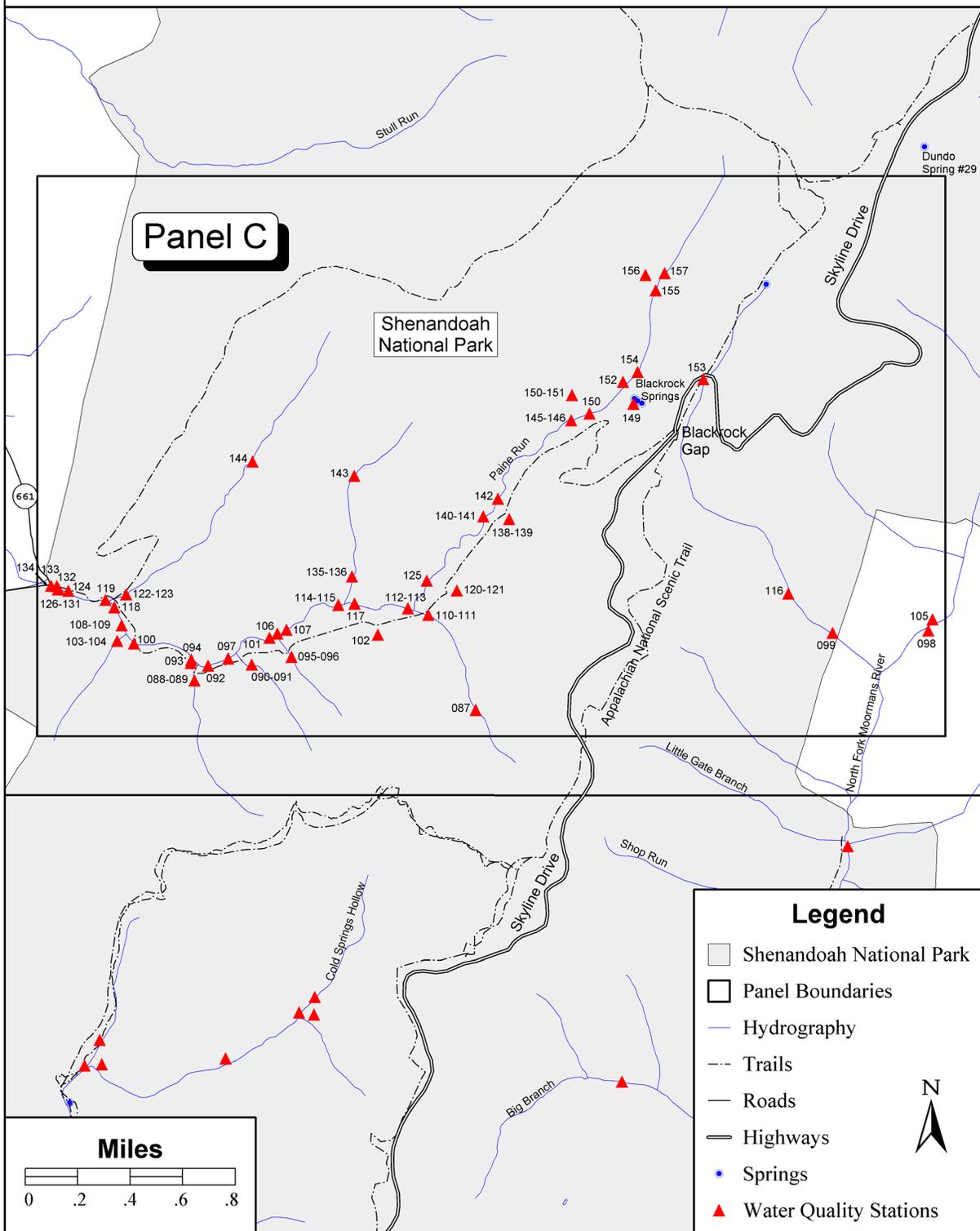
Shenandoah National Park

Water Quality Monitoring Locations



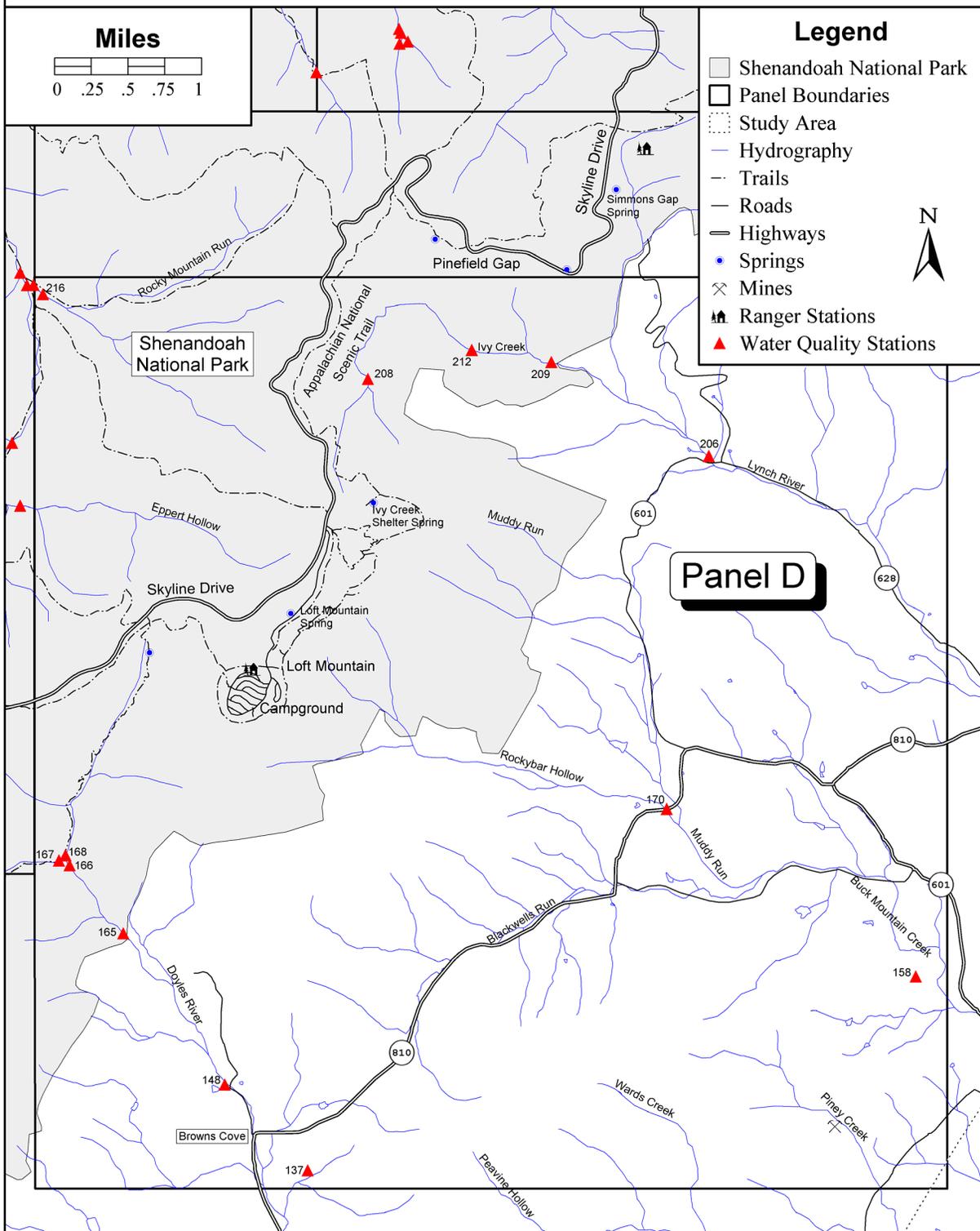
Shenandoah National Park

Water Quality Monitoring Locations



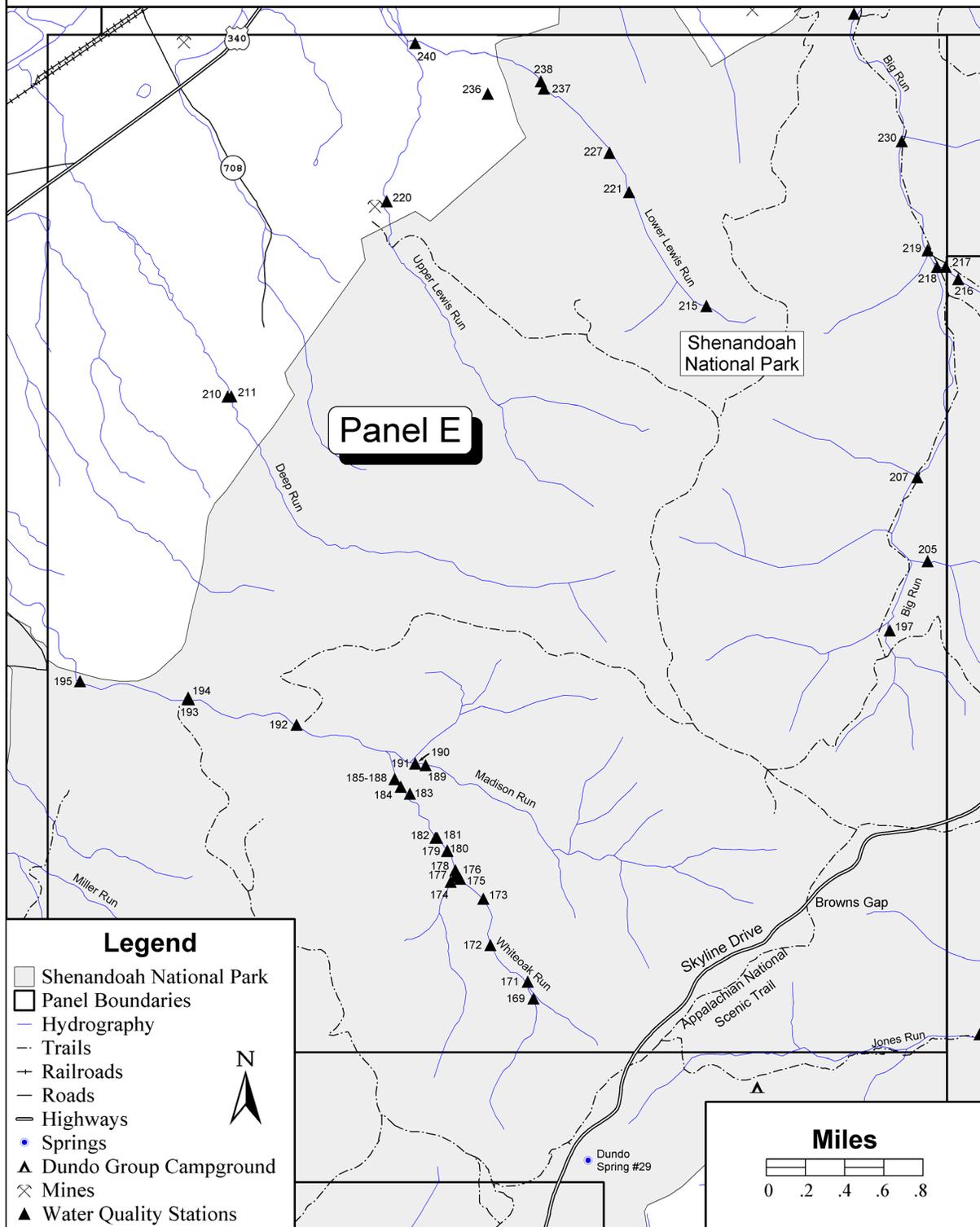
Shenandoah National Park

Water Quality Monitoring Locations



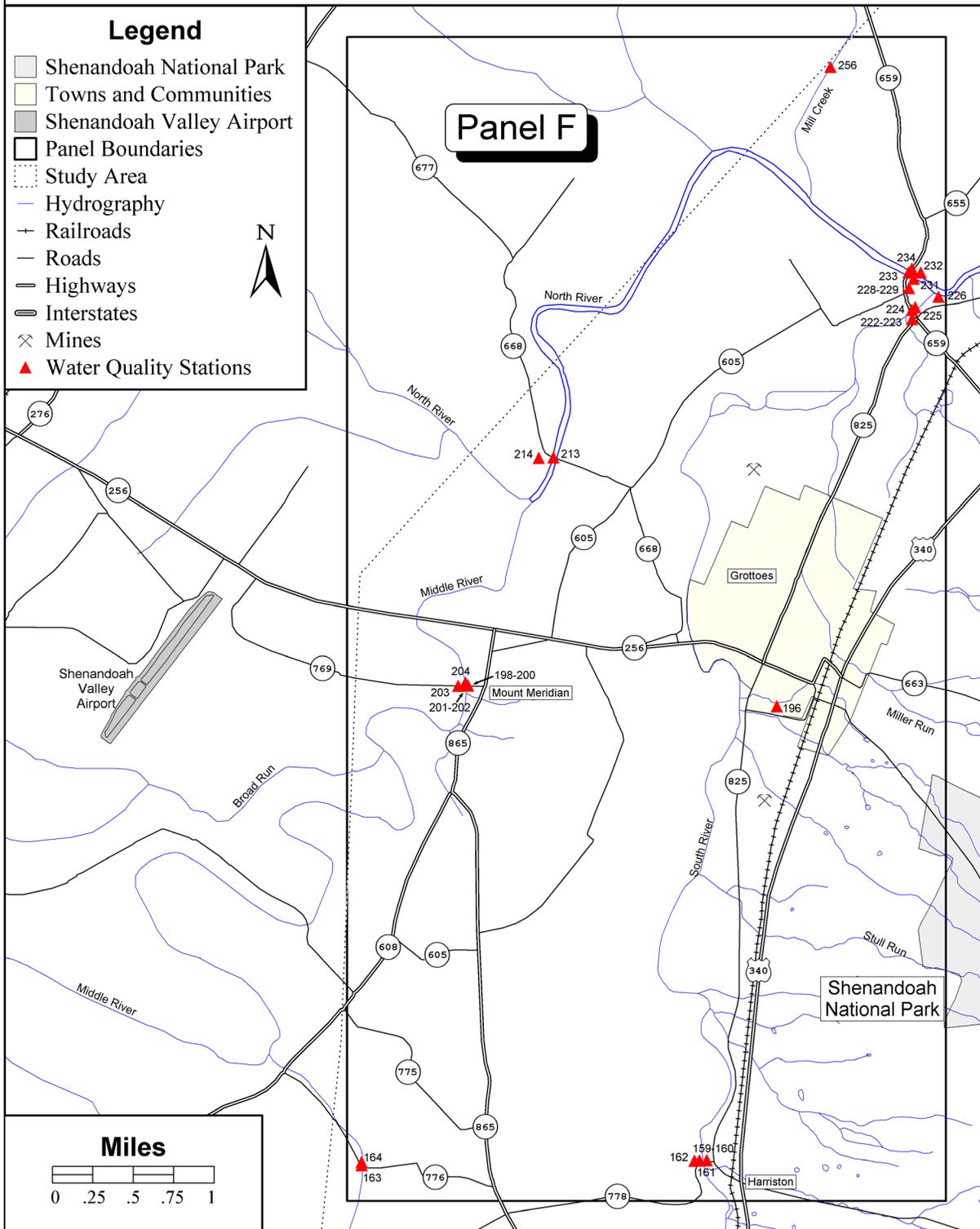
Shenandoah National Park

Water Quality Monitoring Locations



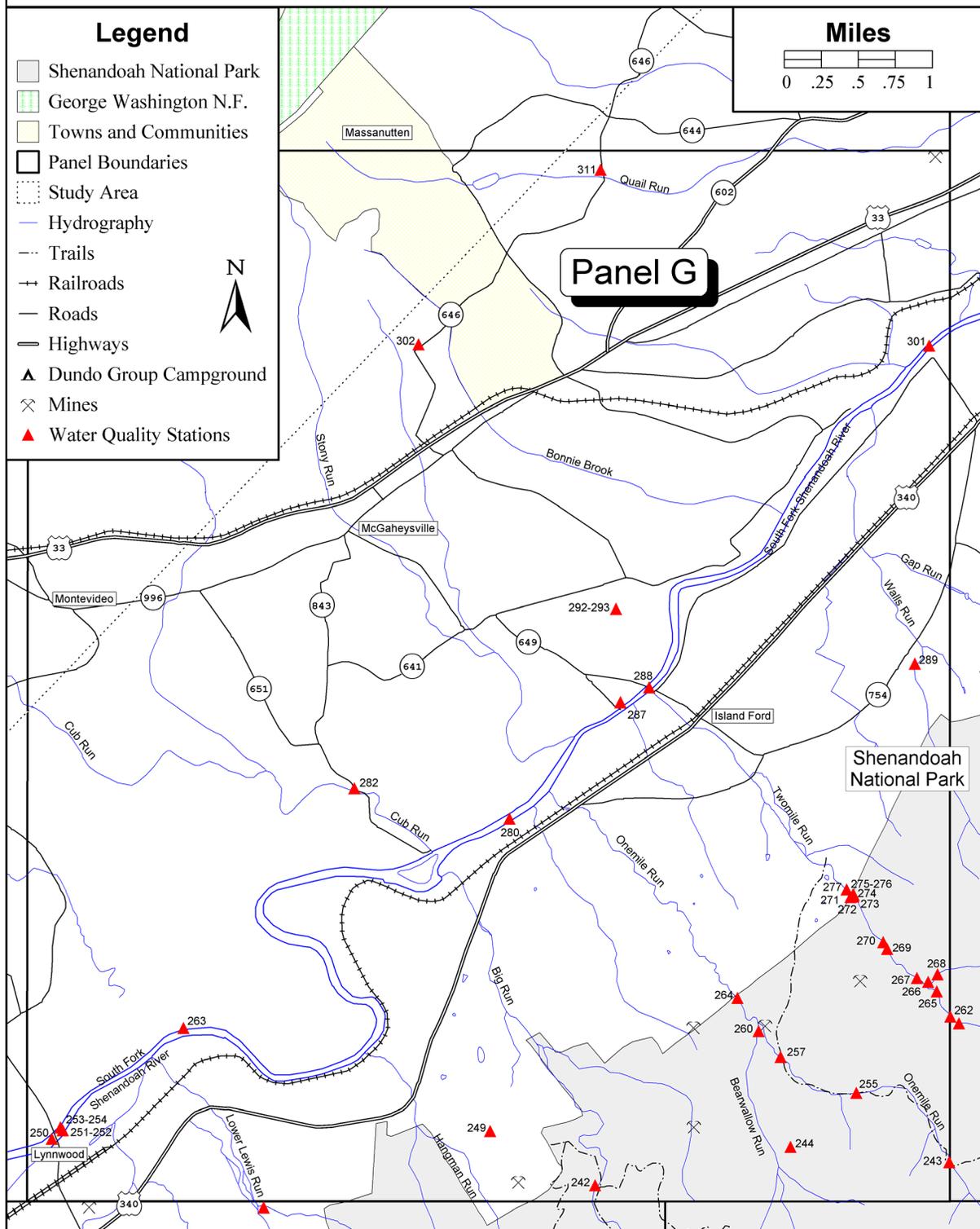
Shenandoah National Park

Water Quality Monitoring Locations



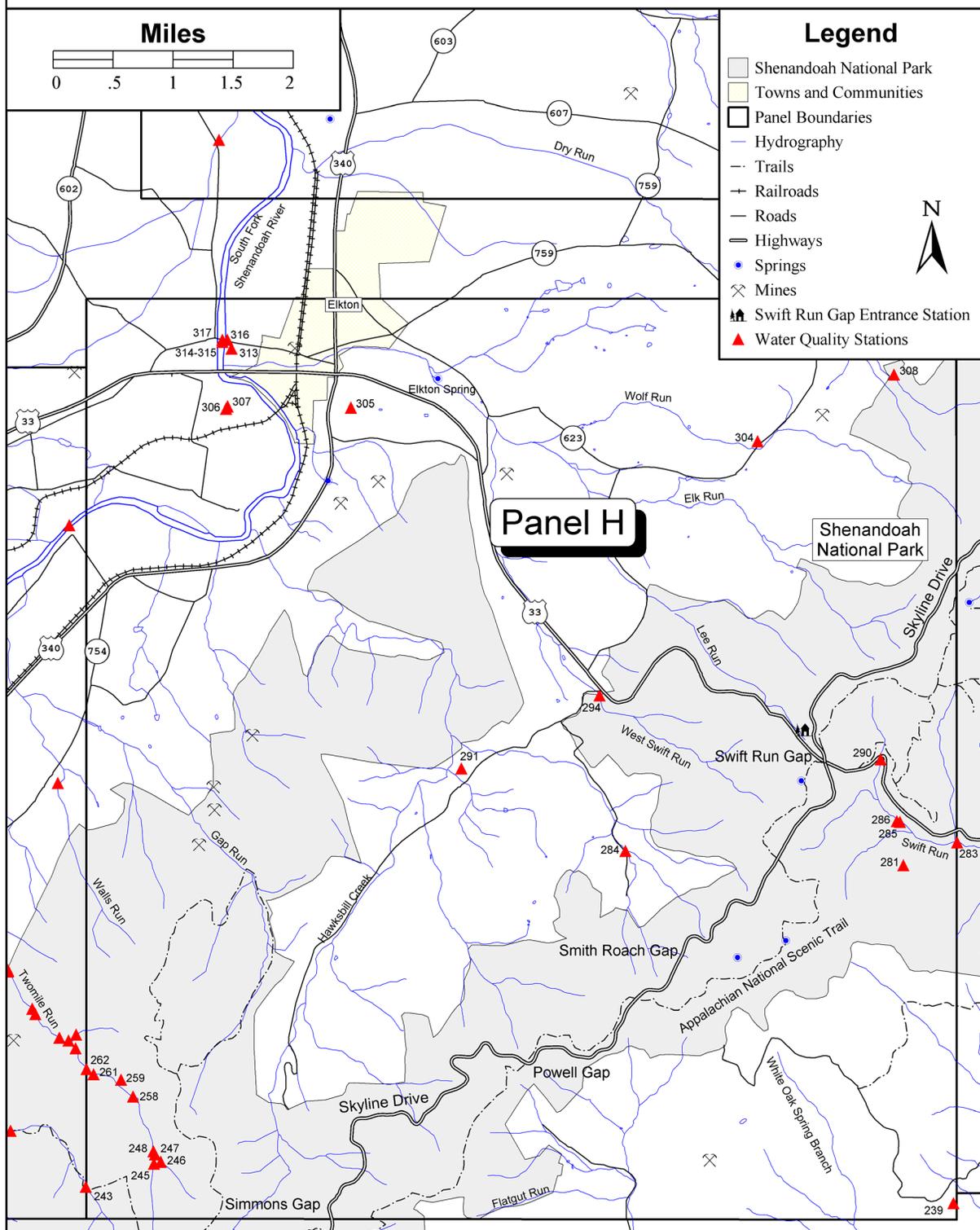
Shenandoah National Park

Water Quality Monitoring Locations



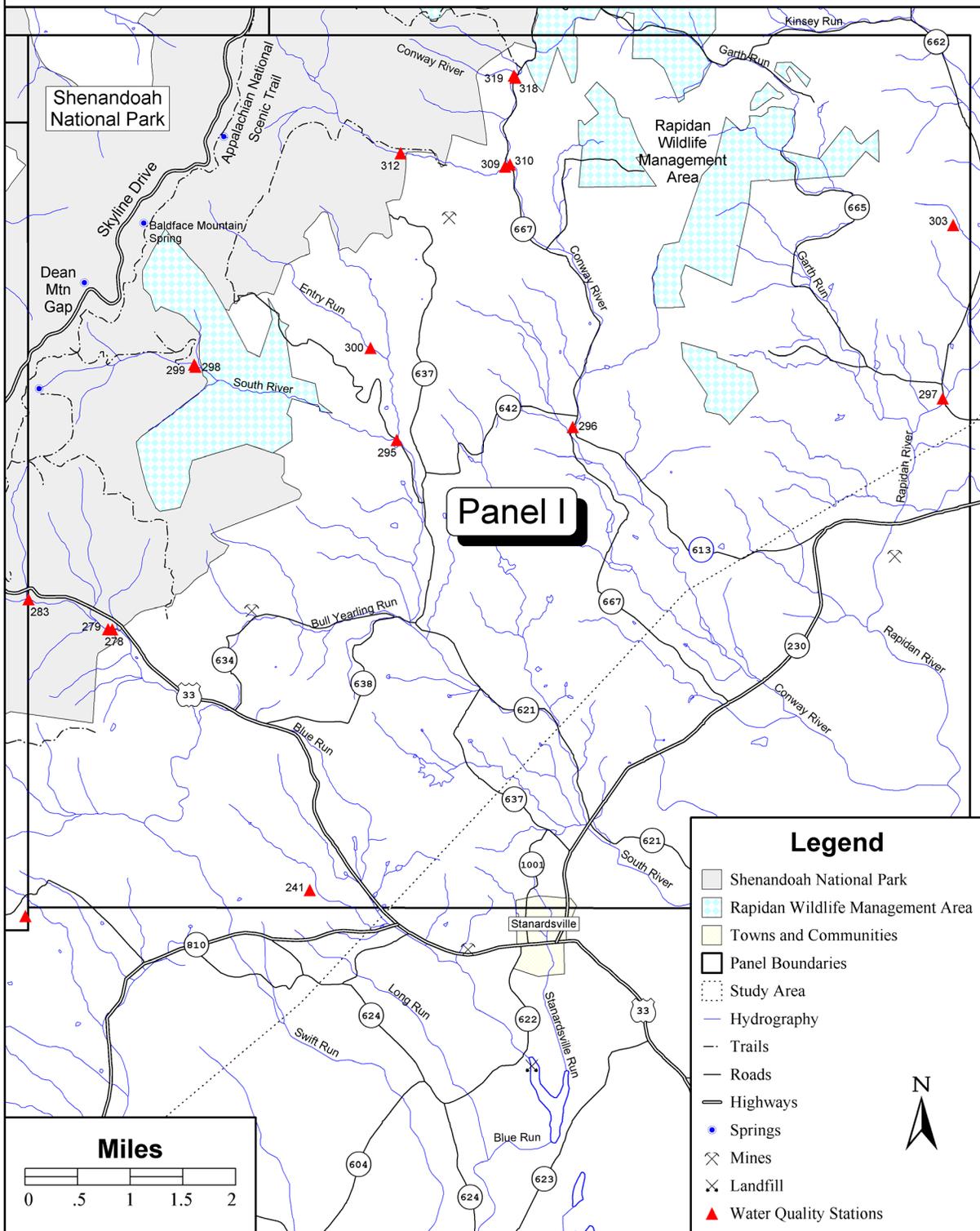
Shenandoah National Park

Water Quality Monitoring Locations



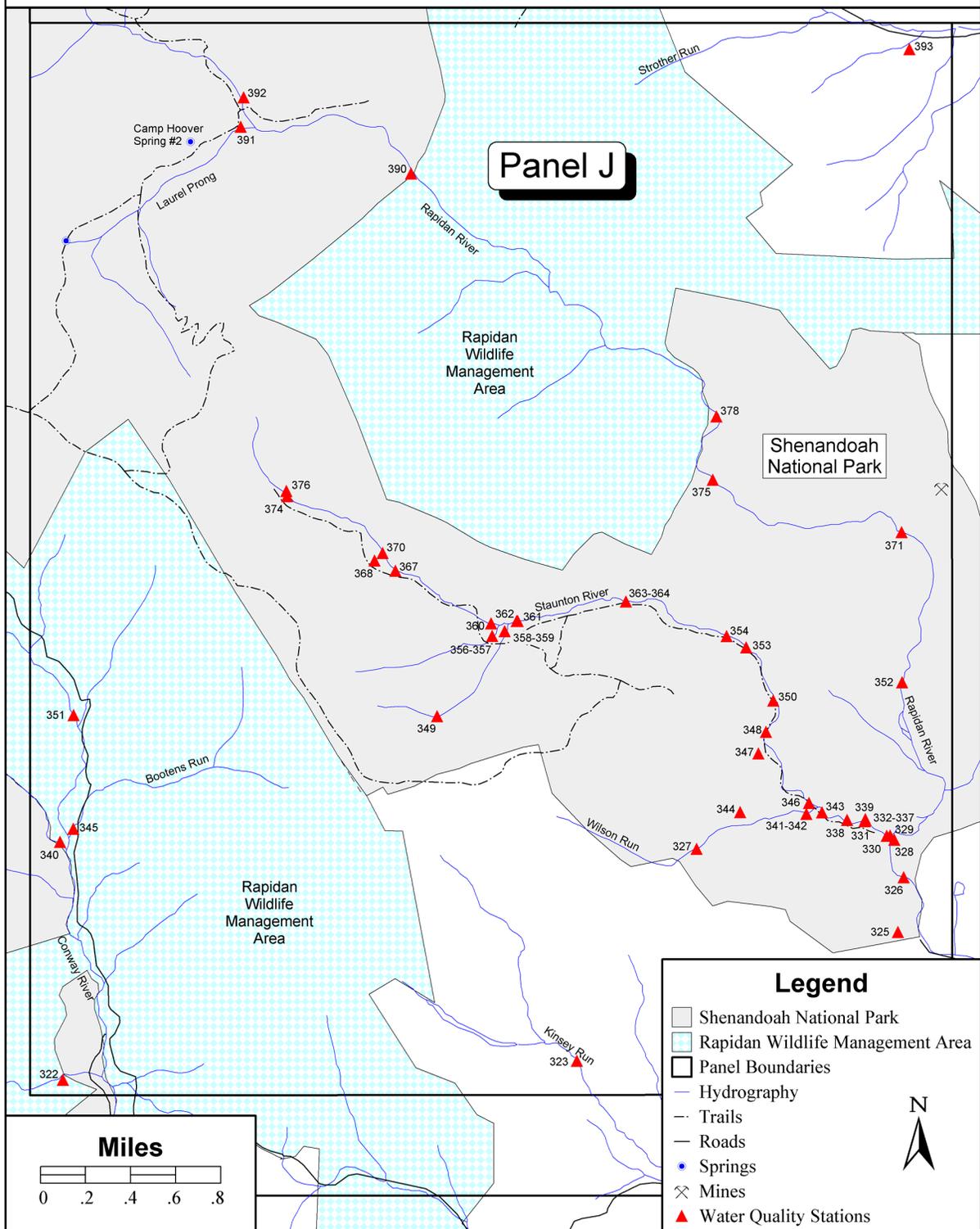
Shenandoah National Park

Water Quality Monitoring Locations



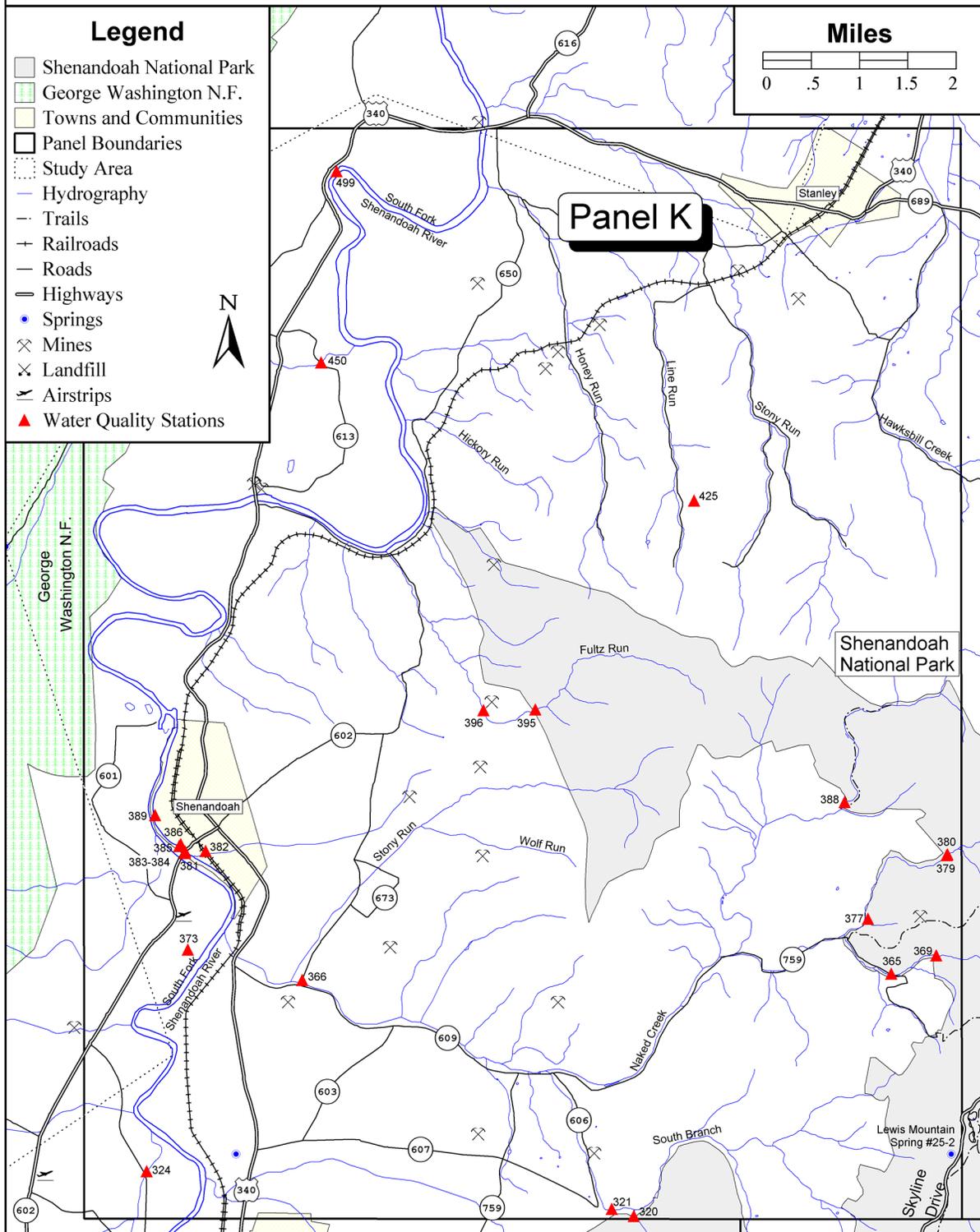
Shenandoah National Park

Water Quality Monitoring Locations



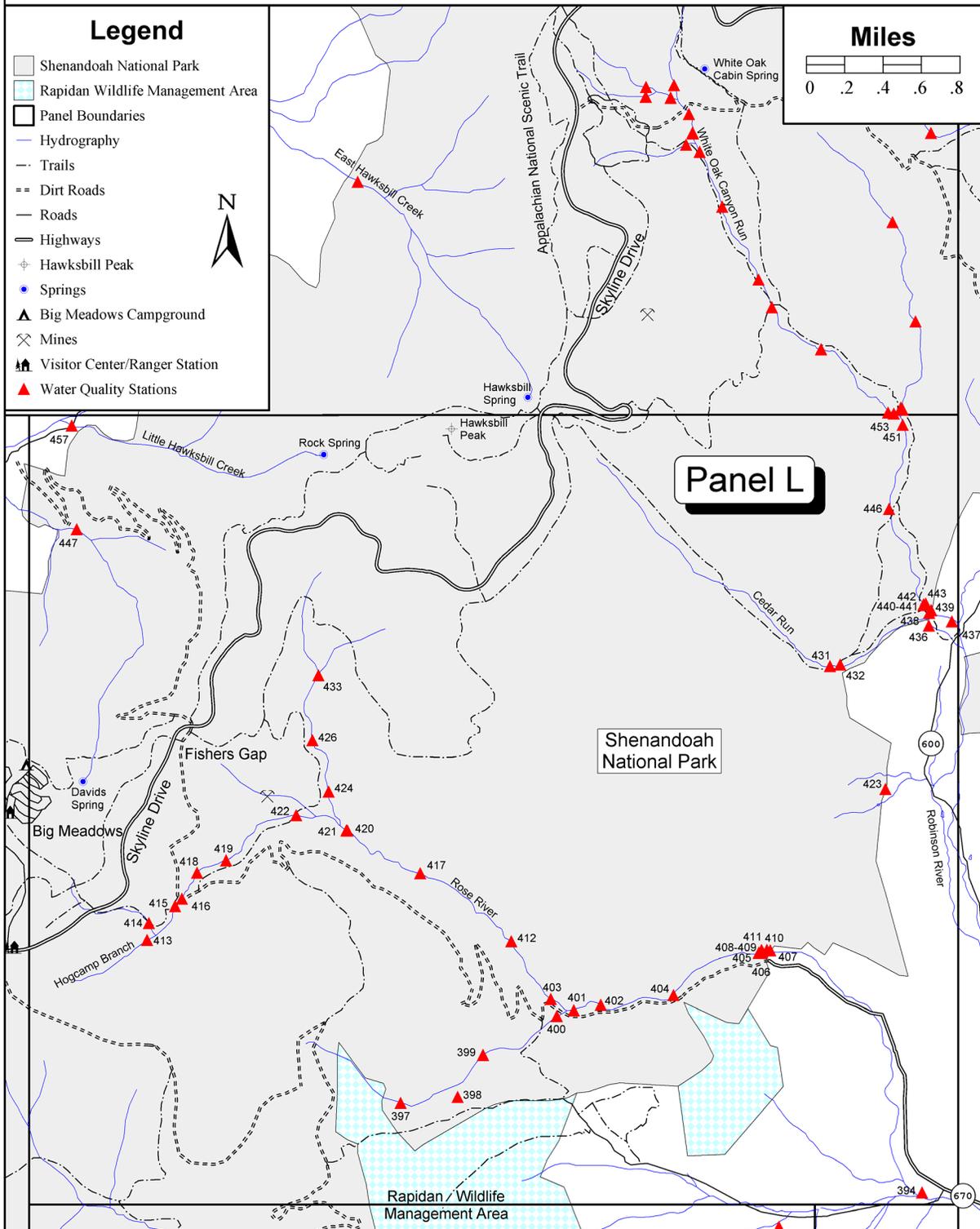
Shenandoah National Park

Water Quality Monitoring Locations



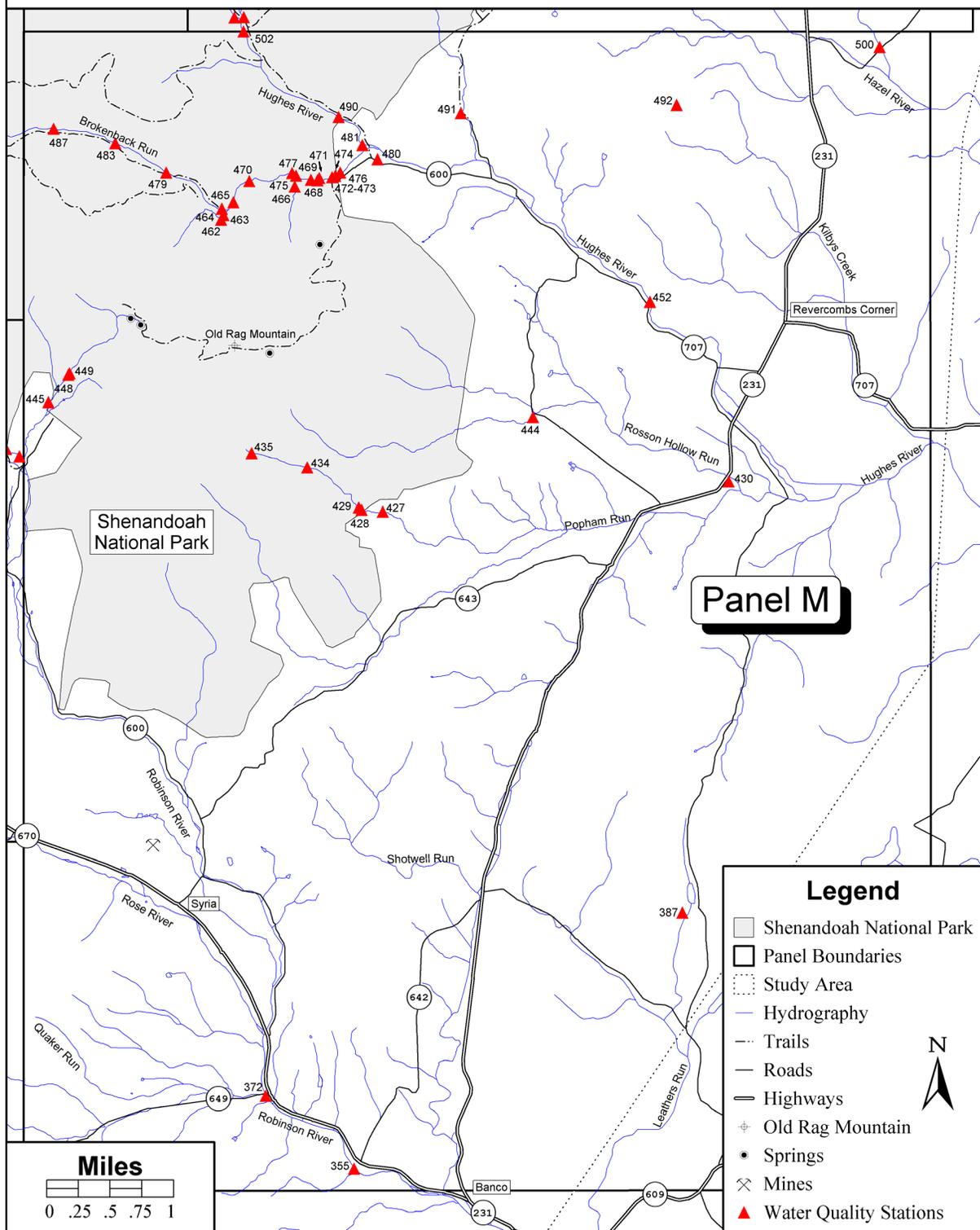
Shenandoah National Park

Water Quality Monitoring Locations



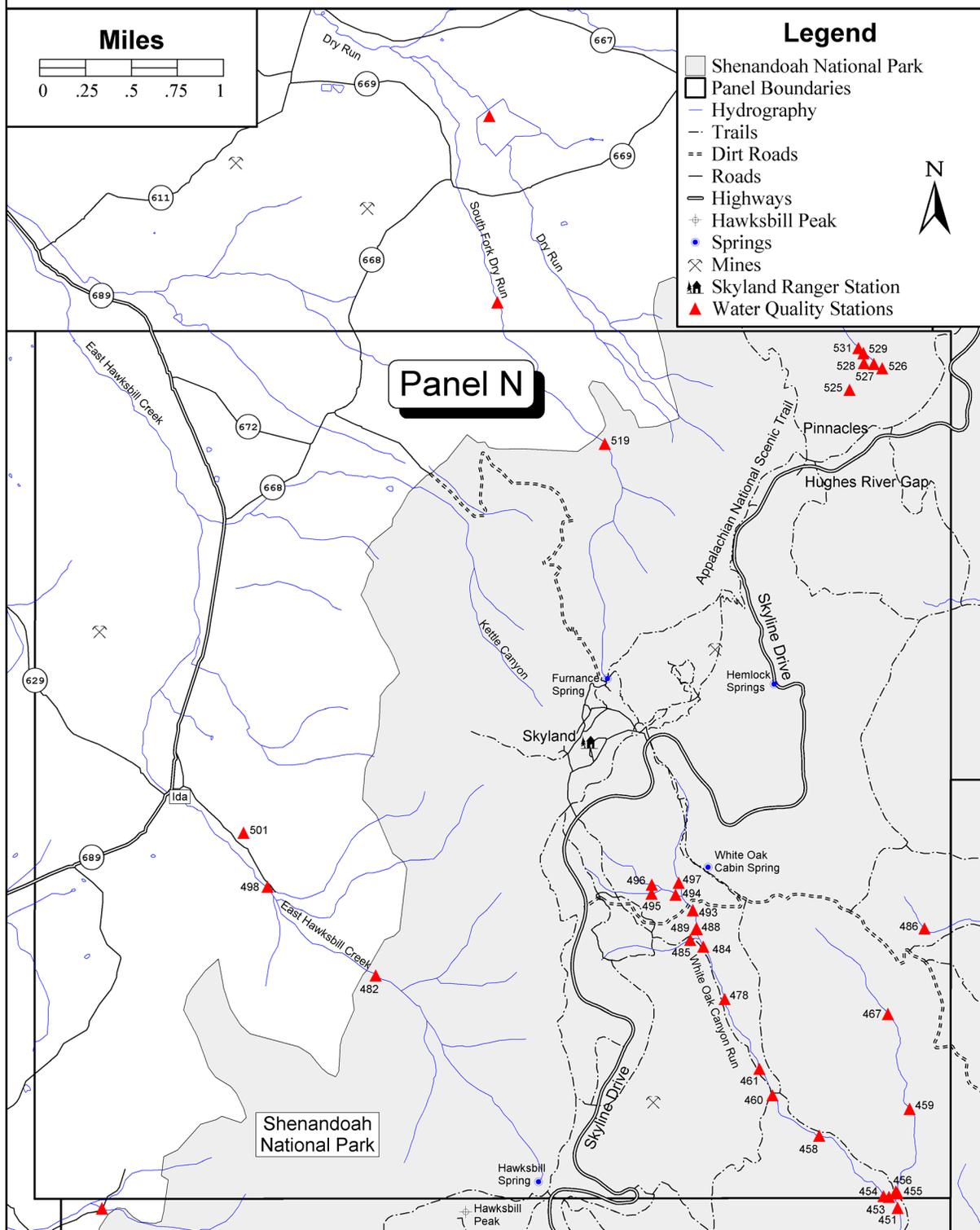
Shenandoah National Park

Water Quality Monitoring Locations



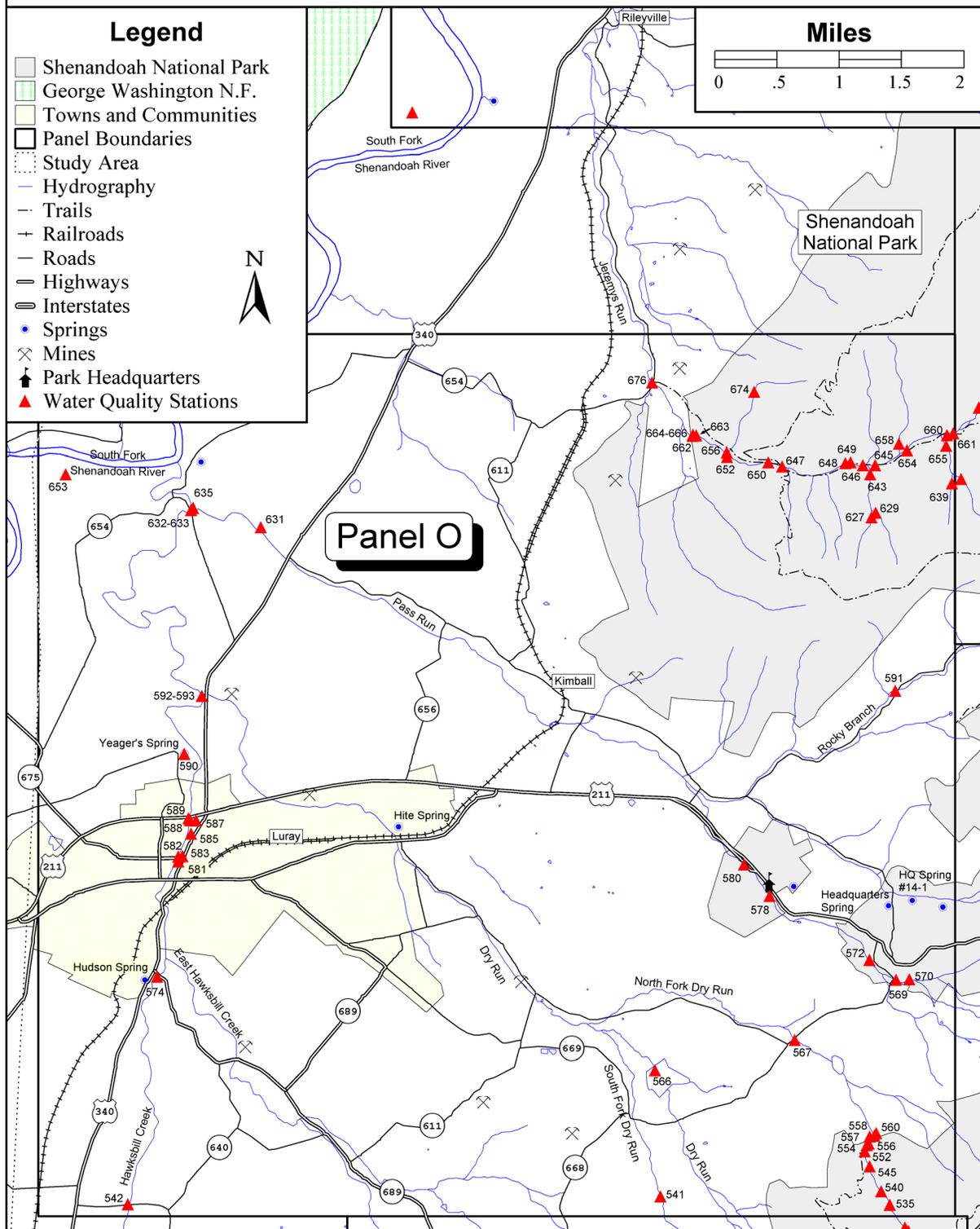
Shenandoah National Park

Water Quality Monitoring Locations



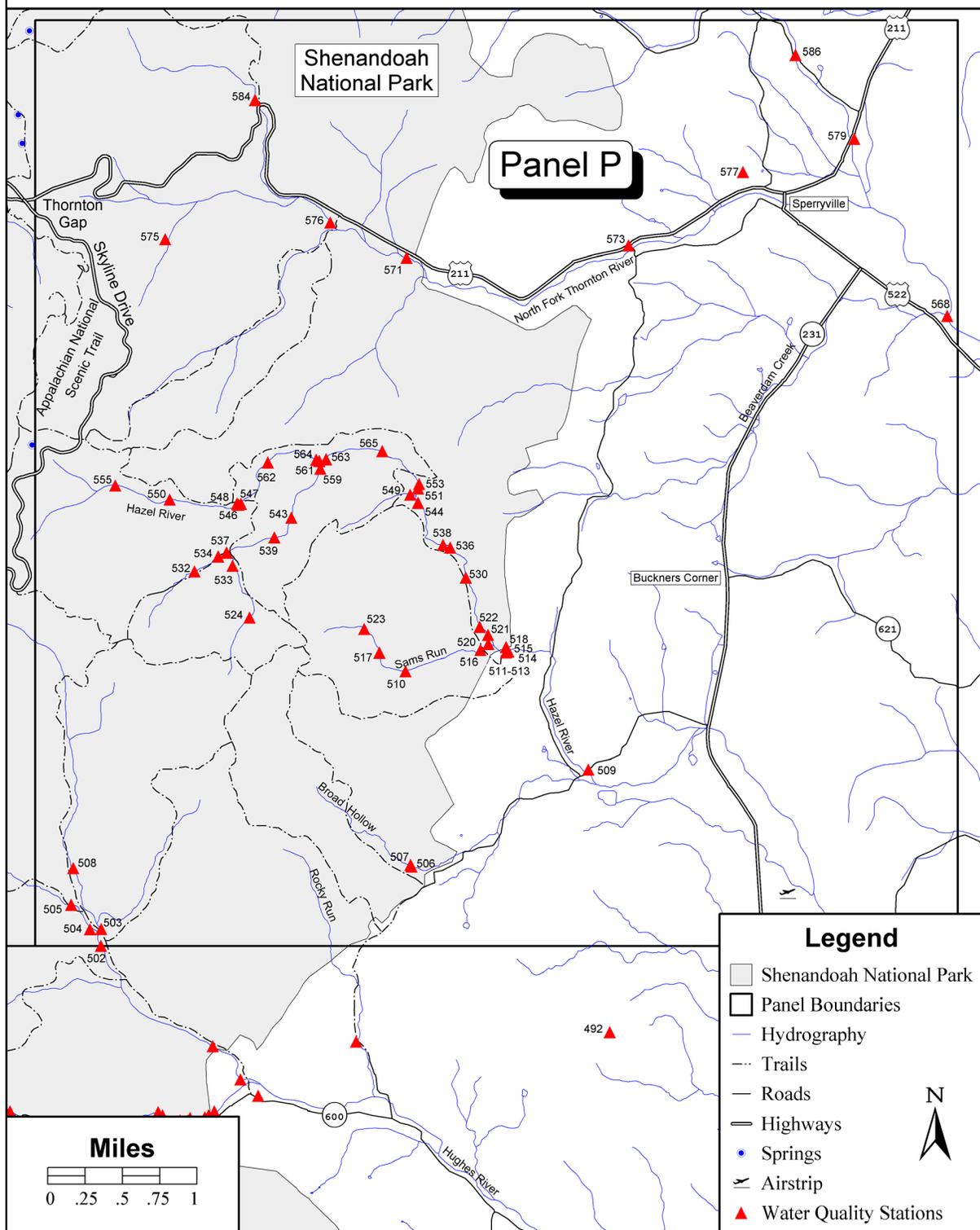
Shenandoah National Park

Water Quality Monitoring Locations



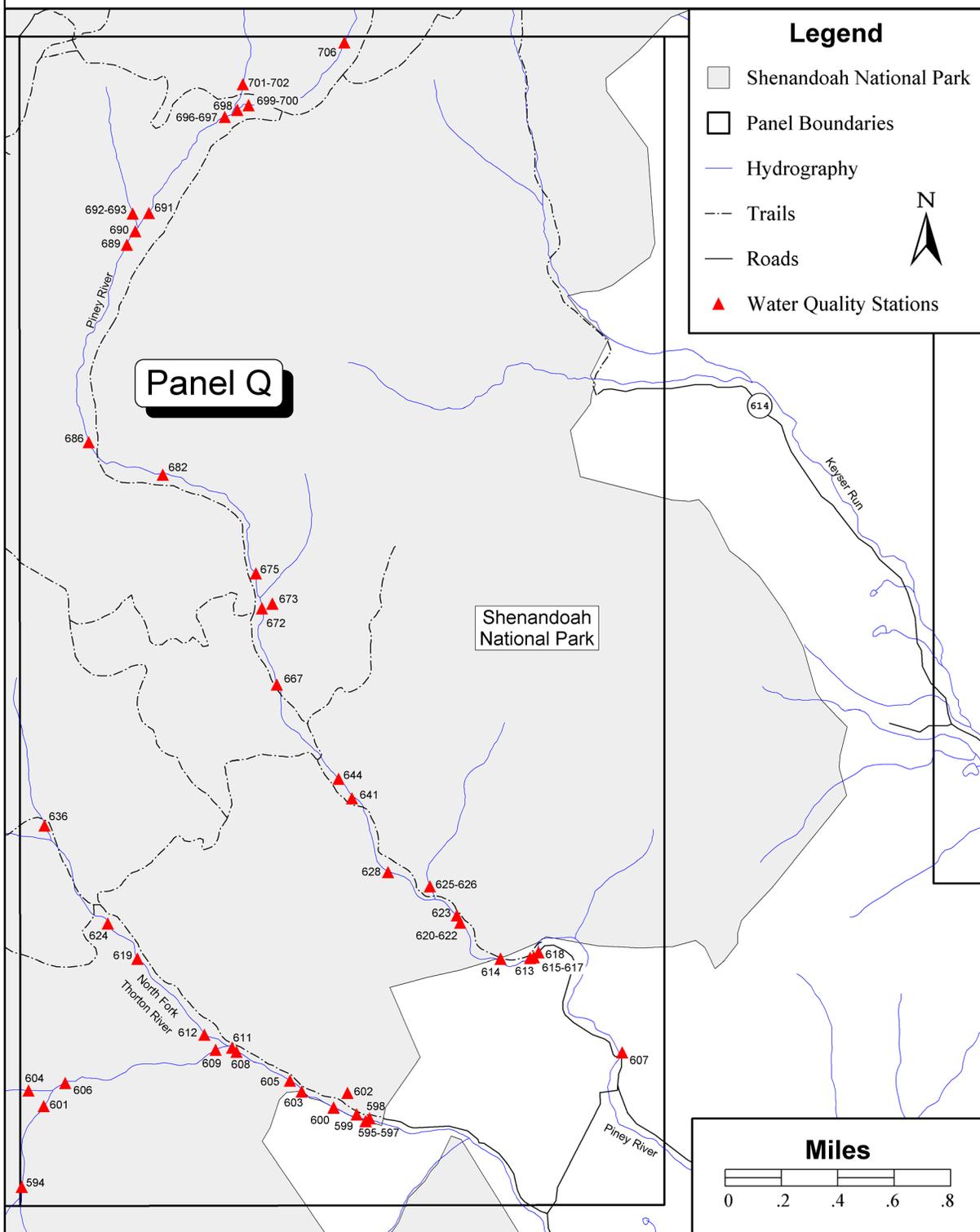
Shenandoah National Park

Water Quality Monitoring Locations



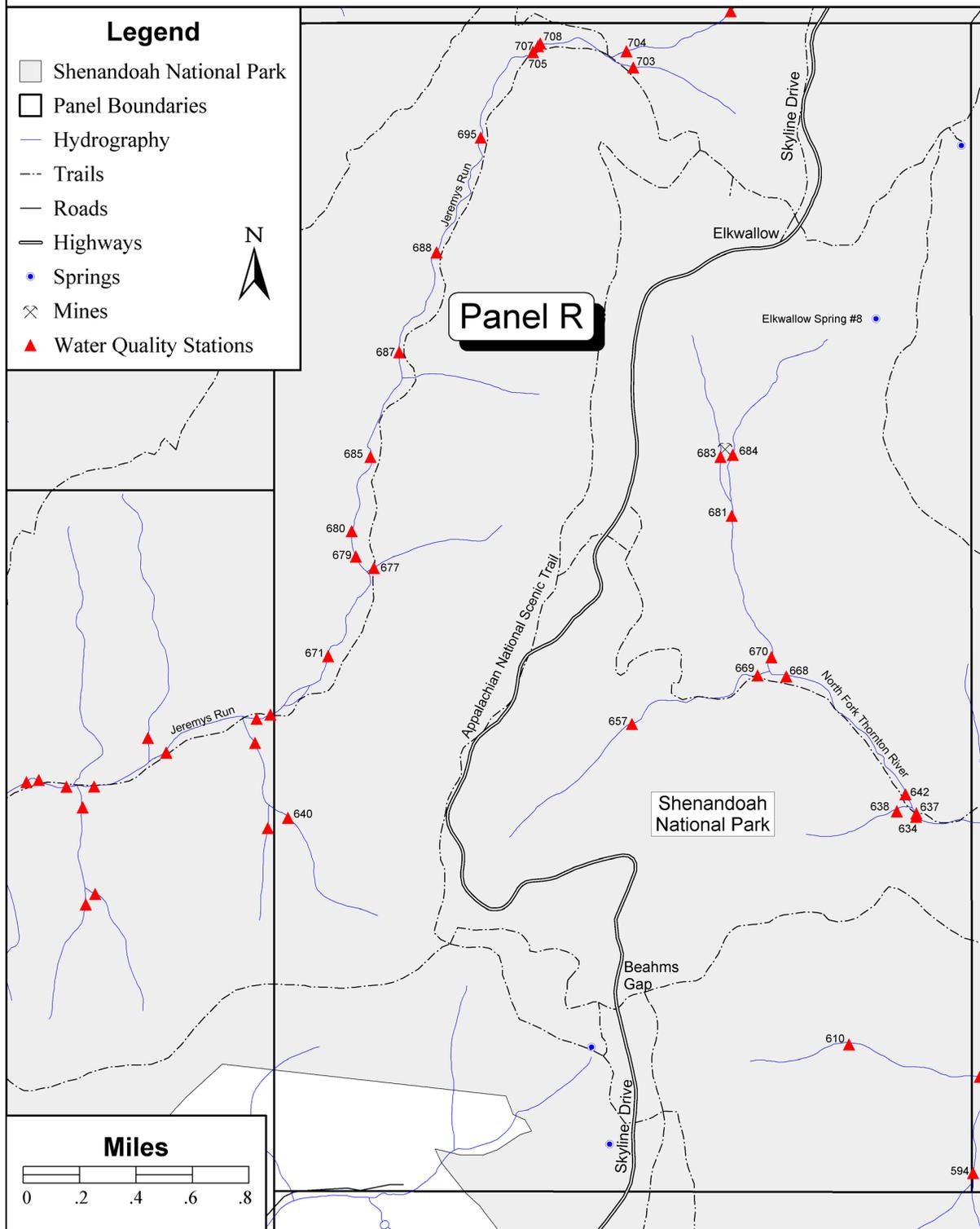
Shenandoah National Park

Water Quality Monitoring Locations



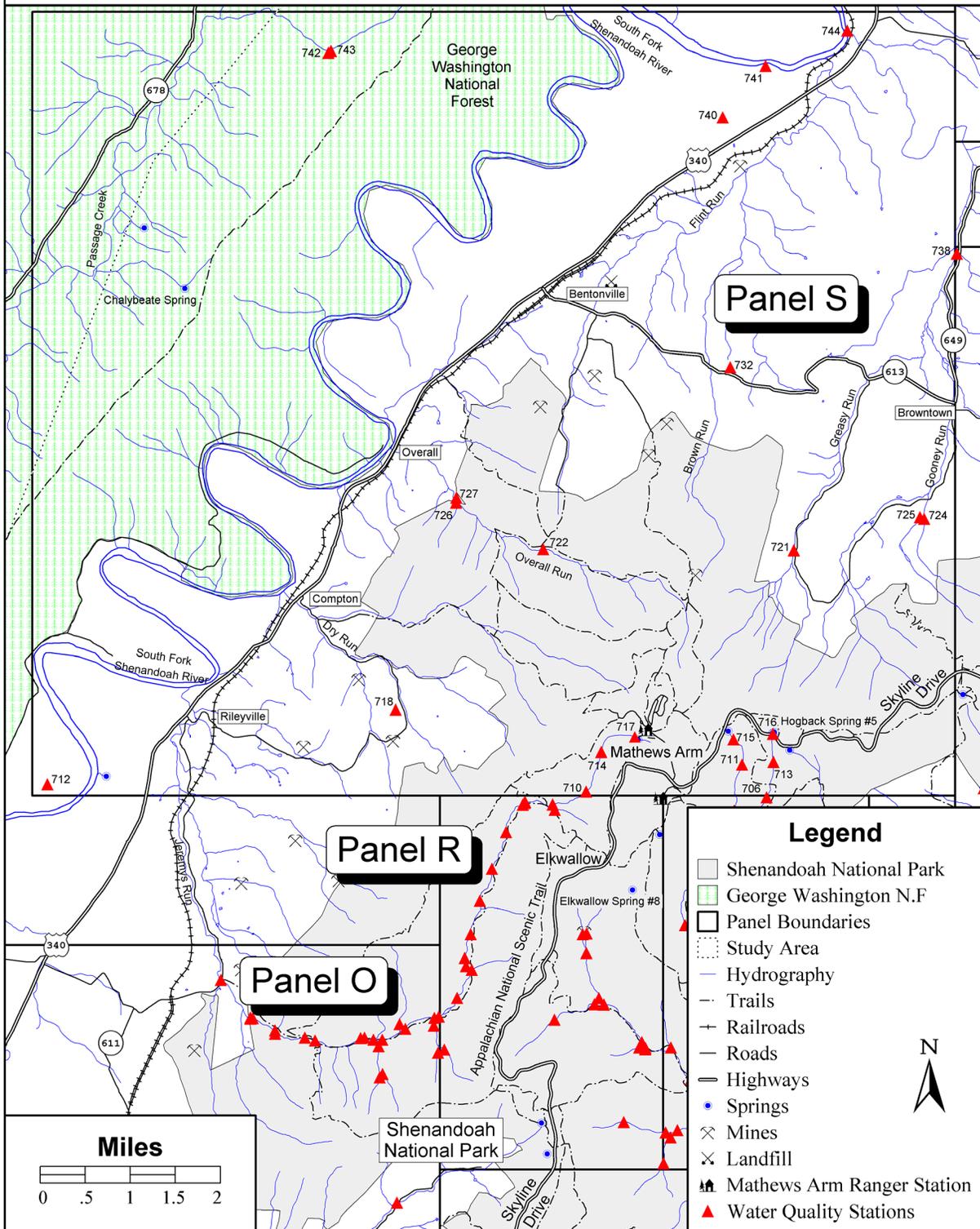
Shenandoah National Park

Water Quality Monitoring Locations



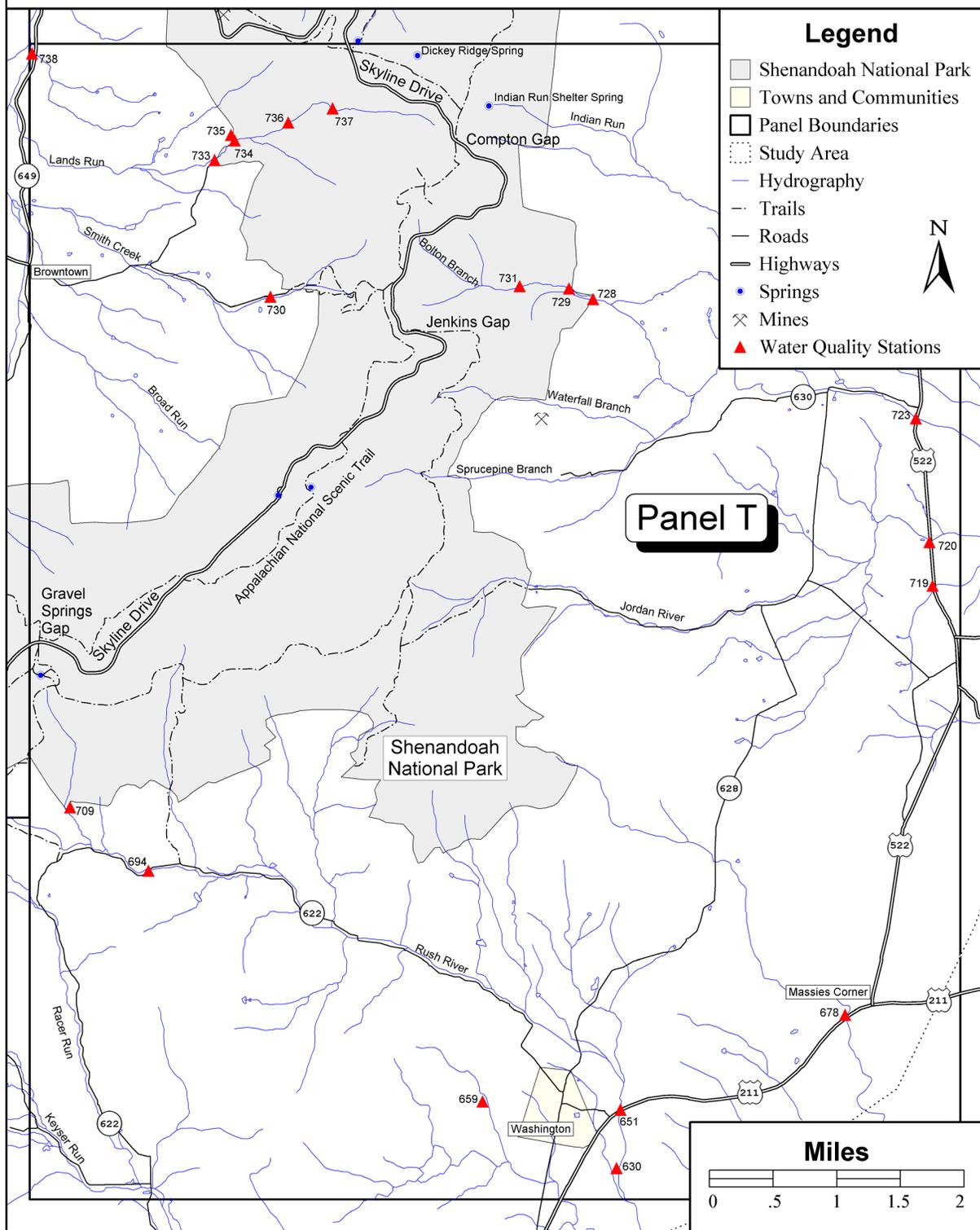
Shenandoah National Park

Water Quality Monitoring Locations



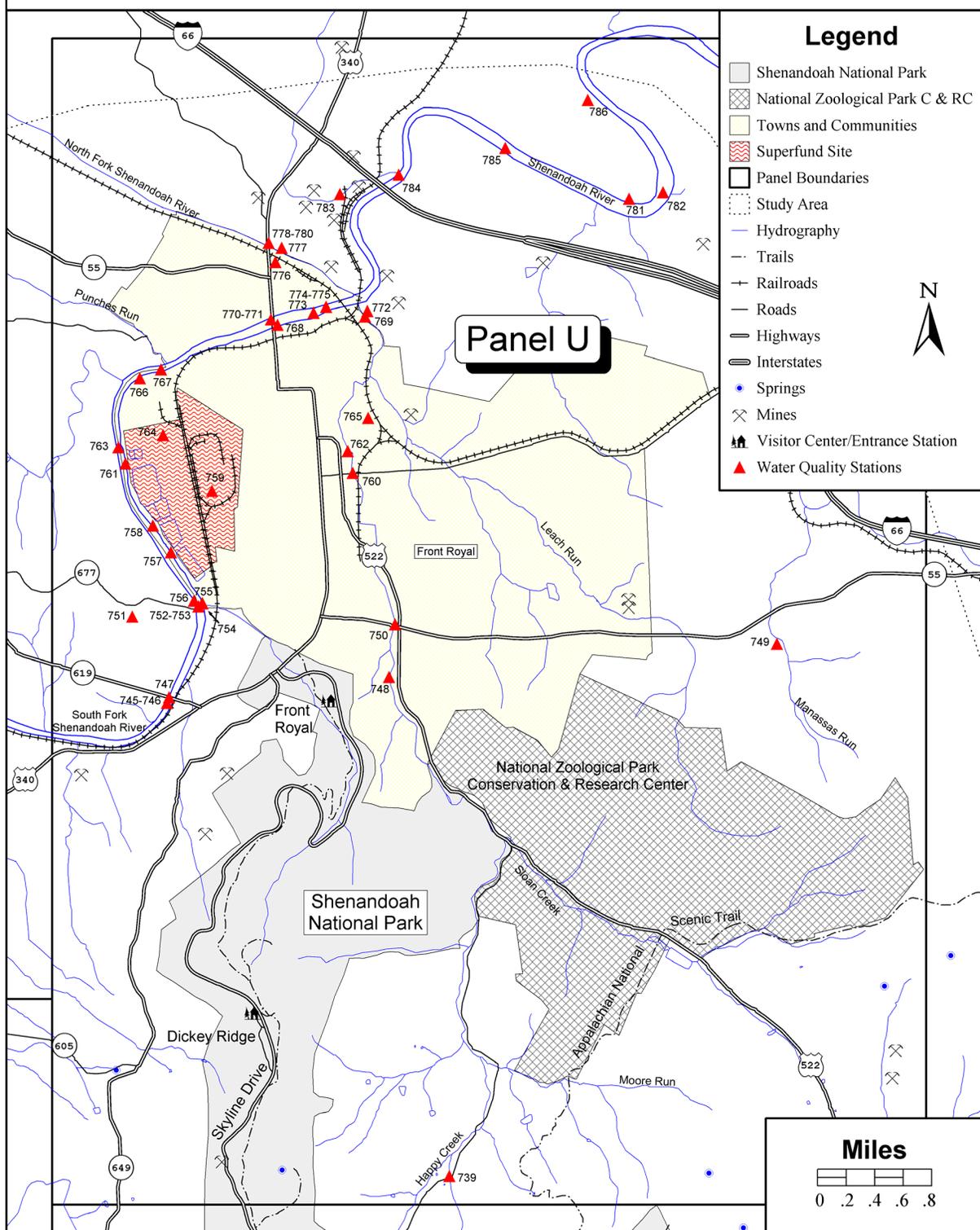
Shenandoah National Park

Water Quality Monitoring Locations



Shenandoah National Park

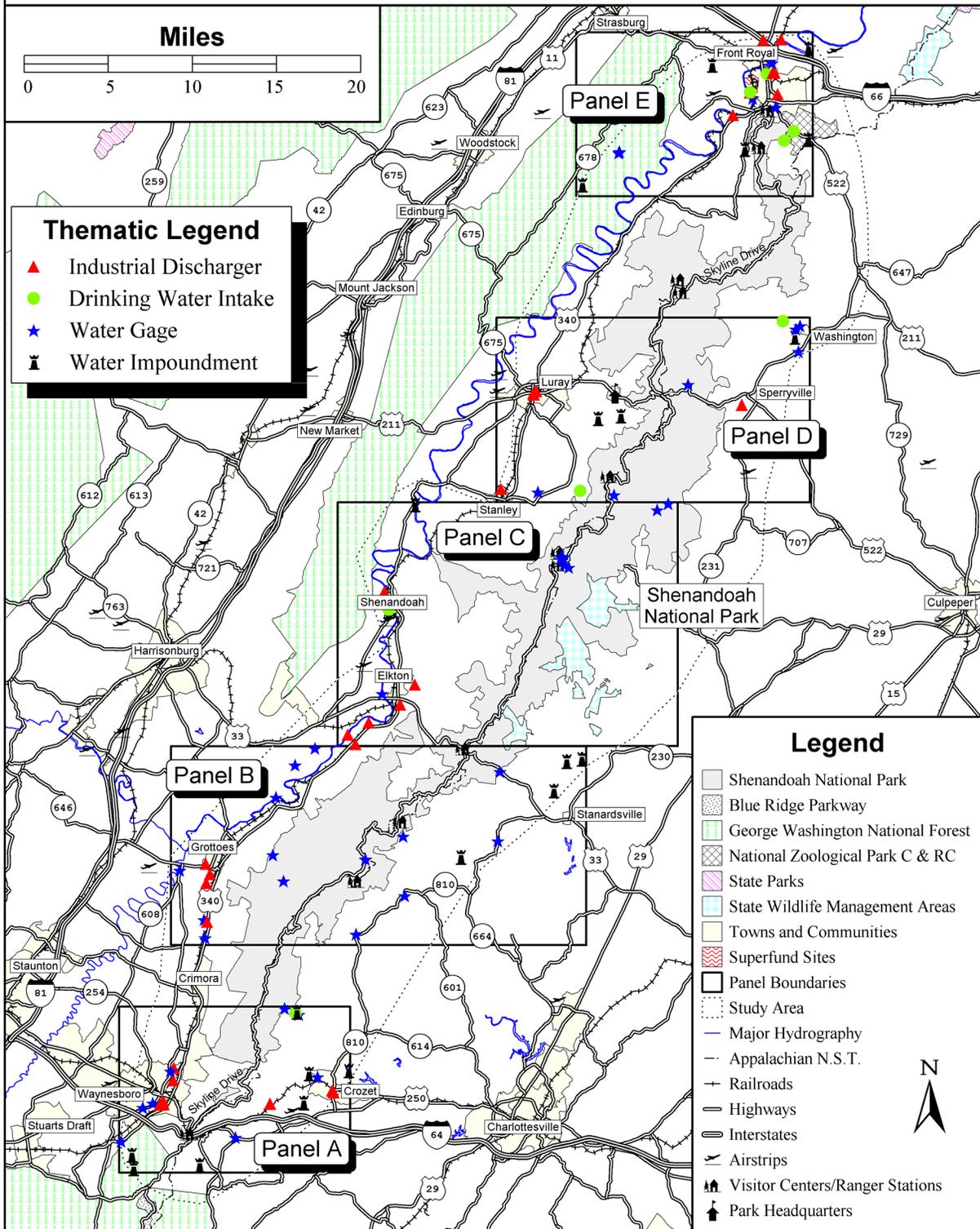
Water Quality Monitoring Locations



Shenandoah National Park

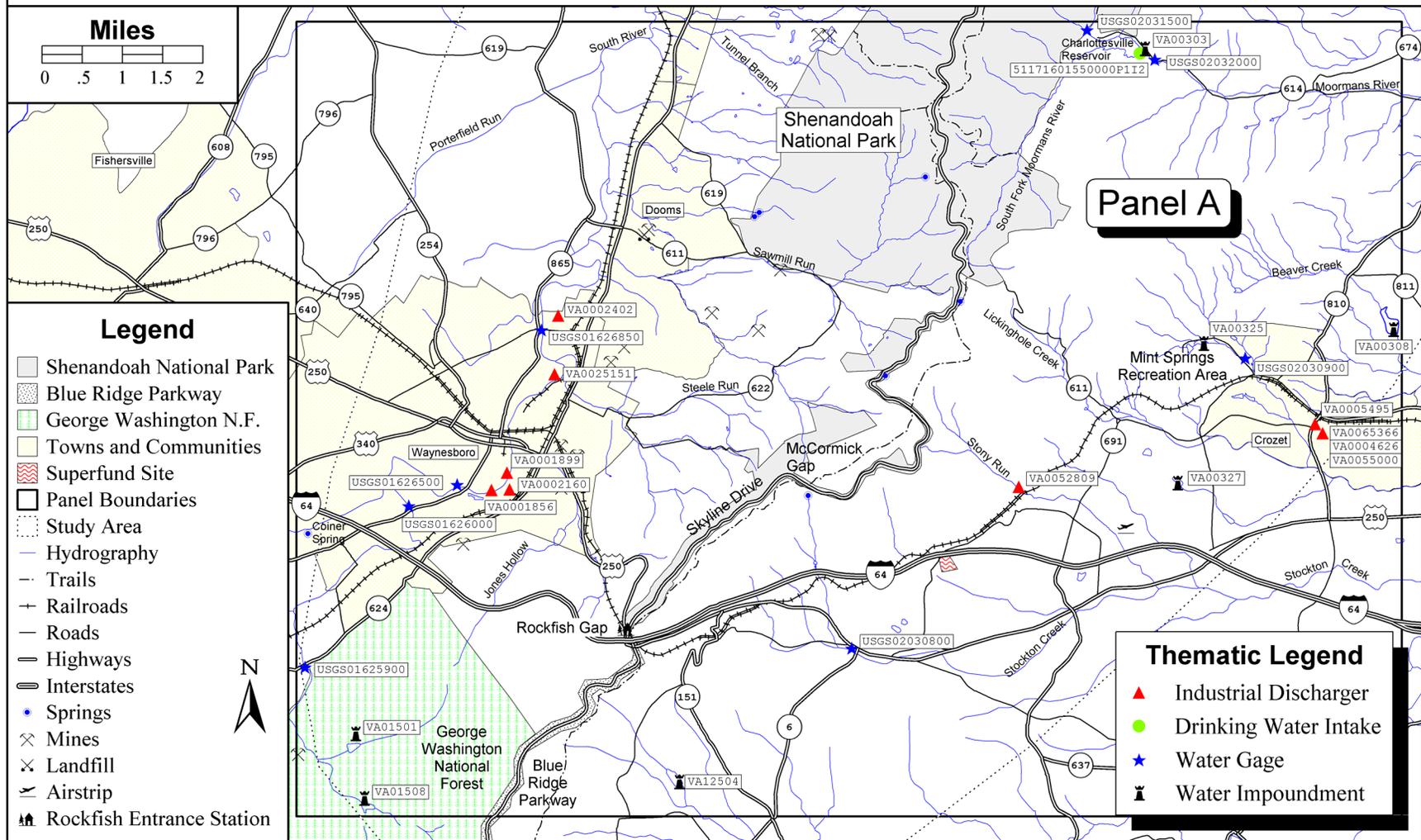
Dischargers, Drinking Intakes, Water Gages, & Water Impoundments

Graphic Panel Index



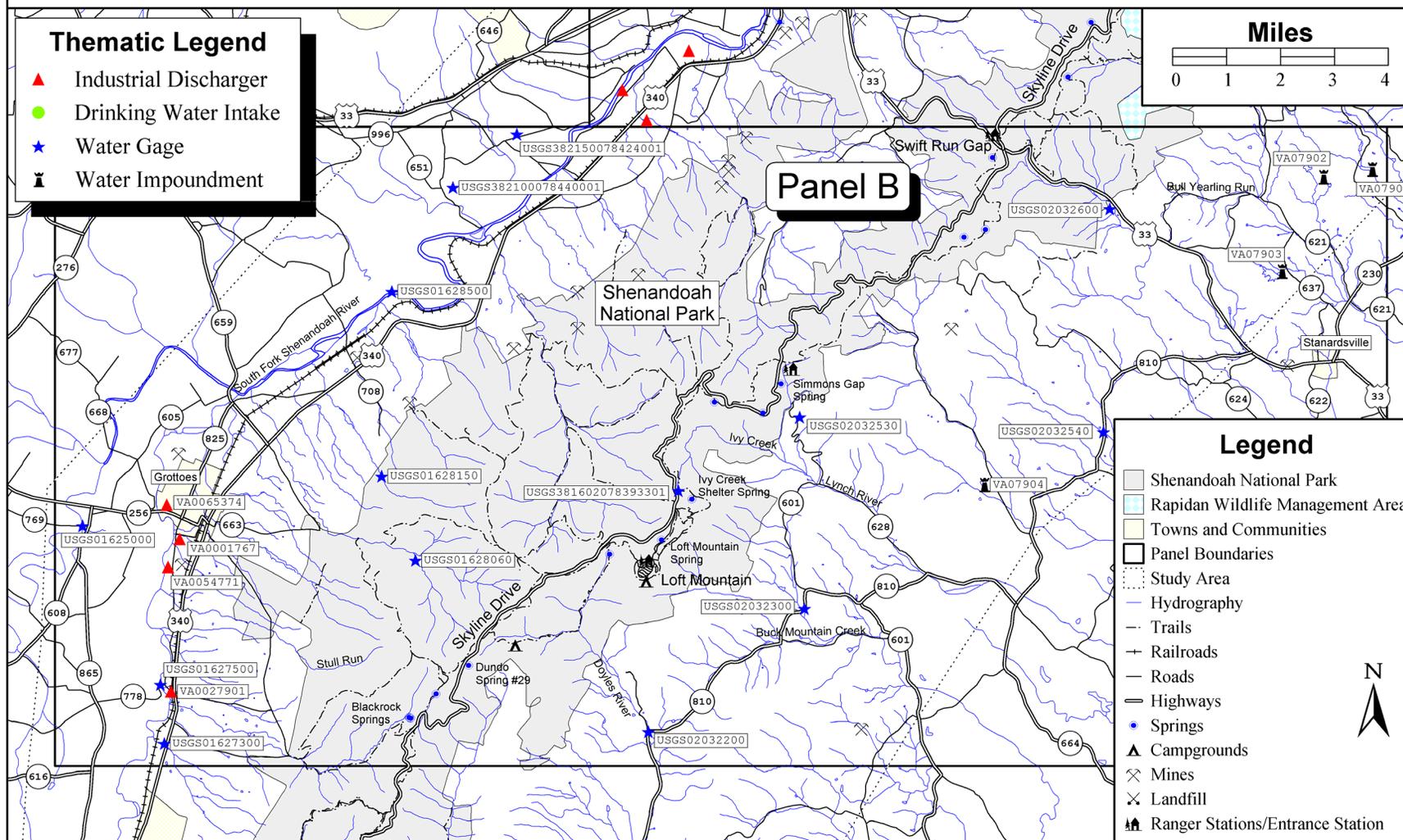
Shenandoah National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



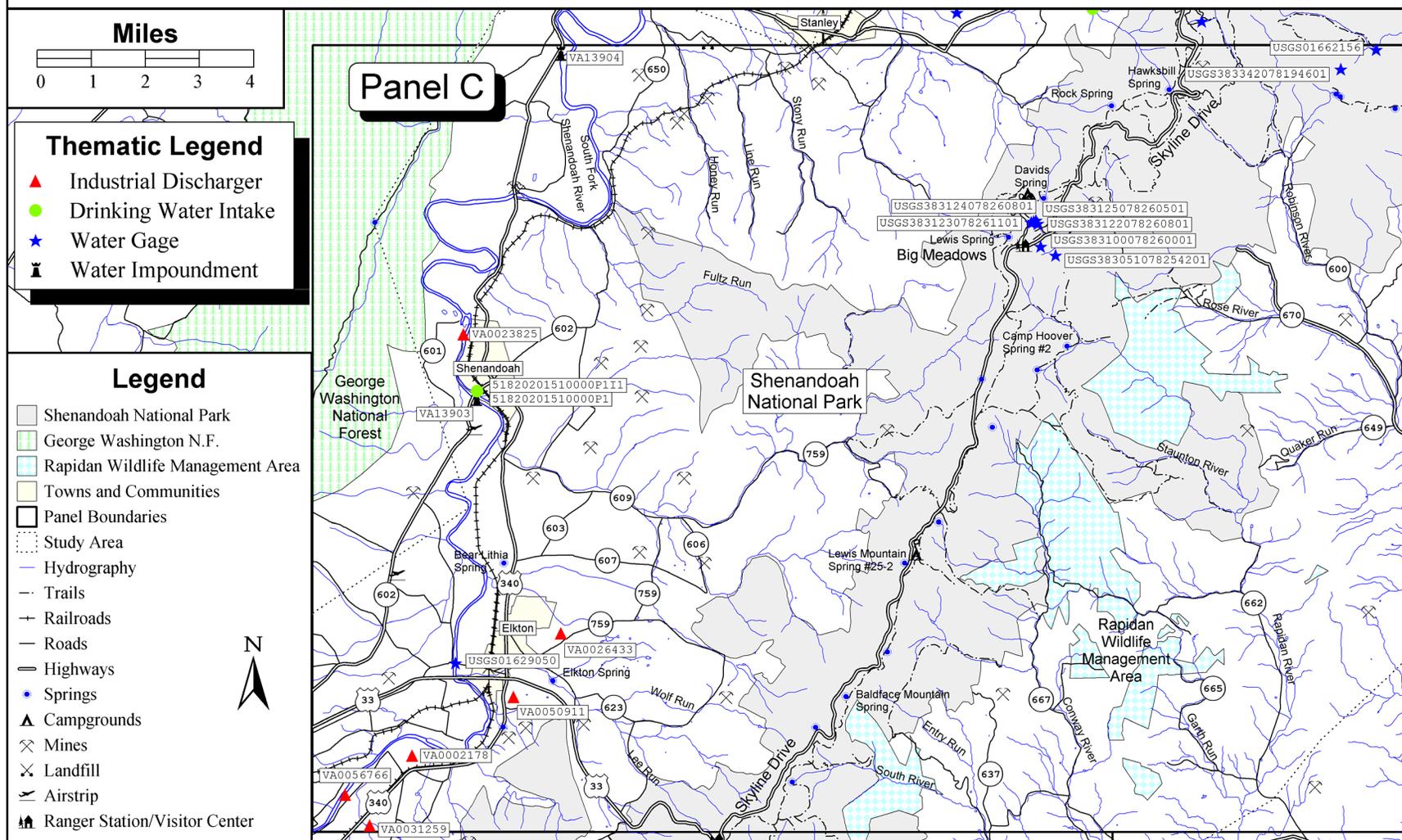
Shenandoah National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



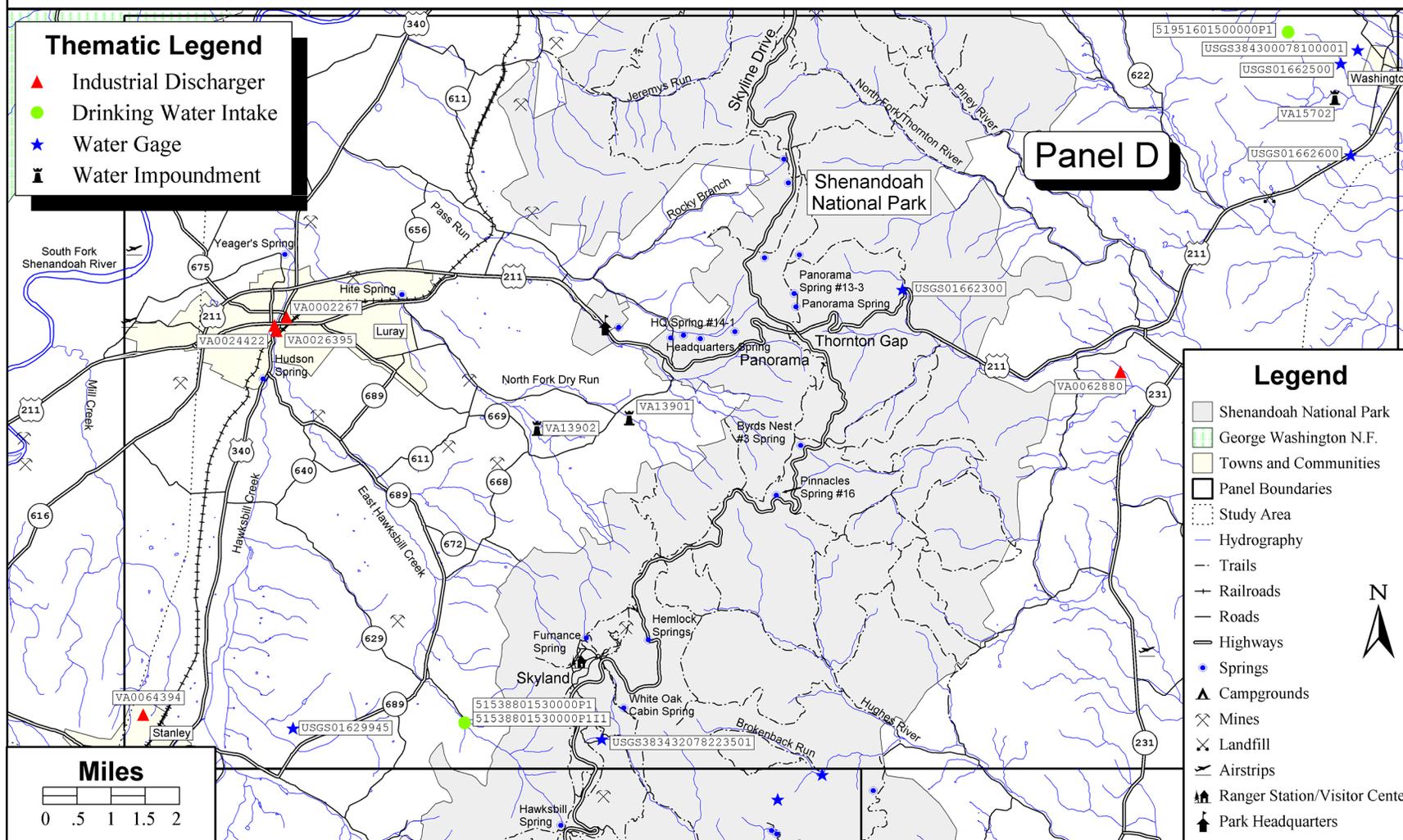
Shenandoah National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



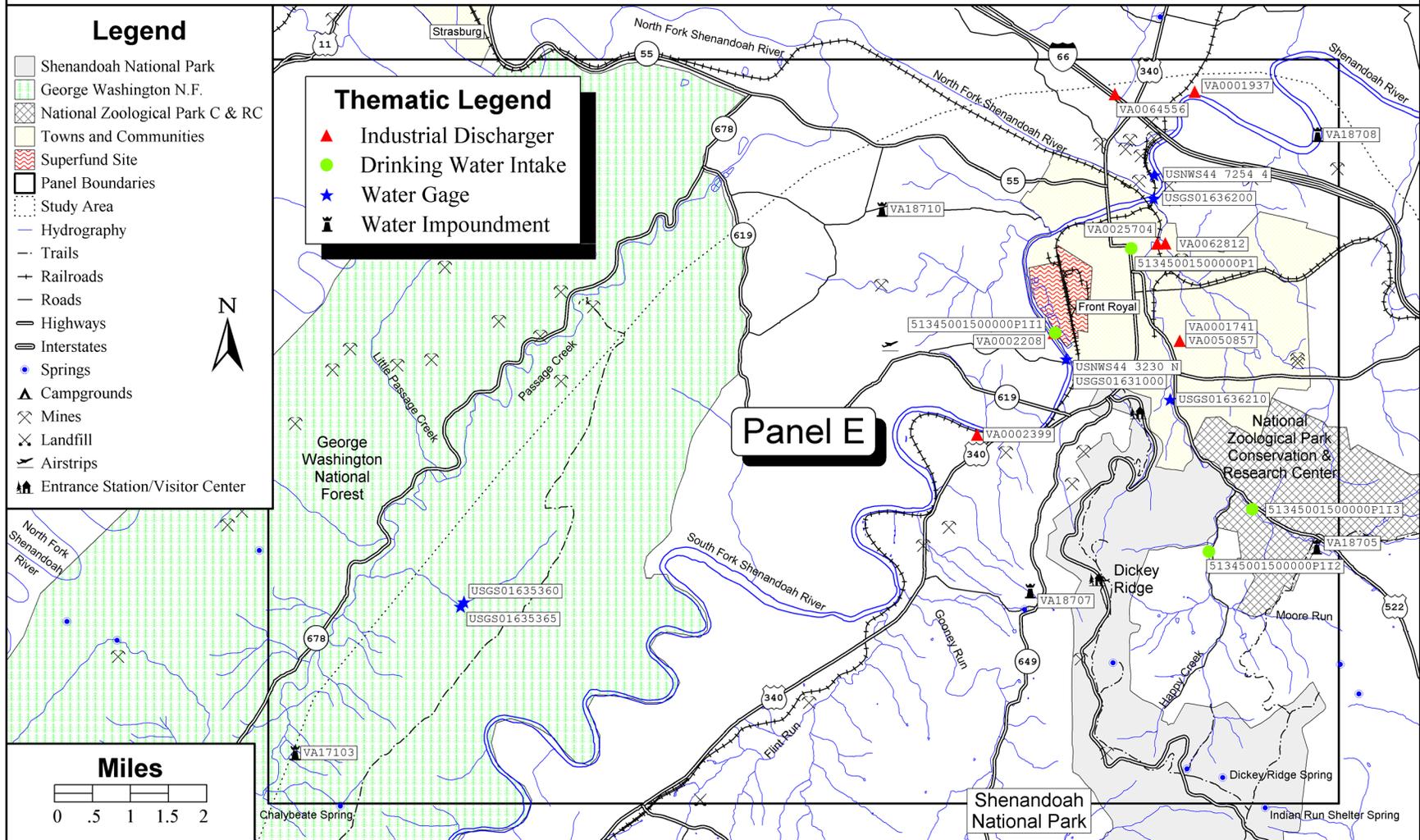
Shenandoah National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



Shenandoah National Park

Dischargers, Drinking Intakes, Water Gages, & Water Impoundments



**Industrial Facility Discharges, Drinking Water Intakes,
Water Gages, and Water Impoundments Within the SHEN Study Area**

Industrial Facility Discharges

<u>Site ID</u>	<u>Station/Facility Name</u>	<u>Address</u>	<u>City</u>	<u>Facility Receiving Water Name</u>
VA0001741	OLD VIRGINIA INC	KENDRICK LANE	FRONT ROYAL	SB OF SHENANDOAH R
VA0001767	REYNOLDS METALS CO GROTTUES	P O BOX 128	GROTTUES	SOUTH RIVER
VA0001856	WAYN TEX, INC.	901 SOUTH DELPHINE AVENUE	WAYNESBORO	SOUTH RIVER
VA0001899	CROMPTON SHENANDOAH WAYNESBORO	.....	WAYNESBORO	SOUTH R
VA0001937	POTOMAC EDISON RIVERTON	ALLEGHENY POWER SERVICE C	GREENSBURG	SHENANDOAH RVR
VA0002160	E. I. DUPONT DE NEMOURS&CO WAY	1007 MARKET STREET	WILMINGTON	SOUTH RVR
VA0002178	MERCK & CO INC STONEWALL PLANT	126 EAST LINCOLN AVENUE	RAHWAY	S FORK SHNDOAH
VA0002208	AVTEX FIBERS INC, FRONT ROYAL	BOX 1169, KENDRICK LANE	FRONT ROYAL	S FORK SHNDOAH
VA0002267	VIRGINIA OAK TANNERY, LURAY	P O BOX 511	LURAY	HAWKSBILL CREEK
VA0002399	AVTEX FIBERS FRONT ROYAL, INC.	P O BOX 883	FRONT ROYAL	S FORK SHNDOAH
VA0002402	GENICOM CORP.	GENERAL ELECTRIC DRIVE	WAYNESBORO	SOUTH RIVER
VA0004626	DEL MONTE FROZEN FOODS INC	P O BOX 97	CROZET ALBEMA	LICKINGHOLE CK
VA0005495	JIFFY CAR WASH	P O BOX 172	CROZET	PARROTT BRANCH
VA0023825	SHENANDOAH,TOWN OF	.....	SHENANDOAH	SOUTH R
VA0024422	U.S. SHENADOAH NATIONAL PARK	.....	LURAY	TR TO HAWKSBILL C
VA0025151	WAYNESBORO DEPT OF UTILITIES S	930 ESSEX AVE	WAYNESBORO	SOUTH R
VA0025704	FORT ROYAL, TOWN OF	.....	FRONT ROYAL	HAPPY C
VA0026395	LURAY, TOWN OF	.....	LURAY	SF SHENANDOAH R
VA0026433	ELKTON, TOWN OF	ROUTE 33 WEST	ELKTON	SF SHENANDOAH R
VA0027901	HARRISTON SERVICE CORPORATION	.....	.....	SOUTH R
VA0031259	TYROLIA FARMS INC	RT 1	MCGAHEYSVILLE	QUAIL RUN
VA0050857	FRONT ROYAL WATER TREAT PLANT	RT 522	FRONT ROYAL	HAPPY C
VA0050911	SHENANDOAH WTP TOWN OF	.....	SHENANDOAH	SF SHENANDOAH R
VA0052809	GREENWOOD CHEMICAL COMPANY	STATE HWY 690	GREENWOOD	TR TO STOCKTON C
VA0054771	GREENVILLE CAR WASH	.....	GREENVILLE	TR TO SOUTH R
VA0055000	CROZET WTR TREAT PLT RIVANNA W	RT 240	.....	BEAVER C LK
VA0056766	ADOLPH COORS CO	U.S. HIWAY 340	ROCKINGHAM CO.	SF SHENANDOAH R
VA0062812	FRONT ROYAL, TOWN OF,STP	MANASSAS AVE	FRONT ROYAL	SHENANDOAH R
VA0062880	SPERRYVILLE WASTEWATER TREAT F	.....	SPERRYVILLE	THORNTON R
VA0064394	TOWN OF STANLEY MAYOR CAROL GO	.....	STANLEY	SHENANDOAH R
VA0064556	VIRGINIA DEPT OF HWYS & TRANSP	I 66	FRONT ROYAL	CROOKED RN
VA0065366	RIVANNA WATER & SEWER AUTH CRO	U S RT 240	CROZET	POWELLS C
VA0065374	GROTTUES TOWN OF	.....	GROTTUES	SOUTH R

Drinking Water Intakes

<u>Site ID</u>	<u>Station/Facility Name</u>	<u>City</u>	<u>Population Served</u>	<u>Avg. Daily Production (Gal./Day)</u>
51171601550000P1I2	SUGAR HOLLOW RESERV	CHARLOTTSVILL	35280	9000.00
51345001500000P1	TREATMENT PLANT	FRONT ROYAL	10900	0000.00
51345001500000P1I1	SOUTH FORK SHEN	FRONT ROYAL	10900	0000.00
51345001500000P1I2	HAPPY CREEK	FRONT ROYAL	10900	0000.00
51345001500000P1I3	SLOAN CREEK	FRONT ROYAL	10900	0000.00
51538801530000P1	TREATMENT PLANT	LURAY	85	6000.00
51538801530000P1I1	HAWKSBILL CREEK	LURAY	85	6000.00
51820201510000P1	TREATMENT PLANT	SHENANDOAH	1790	0000.00
51820201510000P1I1	SOUTH FORK OF S	SHENANDOAH	1790	0000.00
51951601500000P1	.....	WASHINGTON	460	0000.00

**Industrial Facility Discharges, Drinking Water Intakes,
Water Gages, and Water Impoundments Within the SHEN Study Area**

Water Gages

<u>Site ID</u>	<u>Station Name</u>	<u>Site Type</u>	<u>Drainage Area (Square Miles)</u>	<u>Begin Year</u>	<u>End Year</u>
USGS01625000	MIDDLE RIVER NEAR GROTTOS, VA	Stream	375.00	1928	1999
USGS01625900	BACK CREEK AT LYNDHURST, VA		41.20	1974	1977
USGS01626000	SOUTH RIVER NEAR WAYNESBORO, VA	Stream	127.00	1953	1999
USGS01626500	SOUTH RIVER AT WAYNESBORO, VA		133.00	1929	1952
USGS01627300	SOUTH RIVER TRIB NEA	Stream	2.41		
USGS01627500	SOUTH RIVER AT HARRISTON, VA	Stream	212.00	1925	1999
USGS01628500	S F SHENANDOAH RIVER NEAR LYNNWOOD, VA	Stream	1084.00	1931	1999
USGS01629945	CHUB RUN NEAR STANLE				
USGS01631000	S F SHENANDOAH RIVER AT FRONT ROYAL, VA	Stream	1642.00	1931	1999
USGS01636200	SHENANDOAH RIVER AT	Stream			
USGS01636210	HAPPY CREEK AT FRONT ROYAL, VA	Stream	14.00	1949	1978
USGS01662300	THORNTON RIVER TRIB	Stream	1.38		
USGS01662500	RUSH RIVER AT WASHINGTON, VA		14.70	1954	1977
USGS01662600	RUSH RIVER TRIB NEAR	Stream	9.00		
USGS02030800	STOCKTON CREEK NEAR	Stream	2.80		
USGS02030900	POWELLS CREEK NEAR C	Stream	2.32		
USGS02031500	N F MOORMANS RIVER NEAR WHITE HALL, VA	Stream	11.40	1952	1985
USGS02032200	DOYLES RUN NEAR WHIT	Stream	6.70		
USGS02032300	MUDDY RUN NEAR STANA	Stream	3.36		
USGS02032530	PARKER BRANCH NEAR S	Stream	3.24		
USGS02032540	HANEYTOWN CREEK NEAR	Stream	4.45		
USGS02032600	SWIFT RUN TRIB NEAR		35.00		
USNWS44 3230 N	FRONT ROYAL VA ON SF	Stream	1642.00		
USNWS44 7254 4	RIVERTON VA ON SHENA	Stream			
USGS01626850	SOUTH RIVER NEAR DOOMS, VA	Stream	149.00	1974	1994
USGS01628060	WHITE OAK RUN NEAR GROTTOS, VA	Stream	1.94	1980	1994
USGS01628150	DEEP RUN NEAR GROTTOS, VA	Stream	1.17	1980	1982
USGS01629050	S F SHENANDOAH RIVER AT ELKTON, VA	Stream			
USGS01635360	MILL RUN NEAR DETRICK, VA	Stream	1.17	1983	1990
USGS01635365	SHELTER RUN NEAR DETRICK, VA	Stream	0.14	1982	1990
USGS01662156	S F BROKENBACK RUN NEAR NETHERS, VA	Stream	1.02	1982	1990
USGS02032000	MOORMANS RIVER NEAR WHITEHALL, VA	Stream	18.00	1945	1946
USGS381602078393301	41Q 5	Well			
USGS382150078424001	41Q 1	Well			
USGS383051078254201	43S 7	Well			
USGS383122078260801	43S 12	Well			
USGS383123078261101	43S 10	Well			
USGS383124078260801	43S 14	Well			
USGS383125078260501	43S 15	Well			
USGS383342078194601	44S 5	Well			
USGS383432078223501	43S 5	Well			
USGS382100078440001	MC GAHEYSVILLE, VA 02032600	Climate			
USGS383100078260001	BIG MEADOWS, VA 01662300	Climate			
USGS384300078100001	WASHINGTON, VA 01662600	Climate			

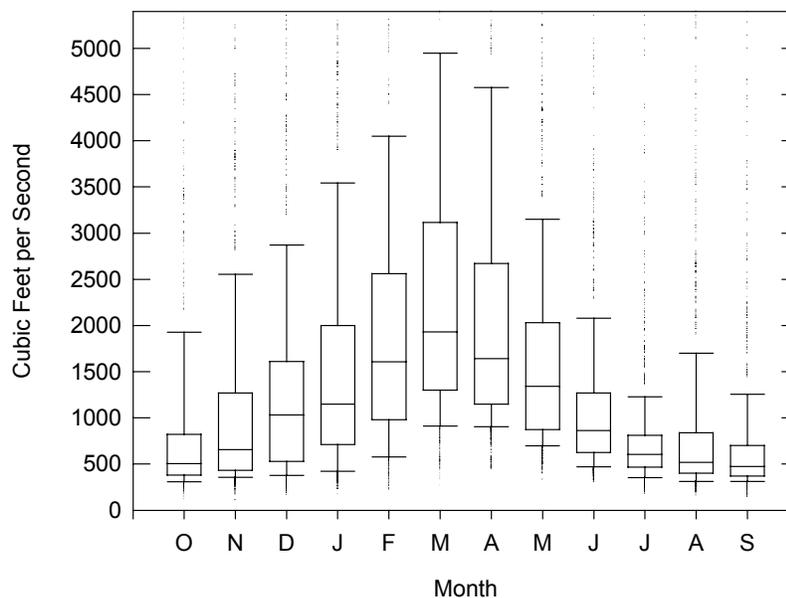
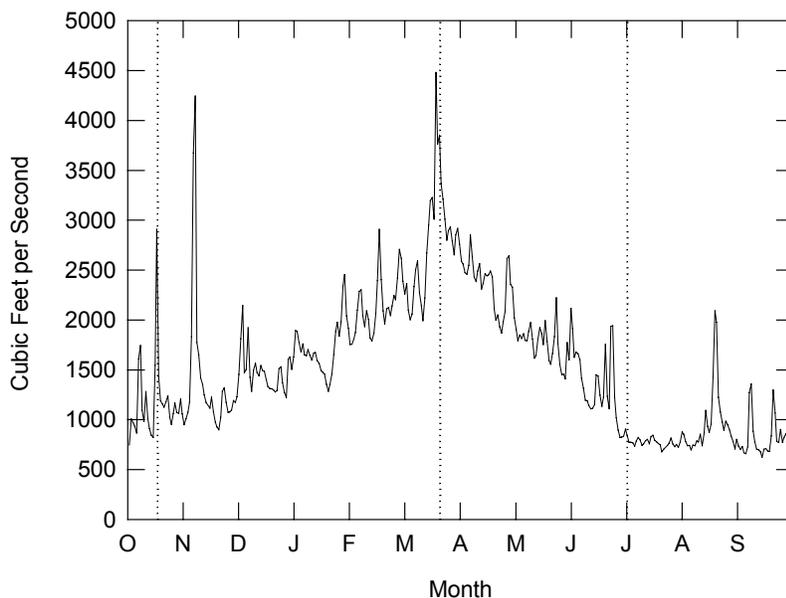
**Industrial Facility Discharges, Drinking Water Intakes,
Water Gages, and Water Impoundments Within the SHEN Study Area**

Water Impoundments

<u>Site ID</u>	<u>Impoundment Name</u>	<u>Owner</u>	<u>Primary Purpose</u>	<u>Type of Dam</u>	<u>Downstream Hazard</u>	<u>Year Completed</u>
VA00303	SUGAR HOLLOW DAM	RIVANNA WATER & SEWER AV	Supply	Gravity	High	1950
VA00308	HENLEYS DAM	JOE HENLEY, JR.	Irrig.	Earth	Significant	1955
VA00325	CROZET WATER SUPPLY DAM	ALBEMARLE COUNTY	Rec.	Earth	Significant	1961
VA00327	WHITES DAM	WM H WHITE	Irrig.	Earth	High	1971
VA01501	SOUTH RIVER NO.-26	JAMES S BOSSERMAN	Flood	Earth	High	1956
VA01508	SOUTH RIVER NO.23	ROBIN HOLLOW, INC.	Flood	Earth	High	1956
VA07902	PRUESS FARM DAM	DON PRUESS	Rec.	Earth	Significant	1972
VA07903	GREENE ACRES DAM	1ST AMERICAN GROUP OF CO	Rec.	Earth	High	1970
VA07904	BLUE RIDGE SCHOOL DAM	BLUE RIDGE SCHOOL	Rec.	Earth	Low	1962
VA07906	GREENE VALLEY SEC 7 DAM	B K HAYNES CORP	Rec.	Earth	Low	1971
VA11310	HABLUTZEL LAKE DAM	RUDOLPH HABLUTZEL	Rec.	Earth	Low	1966
VA12504	BALDWIN DAM	WILLIAM BALDWIN	Rec.	Earth	Significant	1971
VA13901	DRY RUN NO.-102	E. MILLER + AUSTON JUDD	Flood	Earth	High	1969
VA13902	DRY RUN NO.-101	TOWN OF LURAY	Flood	Earth	High	1971
VA13903	SHENANDOAH DAM	POTOMAC EDISON CO OF VA	Hydro	Gravity	Significant	1929
VA13904	NEWPORT DAM	POTOMAC EDISON CO OF VA	Hydro	Buttress	Significant	1923
VA15702	WHIPPOORWILL DAM	DAVID BROWN	Rec.	Earth	Low	1970
VA17103	SEVEN FOUNTAINS DAM	SEVEN FOUNTAINS FARM COR	Rec.	Earth	Low	1962
VA18705	FRONT ROYAL DAM	PRICE-RADIN ASSOC. INC.	Rec.	Earth	High	1970
VA18707	SULLIVANS DAM	GILBERT MORRISON	Rec.	Earth	Low	1966
VA18708	WARREN DAM	POTOMAC EDISON OF VA	Hydro	Buttress	Significant	1924
VA18710	LOCH LINDEN DAM	SKYLAND ESTATES	Rec.	Earth	Low	1960

REPRESENTATIVE MEAN ANNUAL HYDROGRAPH FOR SEASONAL ANALYSIS

SHENANDOAH NATIONAL PARK
 South Fork Shenandoah River at Front Royal, VA
 01631000, 57 year record



Representative mean annual hydrograph (top) and distribution of daily flows by month (bottom) for hydrologic season determination. Box and whiskers represent a five number summary; bottom whisker cap is 10th percentile, bottom of box is 25th percentile, internal line is median, top of box is 75th percentile, and top whisker is 90th percentile. Hydrologic seasons for Shenandoah National Park are: Jul. 1 to Oct. 14, Oct. 15 to Mar. 19, and Mar. 20 to Jun. 30.

CONTACTS FOR AGENCY CODES RETRIEVED FOR SHEN

<u>AGENCY</u>	<u>PRIMARY CONTACT NAME</u>	<u>ORGANIZATION</u>	<u>PHONE NUMBER(S)</u>	
21VASWCB	POLLOCK, VERA	VA DEPT OF ENVIRONMENTAL	(804)698-4566	(804)698-4473
12NSS	LANDERS, DIXON H.	EPA ENVIRONMENTAL RES LAB	(541)754-4427	
112WRD	BRIGGS, JOHN	US GEOLOGICAL SURVEY	(703)648-5624	
1113SHWQ	STORET USER ASSISTANCE	USEPA HQ	(202)260-7050	(800)424-9067
* DATA FOR 1113SHWQ HAS BEEN 'RETIRED' AT THE REQUEST OF STORET USER ASSISTANCE (703)883-8861 ON 03/14/86.				
1113PPWQ	KANETSKY, CHARLES	USEPA REGION 3	(215)597-8176	
1112A9WQ	KANETSKY, CHARLES	USEPA REGION 3	(215)597-8176	
1113UPEN	KANETSKY, CHARLES	USEPA REGION 3	(215)597-8176	
11NPSWRD	TUCKER, DEAN	NATIONAL PARK SERVICE	(970)225-3516	(970)225-3518
1113VABD	KANETSKY, CHARLES	USEPA REGION 3	(215)597-8176	
1118ATL8	HOLCOMB, JACK	US FOREST SERVICE	(404)347-5058	(904)942-9357

**QUANTITY OF DATA RETRIEVED FOR SHEN BY AGENCY CODE
WITHIN THE ENTIRE STUDY AREA (S.A.) AND JUST WITHIN THE PARK**

Agency	Organization	Period of Record		Water Quality Stations		Longer Term ¹ Stations			No Data Stations			Water Quality Observations		Water Quality Parameters	
		Study Area	Park Only	S.A.	Park	S.A.	Park	S.A.	Park	S.A.	Park	S.A.	Park	S.A.	Park
21VASWCB	VA DEPT OF ENVIRONMENTAL	09/19/67-12/21/98	10/23/75-10/23/75	81	2	47	0	15	1	94718	19	244	19		
12NSS	EPA ENVIRONMENTAL RES LAB	03/27/86-04/17/86	03/28/86-04/17/86	14	5	0	0	0	0	652	270	27	27		
112WRD	US GEOLOGICAL SURVEY	09/04/30-06/08/94	03/27/68-06/22/92	83	22	4	0	0	0	21806	1929	275	46		
1113SHWQ	USEPA HQ	06/14/67-06/23/67	No Data in Park	15	0	0	0	0	0	532	0	6	0		
1113PPWQ	USEPA REGION 3	07/28/69-08/19/69	No Data in Park	16	0	0	0	0	0	331	0	11	0		
1112A9WQ	USEPA REGION 3	05/22/72-05/01/79	No Data in Park	29	0	0	0	2	0	1421	0	148	0		
1113UPEN	USEPA REGION 3	No Data in S.A.	No Data in Park	12	0	0	0	12	0	0	0	0	0		
11NPSWRD	NATIONAL PARK SERVICE	01/10/77-08/03/98	01/17/77-08/03/98	531	472	140	134	0	0	114799	92996	36	35		
1113VABD	USEPA REGION 3	No Data in S.A.	No Data in Park	4	0	0	0	4	0	0	0	0	0		
1118ATL8	US FOREST SERVICE	08/27/80-08/27/80	No Data in Park	1	0	0	0	0	0	10	0	10	0		
Totals		09/04/30-12/21/98	03/27/68-08/03/98	786	501	191	134	33	1	234269	95214	554	89		

¹Station With At Least 6 Parameters Having An Average of 1 Or More Observations Per Year During a Period of Record Extending At Least 2 Years.

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0001 ¹	UPSTREAM OF ROUTE 624 BRIDGE AUGUSTA COUNTY	No	737	737	0	0
SHEN0002 ¹	ROUTE 653 BRIDGE, SOUTH OF WAYNESBORO AUGUSTA CO	No	613	0	0	613
SHEN0003	JONES HOLLOW	No	54	54	0	0
SHEN0004 ²	ROUTE 664 BRIDGE - CITY OF WAYNESBORO	No	5537	3753	1686	98
SHEN0005	SOUTH RIVER NEAR WAYNESBORO, VA	No	72	0	0	72
SHEN0006	WAYNE AVE. BRIDGE	No	54	54	0	0
SHEN0007	SOUTH R. WAYNE ST.BR WAYNESBORO	No	23	0	0	23
SHEN0008	SOUTH R. WAYNE ST.BR WAYNESBORO	No	22	0	0	22
SHEN0009	SOUTH RIV AT RT 664 059	No	63	0	0	63
SHEN0010	DUPONT CO. WAYNESBORO UPSTREAM	No	0	0	0	0
SHEN0011	SOUTH RIVER AT WAYNESBORO, VA	No	17	0	0	17
SHEN0012	CROMPTON-SHEN WAYNESBORO OTFL 01	No	0	0	0	0
SHEN0013	RT. 684 BRIDGE	No	0	0	0	0
SHEN0014	JONES HOLLOW	No	54	54	0	0
SHEN0015	SOUTH RIV AT BROAD WAYNESBORO 60	No	63	0	0	63
SHEN0016	SOUTH R. AT RTE 250 WAYNESBORO,VA	No	38	0	38	0
SHEN0017 ²	ROUTE 250 BYPASS IN WAYNESBORO - AUGUSTA COUNTY	No	1287	0	496	791
SHEN0018	VAAL521R	No	13	0	13	0
SHEN0019	BRIDGE STREET BRIDGE	No	142	54	88	0
SHEN0020	39N 1	No	32	0	32	0
SHEN0021	AT HOPEMAN PARKWAY BRIDGE	No	54	54	0	0
SHEN0022	39NS 3	No	33	0	33	0
SHEN0023	VAAU502R	No	10	0	10	0
SHEN0024 ¹	ROUTE 811 BRIDGE	No	136	136	0	0
SHEN0025	SAWMILL RUN NEAR DOOMS, VA	No	104	0	104	0
SHEN0026	DOWNSTREAM HOPEMAN PARKWAY	No	0	0	0	0
SHEN0027	SAWMILL RUN	Yes	9	9	0	0
SHEN0028	Sawmill Run	Yes	32	32	0	0
SHEN0029	Sawmill Run	Yes	7	7	0	0
SHEN0030	SOUTH R. RTE 611 BR DOOMS	No	39	0	0	39
SHEN0031	SOUTH R. RTE 611 BR COINERS MILL	No	21	0	0	21
SHEN0032	SOUTH RIV RT 611 DOOMS	No	54	0	0	54
SHEN0033 ¹	ROUTE 611 BRIDGE, NEAR DOOMS - AUGUSTA COUNTY	No	1351	0	553	798
SHEN0034	VAAL518R	No	13	0	13	0
SHEN0035	MILES W OF RT 29 OVER MOORMANS R	No	0	0	0	0
SHEN0036	VAAU504R	No	13	0	13	0
SHEN0037	MOORMANS RIVER AT RT 614 NEAR WHITEHALL, VA	No	106	0	106	0
SHEN0038	PORTERFIELD RUN NEAR CRIMORA, VA	No	79	79	0	0
SHEN0039	SOUTH FORK OF MOORMANS RIVER	No	9	9	0	0
SHEN0040	MOORMANS RIVER NEAR WHITEHALL, VA	No	18	0	3	15
SHEN0041	SUGAR HOLLOW RESERVOIR 50 FT. UPSTREAM OF DAM	No	0	0	0	0
SHEN0042	S F MOORMANS RIVER NEAR WHITEHALL, VA	No	106	0	106	0
SHEN0043 ¹	SUGAR HOLLOW RESERVOIR-LAKE CENTER-ALBERMARLE CO	No	632	103	529	0
SHEN0044	N F MOORMANS RIVER NEAR WHITE HALL, VA	No	166	0	106	60
SHEN0045	POND RIDGE BRANCH OF MOORMANS RIVER	Yes	9	9	0	0
SHEN0046	NORTH FORK OF MOORMANS RIVER	Yes	9	9	0	0
SHEN0047	North Fork Moormans River	Yes	5	5	0	0
SHEN0048	MINE BRANCH NEAR CRIMORA, VA	No	72	0	72	0
SHEN0049	North Fork Moormans River	Yes	42	42	0	0
SHEN0050	SOUTH RIV NEAR CRIMORA RT 612	No	47	0	0	47
SHEN0051 ¹	RT. 612 BRIDGE AT CRIMORA	No	1177	0	502	675
SHEN0052	N F MOORMANS RIVER BL BIG BR NR WHITEHALL, VA	Yes	71	0	71	0
SHEN0053	MEADOW RUN NEAR CRIMORA, VA	Yes	104	0	104	0
SHEN0054	MEADOW RUN	Yes	56	56	0	0
SHEN0055 ¹	MEADOW RUN	Yes	585	585	0	0
SHEN0056	Meadow Run	Yes	31	31	0	0
SHEN0057	Meadow Run	Yes	47	47	0	0
SHEN0058	MEADOW RUN	No	9	9	0	0
SHEN0059 ¹	MEADOW RUN TRIBUTARY	Yes	70	70	0	0
SHEN0060 ¹	MEADOW RUN TRIBUTARY	Yes	70	70	0	0
SHEN0061	Meadow Run	Yes	1	1	0	0
SHEN0062 ¹	MEADOW RUN	Yes	70	70	0	0
SHEN0063 ¹	MEADOW RUN TRIBUTARY	Yes	70	70	0	0
SHEN0064 ¹	MEADOW RUN	Yes	70	70	0	0
SHEN0065 ¹	MEADOW RUN TRIBUTARY	Yes	70	70	0	0
SHEN0066 ¹	MEADOW RUN TRIBUTARY	Yes	70	70	0	0
SHEN0067 ¹	MEADOW RUN	Yes	70	70	0	0
SHEN0068	North Fork Moormans River	Yes	27	27	0	0
SHEN0069 ¹	MEADOW RUN TRIBUTARY	Yes	70	70	0	0
SHEN0070	NORTH FORK MOORMANS RIVER	Yes	54	54	0	0
SHEN0071	Meadow Run	Yes	36	36	0	0

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0072 ¹	MEADOW RUN	Yes	70	70	0	0
SHEN0073	Big Branch	Yes	5	5	0	0
SHEN0074	BIG BRANCH	Yes	9	9	0	0
SHEN0075	Big Branch	Yes	27	27	0	0
SHEN0076	N F MOORMANS RIVER AB BIG BR NR BROWNS COVE, VA	Yes	71	0	71	0
SHEN0077	Big Branch	Yes	5	5	0	0
SHEN0078 ¹	MEADOW RUN	Yes	70	70	0	0
SHEN0079 ¹	MEADOW RUN	Yes	70	70	0	0
SHEN0080	MEADOW RUN	Yes	56	56	0	0
SHEN0081 ¹	MEADOW RUN TRIBUTARY	Yes	70	70	0	0
SHEN0082 ¹	MEADOW RUN TRIBUTARY	Yes	70	70	0	0
SHEN0083 ¹	MEADOW RUN	Yes	70	70	0	0
SHEN0084 ¹	MEADOW RUN	Yes	70	70	0	0
SHEN0085	NORTH FORK MOORMANS RIVER	Yes	54	54	0	0
SHEN0086	North Fork Moormans River	Yes	37	37	0	0
SHEN0087 ¹	PAINE RUN TRIBUTARY	Yes	84	84	0	0
SHEN0088 ¹	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN0089	PAINE RUN TRIBUTARY	Yes	10	10	0	0
SHEN0090 ¹	PAINE RUN TRIBUTARY	Yes	56	56	0	0
SHEN0091	PAINE RUN TRIBUTARY	Yes	5	5	0	0
SHEN0092 ¹	PAINE RUN	Yes	98	98	0	0
SHEN0093	Paine Run	Yes	27	27	0	0
SHEN0094 ¹	PAINE RUN	Yes	98	98	0	0
SHEN0095 ¹	PAINE RUN TRIBUTARY	Yes	56	56	0	0
SHEN0096	PAINE RUN TRIBUTARY	Yes	5	5	0	0
SHEN0097	Paine Run	Yes	5	5	0	0
SHEN0098	N F MOORMANS RIVER NEAR BROWNS COVE, VA	No	72	0	72	0
SHEN0099	N.F. OF MOORMANS RIVER (BLACKROCK GAP)	Yes	9	9	0	0
SHEN100 ¹	PAINE RUN	Yes	97	97	0	0
SHEN101 ¹	PAINE RUN	Yes	98	98	0	0
SHEN102 ¹	PAINE RUN TRIBUTARY	Yes	70	70	0	0
SHEN103 ¹	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN104	Paine Run	Yes	5	5	0	0
SHEN105	N.F. OF MOORMANS RIVER (UPPER REACH)	No	9	9	0	0
SHEN106	Paine Run	Yes	27	27	0	0
SHEN107 ¹	PAINE RUN	Yes	98	98	0	0
SHEN108 ¹	PAINE RUN	Yes	98	98	0	0
SHEN109	Paine Run	Yes	15	15	0	0
SHEN110 ¹	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN111	PAINE RUN TRIBUTARY	Yes	5	5	0	0
SHEN112 ¹	PAINE RUN	Yes	84	84	0	0
SHEN113	Paine Run	Yes	5	5	0	0
SHEN114 ¹	PAINE RUN	Yes	70	70	0	0
SHEN115	Paine Run	Yes	10	10	0	0
SHEN116	N F MOORMANS RIVER TRIB NEAR BROWNS COVE, VA	Yes	71	0	71	0
SHEN117 ¹	PAINE RUN	Yes	70	70	0	0
SHEN118 ¹	PAINE RUN	Yes	98	98	0	0
SHEN119 ¹	PAINE RUN	Yes	98	98	0	0
SHEN120 ¹	PAINE RUN TRIBUTARY	Yes	70	70	0	0
SHEN121	PAINE RUN TRIBUTARY	Yes	5	5	0	0
SHEN122 ¹	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN123	PAINE RUN TRIBUTARY	Yes	5	5	0	0
SHEN124	PAINE RUN NEAR HARRISTON, VA	Yes	88	0	88	0
SHEN125 ¹	PAINE RUN	Yes	97	97	0	0
SHEN126 ¹	PAINE RUN	Yes	3830	3830	0	0
SHEN127 ¹	PAINE RUN	Yes	98	98	0	0
SHEN128 ¹	PAINE RUN	Yes	448	448	0	0
SHEN129 ¹	PAINE RUN	Yes	2086	2086	0	0
SHEN130 ¹	PAINE RUN	Yes	1313	1313	0	0
SHEN131	Paine Run	Yes	5	5	0	0
SHEN132	Paine Run	Yes	35	35	0	0
SHEN133	PAINE RUN	Yes	9	9	0	0
SHEN134	Paine Run	Yes	96	96	0	0
SHEN135 ¹	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN136	PAINE RUN TRIBUTARY	Yes	5	5	0	0
SHEN137	VAAL513R	No	13	0	13	0
SHEN138 ¹	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN139	PAINE RUN TRIBUTARY	Yes	10	10	0	0
SHEN140 ¹	PAINE RUN	Yes	84	84	0	0
SHEN141	Paine Run	Yes	5	5	0	0
SHEN142 ¹	PAINE RUN	Yes	98	98	0	0

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0143 ⁷	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN0144 ¹	PAINE RUN TRIBUTARY	Yes	70	70	0	0
SHEN0145 ⁵	PAINE RUN	Yes	98	98	0	0
SHEN0146	Paine Run	Yes	5	5	0	0
SHEN0147 ¹	PAINE RUN	Yes	98	98	0	0
SHEN0148	DOYLES RIVER NEAR BROWNS COVE, VA	No	105	0	105	0
SHEN0149 ⁷	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN0150 ¹	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN0151	PAINE RUN TRIBUTARY	Yes	5	5	0	0
SHEN0152	Paine Run	Yes	95	95	0	0
SHEN0153	N F MOORMANS RIVER TRIB NEAR HARRISTON, VA	Yes	72	0	72	0
SHEN0154 ⁷	PAINE RUN	Yes	98	98	0	0
SHEN0155 ¹	PAINE RUN	Yes	98	98	0	0
SHEN0156 ⁷	PAINE RUN TRIBUTARY	Yes	98	98	0	0
SHEN0157 ⁷	PAINE RUN	Yes	98	98	0	0
SHEN0158	VAAL505R	No	7	0	7	0
SHEN0159	SOUTH R. RTE 778 BR HARRISTON	No	39	0	0	39
SHEN0160	SOUTH R. RTE 778 BR HARRISTON	No	21	0	0	21
SHEN0161 ¹	SOUTH RIVER AT HARRISTON, VA	No	851	72	0	779
SHEN0162 ⁷	RT. 778 AT HARRISTON	No	6175	3712	1740	723
SHEN0163	POLECAT DRAFT NEAR PIEDMONT, VA	No	78	78	0	0
SHEN0164 ¹	RT. 776 BRIDGE (AUGUSTA CO)	No	1689	1689	0	0
SHEN0165	DOYLES RIVER	Yes	5	5	0	0
SHEN0166	Doyles River	Yes	10	10	0	0
SHEN0167	JONES RUN	Yes	9	9	0	0
SHEN0168	DOYLES RIVER	Yes	9	9	0	0
SHEN0169	WHITEOAK RUN	Yes	13	13	0	0
SHEN0170	MUDDY RUN TRIB NEAR BOONESVILLE, VA	No	105	0	105	0
SHEN0171	WHITEOAK RUN	Yes	13	13	0	0
SHEN0172	WHITEOAK RUN	Yes	13	13	0	0
SHEN0173	WHITEOAK RUN	Yes	13	13	0	0
SHEN0174 ¹	LUCK RUN	Yes	5811	5811	0	0
SHEN0175 ⁵	WHITEOAK RUN	Yes	6288	6288	0	0
SHEN0176	WHITEOAK RUN	Yes	13	13	0	0
SHEN0177	LUCK RUN	Yes	13	13	0	0
SHEN0178	WHITEOAK RUN	Yes	13	13	0	0
SHEN0179 ⁷	WHITEOAK RUN	Yes	4711	4711	0	0
SHEN0180	WHITEOAK RUN	Yes	13	13	0	0
SHEN0181 ⁵	WHITEOAK RUN	Yes	4125	4125	0	0
SHEN0182	WHITEOAK RUN	Yes	13	13	0	0
SHEN0183	WHITE OAK RUN	Yes	54	54	0	0
SHEN0184	WHITEOAK RUN	Yes	9	9	0	0
SHEN0185 ¹	WHITEOAK RUN	Yes	11664	8399	3265	0
SHEN0186	Whiteoak Run	Yes	5	5	0	0
SHEN0187	WHITEOAK RUN	Yes	13	13	0	0
SHEN0188	WHITE OAK RUN NEAR GROTTOS, VA	Yes	32	32	0	0
SHEN0189 ⁷	MADISON RUN	Yes	8249	6819	1430	0
SHEN0190	MADISON RUN	Yes	9	9	0	0
SHEN0191	MADISON RUN ABOVE WHITE OAK RUN NR GROTTOS, VA	Yes	105	0	105	0
SHEN0192	Madison Run	Yes	17	17	0	0
SHEN0193 ¹	MADISON RUN	Yes	6174	5455	719	0
SHEN0194	MADISON RUN NEAR GROTTOS, VA	Yes	266	0	104	162
SHEN0195	Madison Run	Yes	9	9	0	0
SHEN0196	SOUTH RIV S OF RT 865 GROTTOS63	No	56	0	0	56
SHEN0197	Big Run	Yes	10	10	0	0
SHEN0198	MIDDLE R. RTE 256 BR WST GROTTOE	No	20	0	0	20
SHEN0199	MIDDLE R. RTE 256 BR W GROTTOS	No	21	0	0	21
SHEN0200	MIDDLE R. RTE 256 BR W GROTTOS	No	22	0	0	22
SHEN0201	MIDDLE RIVER NEAR GROTTOS, VA	No	584	172	0	412
SHEN0202	MIDDLE RIVER AT RT 256 070	No	26	0	0	26
SHEN0203	T 769 BR (FORMERLY RT 256).	No	0	0	0	0
SHEN0204 ¹	ROUTE 769 BRIDGE	No	4907	3702	1205	0
SHEN0205	Eppert Hollow	Yes	1	1	0	0
SHEN0206	IVY CREEK NEAR BOONESVILLE, VA	No	105	0	105	0
SHEN0207	Big Run	Yes	10	10	0	0
SHEN0208	Ivy Creek	Yes	5	5	0	0
SHEN0209	IVY CREEK	Yes	9	9	0	0
SHEN0210	DEEP RUN	No	54	54	0	0
SHEN0211 ¹	DEEP RUN	No	12181	8960	3221	0
SHEN0212	Ivy Creek	Yes	5	5	0	0
SHEN0213	NORTH R. RTE 668 BR NW OF GROTTO	No	23	0	0	23

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0214	668 BR.	No	0	0	0	0
SHEN0215	LOWER LEWIS RUN	Yes	54	54	0	0
SHEN0216	Rocky Mountain Run	Yes	10	10	0	0
SHEN0217	ROCKY MOUNTAIN RUN	Yes	9	9	0	0
SHEN0218	BIG RUN (UPPER REACH)	Yes	9	9	0	0
SHEN0219	Big Run	Yes	1	1	0	0
SHEN0220	UPPER LEWIS RUN NEAR LYNNWOOD, VA	No	54	0	54	0
SHEN0221	Lower Lewis Run	Yes	11	11	0	0
SHEN0222	SOUTH R. RTE 629 BR PORT REPBLIC	No	39	0	0	39
SHEN0223	SOUTH R. RTE 629 BR PORT REPUBLIC	No	22	0	0	22
SHEN0224	SOUTH RIV AT PORT REPUBLIC 064	No	30	0	0	30
SHEN0225	RT. 629 BRIDGE AT PORT REPUBLIC	No	1178	0	511	667
SHEN0226	DGIF BOAT BASIN	No	30	30	0	0
SHEN0227	Lower Lewis Run	Yes	7	7	0	0
SHEN0228	MIDDLE R. RTE 629 BR PORT REPBLIC	No	39	0	0	39
SHEN0229	MIDDLE R. RTE 629 BR PORT REPBLIC	No	22	0	0	22
SHEN0230	Big Run	Yes	4	4	0	0
SHEN0231	NORTH RIVER AT PORT REPUBLIC, VA	No	514	0	0	514
SHEN0232	865 BR IN PORT REPUBLIC.	No	0	0	0	0
SHEN0233	NORTH RIV IN PORT REPUBLIC 077	No	30	0	0	30
SHEN0234	RT. 659 BRIDGE NEAR LYNWOOD BELOW GROTTOS	No	1124	0	405	719
SHEN0235	RT. 629/865 BRIDGE AT PORT REPUBLIC	No	1290	0	495	795
SHEN0236	LOWER LEWIS RUN TRIB NEAR LYNNWOOD, VA	No	55	0	55	0
SHEN0237	LOWER LEWIS RUN	Yes	9	9	0	0
SHEN0238	LOWER LEWIS RUN NEAR LYNNWOOD, VA	Yes	55	0	55	0
SHEN0239	VAGE502R	No	10	0	10	0
SHEN0240	LOWER LEWIS RUN	No	54	54	0	0
SHEN0241	VAGE514R	No	14	0	14	0
SHEN0242	BIG RUN (LOWER REACH)	Yes	9	9	0	0
SHEN0243	Onemile Run	Yes	13	13	0	0
SHEN0244	BEARWALLOW RUN (ONEMILE RUN TRIBUTARY)	Yes	9	9	0	0
SHEN0245	TWOMILE RUN	Yes	42	42	0	0
SHEN0246	TWOMILE RUN TRIBUTARY	Yes	42	42	0	0
SHEN0247	Twomile Run	Yes	75	75	0	0
SHEN0248	TWOMILE RUN	Yes	42	42	0	0
SHEN0249	HANGMAN RUN NEAR ROCKY BAR, VA	No	37	0	37	0
SHEN0250	SOUTH FORK SHENANDOAH RIVER UPSTREAM RT. 708 BR.	No	0	0	0	0
SHEN0251	SOUTH FORK SHENANDOAH RIVER AT LYNNWOOD, VA	No	720	0	0	720
SHEN0252	RT. 708 BRIDGE	No	4869	3644	1225	0
SHEN0253	S.F.SHEN.R. RTE 659 NE GROTTOS	No	42	0	0	42
SHEN0254	S.F.SHEN.R. RTE 659 B N GROTTOS	No	22	0	0	22
SHEN0255	Onemile Run	Yes	33	33	0	0
SHEN0256	RT 671 BRIDGE (ROCKINGHAM CO)	No	1780	1780	0	0
SHEN0257	Onemile Run	Yes	7	7	0	0
SHEN0258	TWOMILE RUN	Yes	42	42	0	0
SHEN0259	TWOMILE RUN	Yes	56	56	0	0
SHEN0260	BEARWALLOW RUN	Yes	9	9	0	0
SHEN0261	TWOMILE RUN	Yes	56	56	0	0
SHEN0262	Twomile Run	Yes	1	1	0	0
SHEN0263	S F SHENANDOAH RIVER NEAR LYNNWOOD, VA	No	185	0	1	184
SHEN0264	Onemile Run	Yes	42	42	0	0
SHEN0265	TWOMILE RUN	Yes	56	56	0	0
SHEN0266	TWOMILE RUN TRIBUTARY	Yes	28	28	0	0
SHEN0267	TWOMILE RUN	Yes	56	56	0	0
SHEN0268	TWOMILE RUN TRIBUTARY	Yes	28	28	0	0
SHEN0269	TWOMILE RUN	Yes	70	70	0	0
SHEN0270	Twomile Run	Yes	23	23	0	0
SHEN0271	Twomile Run	Yes	90	90	0	0
SHEN0272	Twomile Run	Yes	30	30	0	0
SHEN0273	TWOMILE RUN	Yes	9	9	0	0
SHEN0274	TWOMILE RUN	Yes	70	70	0	0
SHEN0275	TWOMILE RUN	Yes	583	583	0	0
SHEN0276	Twomile Run	Yes	30	30	0	0
SHEN0277	TWOMILE RUN NEAR MCGAHEYSVILLE, VA	No	89	0	89	0
SHEN0278	SWIFT RUN AT LYDIA, VA	Yes	105	0	105	0
SHEN0279	Swift Run	Yes	12	12	0	0
SHEN0280	1.3 MILES UPSTREAM OF RT. 649 BRIDGE	No	0	0	0	0
SHEN0281	VAGE501R	Yes	12	0	12	0
SHEN0282	RT. 651 BRIDGE (ROCKINGHAM COUNTY)	No	767	767	0	0
SHEN0283	SWIFT RUN NEAR LYDIA, VA	Yes	16	0	16	0
SHEN0284	HAWKSBILL CREEK TRIB NEAR SWIFT RUN, VA	No	106	0	106	0

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0285	Swift Run	Yes	7	7	0	0
SHEN0286	SWIFT RUN NEAR BACON HOLLOW, VA	Yes	16	0	16	0
SHEN0287	RT. 649 BRIDGE	No	1294	0	537	757
SHEN0288	RT. 649 BRIDGE	No	0	0	0	0
SHEN0289	WALLS RUN NEAR ROCKY BAR, VA	No	37	0	37	0
SHEN0290	SWIFT RUN NEAR SWIFT RUN, VA	Yes	16	0	16	0
SHEN0291	VARK505R	No	13	0	13	0
SHEN0292	S.F.SHEN.R. RTE 649 BR MCGAHYSVL	No	39	0	0	39
SHEN0293	S.F.SHEN.R. RTE 649 BR MCGAHYSVL	No	21	0	0	21
SHEN0294	WEST SWIFT RUN AT SWIFT RUN, VA	Yes	104	0	104	0
SHEN0295	SOUTH RIVER NEAR MCMULLEN, VA	No	106	0	106	0
SHEN0296	RT. 613	No	0	0	0	0
SHEN0297	RT. 662 BRIDGE MADISON/GREEN COUNTIES	No	2024	1913	85	26
SHEN0298	SOUTH RIVER	Yes	9	9	0	0
SHEN0299	South River	Yes	5	5	0	0
SHEN0300	ENTRY RUN	No	9	9	0	0
SHEN0301	S FORK SHEN 2 MI SW OF ELKTON	No	63	0	0	63
SHEN0302	VARK501R	No	13	0	13	0
SHEN0303	VAMA501R	No	13	0	13	0
SHEN0304	VARK503R	No	10	0	10	0
SHEN0305	STP ELKTON ON RT 33	No	43	0	0	43
SHEN0306	S FORK SHEN RT 33 ELKTON	No	63	0	0	63
SHEN0307	100 YDS DOWN FROM ELKTON STP	No	54	0	0	54
SHEN0308	DRY RUN	Yes	9	9	0	0
SHEN0309	POCOSIN HOLLOW	No	9	9	0	0
SHEN0310	CONWAY RIVER TRIB NEAR KINDERHOOK, VA	No	106	0	106	0
SHEN0311	ROUTE 646 BRIDGE	No	174	174	0	0
SHEN0312	Pocosin Hollow	Yes	5	5	0	0
SHEN0313	MERCK&CO,INC. ELKTON EFFLUENT	No	0	0	0	0
SHEN0314	S.F.SHEN.R. RTE 33 BR ELKTON	No	38	0	0	38
SHEN0315	S.F.SHEN.R. US 33 BR W ELKTON	No	22	0	0	22
SHEN0316	RT. 33 BRIDGE	No	1417	0	616	801
SHEN0317	S F SHENANDOAH RIVER AT ELKTON, VA	No	137	0	93	44
SHEN0318	CONWAY RIVER NEAR KINDERHOOK, VA	No	106	0	106	0
SHEN0319	RT. 667	No	0	0	0	0
SHEN0320	BIG UGLY RUN	Yes	9	9	0	0
SHEN0321	S BRANCH NAKED CR BL BIG UGLY BR NR FURNACE, VA	No	106	0	106	0
SHEN0322	DEVILS DITCH	No	9	9	0	0
SHEN0323	KINSEY RUN	No	9	9	0	0
SHEN0324	RT. 635 BRIDGE (ROCKINGHAM COUNTY)	No	401	401	0	0
SHEN0325	VAMA502R	Yes	14	0	14	0
SHEN0326	Rapidan River	Yes	31	31	0	0
SHEN0327	WILSON RUN (STAUNTON RIVER TRIBUTARY)	Yes	112	112	0	0
SHEN0328	RAPIDAN RIVER	Yes	9	9	0	0
SHEN0329	RAPIDAN RIVER NEAR GRAVES MILL, VA	Yes	105	0	105	0
SHEN0330	STAUNTON RIVER NEAR GRAVES MILL, VA	Yes	105	0	105	0
SHEN0331	Staunton River	Yes	26	26	0	0
SHEN0332	STAUNTON RIVER	Yes	112	112	0	0
SHEN0333	STAUNTON RIVER	Yes	3771	3771	0	0
SHEN0334	STAUNTON RIVER	Yes	461	461	0	0
SHEN0335	STAUNTON RIVER	Yes	3035	3035	0	0
SHEN0336	STAUNTON RIVER	Yes	2630	2630	0	0
SHEN0337	Staunton River	Yes	5	5	0	0
SHEN0338	Staunton River	Yes	103	103	0	0
SHEN0339	STAUNTON RIVER	Yes	9	9	0	0
SHEN0340	BUSH MOUNTAIN STREAM	No	9	9	0	0
SHEN0341	WILSON RUN (STAUNTON RIVER TRIBUTARY)	Yes	98	98	0	0
SHEN0342	WILSON RUN (STAUNTON RIVER TRIBUTARY)	Yes	5	5	0	0
SHEN0343	STAUNTON RIVER	Yes	112	112	0	0
SHEN0344	STAUNTON RIVER TRIBUTARY	Yes	42	42	0	0
SHEN0345	BOOTENS RUN	No	9	9	0	0
SHEN0346	STAUNTON RIVER	Yes	112	112	0	0
SHEN0347	STAUNTON RIVER TRIBUTARY	Yes	56	56	0	0
SHEN0348	Staunton River	Yes	10	10	0	0
SHEN0349	STAUNTON RIVER TRIBUTARY	Yes	111	111	0	0
SHEN0350	STAUNTON RIVER	Yes	98	98	0	0
SHEN0351	CONWAY RIVER (UPPER REACH)	No	9	9	0	0
SHEN0352	Rapidan River	Yes	5	5	0	0
SHEN0353	Staunton River	Yes	31	31	0	0
SHEN0354	STAUNTON RIVER	Yes	84	84	0	0
SHEN0355	RT. 642 BRIDGE	No	0	0	0	0

Station Period of Record Tabulation From 09/04/30 To 12/21/98

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0356	GARTH SPRING RUN (STAUNTON RIVER TRIBUTARY)	Yes	111	111	0	0
SHEN0357	GARTH SPRING RUN (STAUNTON RIVER TRIBUTARY)	Yes	10	10	0	0
SHEN0358	STAUNTON RIVER TRIBUTARY	Yes	111	111	0	0
SHEN0359	STAUNTON RIVER TRIBUTARY	Yes	10	10	0	0
SHEN0360	STAUNTON RIVER	Yes	111	111	0	0
SHEN0361	Staunton River	Yes	32	32	0	0
SHEN0362	STAUNTON RIVER	Yes	111	111	0	0
SHEN0363	STAUNTON RIVER TRIBUTARY	Yes	111	111	0	0
SHEN0364	STAUNTON RIVER TRIBUTARY	Yes	10	10	0	0
SHEN0365	BIG CREEK NEAR JOLLETT, VA	Yes	105	0	105	0
SHEN0366	RT. 603 BRIDGE (ROCKINGHAM/PAGE COUNTY LINE)	No	399	399	0	0
SHEN0367	STAUNTON RIVER	Yes	111	111	0	0
SHEN0368	STAUNTON RIVER TRIBUTARY	Yes	84	84	0	0
SHEN0369	BIG CREEK	Yes	9	9	0	0
SHEN0370	Staunton River	Yes	32	32	0	0
SHEN0371	Rapidan River	Yes	22	22	0	0
SHEN0372	RT. 649 BRIDGE	No	1316	935	355	26
SHEN0373	S FK SHEN RIV AT RT 602 081	No	53	0	0	53
SHEN0374	STAUNTON RIVER	Yes	111	111	0	0
SHEN0375	Rapidan River	Yes	5	5	0	0
SHEN0376	Staunton River	Yes	94	94	0	0
SHEN0377	EAST BRANCH NAKED CREEK NEAR JOLLETT, VA	Yes	104	0	104	0
SHEN0378	Rapidan River	Yes	22	22	0	0
SHEN0379	EAST BRANCH OF NAKED CREEK	Yes	9	9	0	0
SHEN0380	East Branch Naked Creek	Yes	10	10	0	0
SHEN0381	RT. 602 BRIDGE	No	1223	0	482	741
SHEN0382	S FORK SHEN AT RT340 GROVE HILL	No	54	0	0	54
SHEN0383	S.F.SHEN.R. RTE 602 BR SHNANDOAH	No	39	0	0	39
SHEN0384	S.F.SHEN.R. RTE 602 BR SHENANDOAH	No	22	0	0	22
SHEN0385	SOUTH FORK SHENANDOAH RIVER DOWNSTREAM OF RT.602	No	0	0	0	0
SHEN0386	RI. ML. NEAR DAM ON S FRK SHEN. NEAR SHENANDOAH	No	2909	2909	0	0
SHEN0387	VAMA523R	No	10	0	10	0
SHEN0388	West Branch Naked Creek	Yes	14	14	0	0
SHEN0389	STP SHENANDO A VA	No	43	0	0	43
SHEN0390	Rapidan River	Yes	27	27	0	0
SHEN0391	LAUREL PRONG	Yes	9	9	0	0
SHEN0392	MILL PRONG	Yes	9	9	0	0
SHEN0393	VAMA524R	No	13	0	13	0
SHEN0394	RT. 648 (MADISON CO)	No	18	0	18	0
SHEN0395	Fultz Run	Yes	2	2	0	0
SHEN0396	FULTZ RUN	No	9	9	0	0
SHEN0397	ROSE RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0398	ROSE RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0399	ROSE RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0400	ROSE RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0401	Rose River	Yes	27	27	0	0
SHEN0402	ROSE RIVER	Yes	14	14	0	0
SHEN0403	ROSE RIVER	Yes	14	14	0	0
SHEN0404	ROSE RIVER	Yes	14	14	0	0
SHEN0405	Rose River	Yes	82	82	0	0
SHEN0406	Rose River	Yes	5	5	0	0
SHEN0407	ROSE RIVER NEAR SYRIA, VA	Yes	106	0	106	0
SHEN0408	ROSE RIVER	Yes	557	557	0	0
SHEN0409	Rose River	Yes	31	31	0	0
SHEN0410	ROSE RIVER	Yes	9	9	0	0
SHEN0411	ROSE RIVER	Yes	14	14	0	0
SHEN0412	ROSE RIVER	Yes	14	14	0	0
SHEN0413	HOGCAMP BRANCH (ROSE RIVER TRIBUTARY)	Yes	14	14	0	0
SHEN0414	ROSE RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0415	HOGCAMP BRANCH (ROSE RIVER TRIBUTARY)	Yes	14	14	0	0
SHEN0416	Rose River & Hog Camp Branch	Yes	76	76	0	0
SHEN0417	ROSE RIVER	Yes	14	14	0	0
SHEN0418	Hogcamp Branch	Yes	26	26	0	0
SHEN0419	HOGCAMP BRANCH (ROSE RIVER TRIBUTARY)	Yes	14	14	0	0
SHEN0420	ROSE RIVER	Yes	14	14	0	0
SHEN0421	Rose River	Yes	22	22	0	0
SHEN0422	HOGCAMP BRANCH (ROSE RIVER TRIBUTARY)	Yes	14	14	0	0
SHEN0423	VAMA526R	No	13	0	13	0
SHEN0424	ROSE RIVER	Yes	14	14	0	0
SHEN0425	VAPA518R	No	12	0	12	0
SHEN0426	ROSE RIVER	Yes	14	14	0	0

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0427	RAGGED RUN NEAR ETLAN, VA	No	105	0	105	0
SHEN0428	RAGGED RUN	Yes	9	9	0	0
SHEN0429	Ragged Run	Yes	10	10	0	0
SHEN0430	VARA524R	No	11	0	11	0
SHEN0431	Whiteoak System - Cedar Run	Yes	5	5	0	0
SHEN0432	CEDAR RUN	Yes	9	9	0	0
SHEN0433	ROSE RIVER	Yes	14	14	0	0
SHEN0434	Ragged Run	Yes	7	7	0	0
SHEN0435	Ragged Run	Yes	1	1	0	0
SHEN0436	CEDAR RUN NEAR SYRIA, VA	No	106	0	106	0
SHEN0437	WHITE OAK CANYON TRIB NEAR SYRIA, VA	No	107	0	107	0
SHEN0438	Whiteoak Canyon Run	Yes	84	84	0	0
SHEN0439	WHITE OAK CANYON (ROBINSON RIVER)	Yes	9	9	0	0
SHEN0440	WHITEOAK CANYON RUN	Yes	427	427	0	0
SHEN0441	Whiteoak Canyon Run	Yes	31	31	0	0
SHEN0442	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0443	Whiteoak Canyon Run	Yes	5	5	0	0
SHEN0444	ROSSON HOLLOW RUN TRIB NEAR ETLAN, VA	No	107	0	107	0
SHEN0445	BERRY HOLLOW TRIB NEAR NETHERS, VA	No	105	0	105	0
SHEN0446	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0447	Little Hawksbill	Yes	17	17	0	0
SHEN0448	BERRY HOLLOW	Yes	9	9	0	0
SHEN0449	Whiteoak System - Berry Holl	Yes	6	6	0	0
SHEN0450	ROUTE 613 BRIDGE	No	1951	1951	0	0
SHEN0451	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0452	ROUTE 707 (RAPPAHANNOCK COUNTY)	No	19	0	19	0
SHEN0453	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0454	WHITEOAK CANYON (ROBINSON RIVER)	Yes	9	9	0	0
SHEN0455	NEGRO RUN	Yes	9	9	0	0
SHEN0456	NEGRO RUN (WHITEOAK CANYON RUN TRIBUTARY)	Yes	28	28	0	0
SHEN0457	LITTLE HAWKSBILL CREEK TRIB NEAR IDA, VA	No	106	0	106	0
SHEN0458	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0459	NEGRO RUN (WHITEOAK CANYON RUN TRIBUTARY)	Yes	28	28	0	0
SHEN0460	Whiteoak Canyon Run	Yes	74	74	0	0
SHEN0461	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0462	OLD RAG RUN	Yes	54	54	0	0
SHEN0463	BROKENBACK RUN TRIBUTARY	Yes	70	70	0	0
SHEN0464	BROKENBACK RUN	Yes	70	70	0	0
SHEN0465	BROKENBACK RUN	Yes	69	69	0	0
SHEN0466	BROKENBACK RUN TRIBUTARY	Yes	70	70	0	0
SHEN0467	NEGRO RUN (WHITEOAK CANYON RUN TRIBUTARY)	Yes	28	28	0	0
SHEN0468	BROKENBACK RUN	Yes	9	9	0	0
SHEN0469	BROKENBACK RUN	Yes	84	84	0	0
SHEN0470	BROKENBACK RUN	Yes	70	70	0	0
SHEN0471	ROUTE 600 (MADISON COUNTY)	Yes	19	0	19	0
SHEN0472	BROKENBACK RUN	Yes	596	596	0	0
SHEN0473	Brokenback Run	Yes	41	41	0	0
SHEN0474	Brokenback Run	Yes	5	5	0	0
SHEN0475	BROKENBACK RUN	Yes	70	70	0	0
SHEN0476	BROKENBACK RUN NEAR NETHERS, VA	No	107	0	107	0
SHEN0477	Brokenback Run	Yes	8	8	0	0
SHEN0478	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0479	BROKENBACK RUN	Yes	70	70	0	0
SHEN0480	VAMA528R	No	12	0	12	0
SHEN0481	HUGHES RIVER NEAR NETHERS, VA	No	105	0	105	0
SHEN0482	East Hawksbill Creek	Yes	17	17	0	0
SHEN0483	BROKENBACK RUN	Yes	70	70	0	0
SHEN0484	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0485	NEGRO RUN (WHITEOAK CANYON RUN TRIBUTARY)	Yes	28	28	0	0
SHEN0486	BROKENBACK RUN	Yes	70	70	0	0
SHEN0487	BROKENBACK RUN	Yes	70	70	0	0
SHEN0488	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0489	Whiteoak Canyon Run	Yes	25	25	0	0
SHEN0490	Hughes River	Yes	27	27	0	0
SHEN0491	ROCKY RUN AT NETHERS, VA	No	105	0	105	0
SHEN0492	VARA525R	No	12	0	12	0
SHEN0493	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0494	WHITEOAK CANYON RUN	Yes	28	28	0	0
SHEN0495	NEGRO RUN (WHITEOAK CANYON RUN TRIBUTARY)	Yes	28	28	0	0
SHEN0496	NEGRO RUN (WHITEOAK CANYON RUN TRIBUTARY)	Yes	14	14	0	0
SHEN0497	WHITEOAK CANYON RUN	Yes	28	28	0	0

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0498	EAST HAWKSBILL CREEK NEAR IDA, VA	No	106	0	106	0
SHEN0499	NEWPORT DGIF BOAT LAUNCH	No	30	30	0	0
SHEN0500	RT. 618	No	271	0	271	0
SHEN0501	VAPA515R	No	12	0	12	0
SHEN0502	Hughes River	Yes	22	22	0	0
SHEN0503	HANNAH RUN	Yes	9	9	0	0
SHEN0504	HUGHES RIVER	Yes	9	9	0	0
SHEN0505	Hughes River	Yes	22	22	0	0
SHEN0506	BROAD HOLLOW	Yes	9	9	0	0
SHEN0507	Broad Hollow Run	Yes	13	13	0	0
SHEN0508	Hannah Run	Yes	22	22	0	0
SHEN0509	ROUTE 681 - RAPPAHANNOCK COUNTY	No	0	0	0	0
SHEN0510	SAMS RUN (HAZEL RIVER TRIBUTARY)	Yes	14	14	0	0
SHEN0511	HAZEL RIVER	No	14	14	0	0
SHEN0512	HAZEL RIVER	No	583	583	0	0
SHEN0513	Hazel River	No	31	31	0	0
SHEN0514	HAZEL RIVER NEAR NETHERS, VA	No	106	0	106	0
SHEN0515	Hazel River	No	19	19	0	0
SHEN0516	SAMS RUN (HAZEL RIVER TRIBUTARY)	Yes	14	14	0	0
SHEN0517	SAMS RUN (HAZEL RIVER TRIBUTARY)	Yes	14	14	0	0
SHEN0518	Hazel River	Yes	82	82	0	0
SHEN0519	South Fork Dry Run	Yes	15	15	0	0
SHEN0520	SAMS RUN	Yes	9	9	0	0
SHEN0521	HAZEL RIVER	Yes	9	9	0	0
SHEN0522	HAZEL RIVER	Yes	14	14	0	0
SHEN0523	SAMS RUN (HAZEL RIVER TRIBUTARY)	Yes	14	14	0	0
SHEN0524	HAZEL RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0525	NORTH FORK DRY RUN TRIBUTARY	Yes	28	28	0	0
SHEN0526	NORTH FORK DRY RUN	Yes	28	28	0	0
SHEN0527	NORTH FORK DRY RUN	Yes	42	42	0	0
SHEN0528	NORTH FORK DRY RUN	Yes	56	56	0	0
SHEN0529	NORTH FORK DRY RUN	Yes	56	56	0	0
SHEN0530	HAZEL RIVER	Yes	14	14	0	0
SHEN0531	NORTH FORK DRY RUN	Yes	56	56	0	0
SHEN0532	HAZEL RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0533	HAZEL RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0534	HAZEL RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0535	NORTH FORK DRY RUN	Yes	56	56	0	0
SHEN0536	Hazel River	Yes	10	10	0	0
SHEN0537	HAZEL RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0538	HAZEL RIVER	Yes	14	14	0	0
SHEN0539	HAZEL RIVER TRIBUTARY	Yes	20	20	0	0
SHEN0540	NORTH FORK DRY RUN	Yes	56	56	0	0
SHEN0541	S F DRY RUN NEAR FAIRVIEW, VA	No	105	0	105	0
SHEN0542	RT. 640 BRIDGE (PAGE COUNTY)	No	496	496	0	0
SHEN0543	HAZEL RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0544	HAZEL RIVER	Yes	14	14	0	0
SHEN0545	NORTH FORK DRY RUN	Yes	56	56	0	0
SHEN0546	HAZEL RIVER	Yes	14	14	0	0
SHEN0547	Hazel River	Yes	11	11	0	0
SHEN0548	Hazel River	Yes	75	75	0	0
SHEN0549	HAZEL RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0550	HAZEL RIVER	Yes	14	14	0	0
SHEN0551	Hazel River	Yes	1	1	0	0
SHEN0552	North Fork Dry Run	Yes	88	88	0	0
SHEN0553	HAZEL RIVER	Yes	14	14	0	0
SHEN0554	NORTH FORK DRY RUN	Yes	56	56	0	0
SHEN0555	HAZEL RIVER	Yes	14	14	0	0
SHEN0556	North Fork Dry Run	Yes	30	30	0	0
SHEN0557	NF OF THE DRY RUN	No	7171	7171	0	0
SHEN0558	NORTH FORK DRY RUN	No	54	54	0	0
SHEN0559	HAZEL RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0560	NORTH FORK DRY RUN	No	9	9	0	0
SHEN0561	Hazel River	Yes	32	32	0	0
SHEN0562	HAZEL RIVER	Yes	14	14	0	0
SHEN0563	HAZEL RIVER	Yes	14	14	0	0
SHEN0564	HAZEL RIVER	Yes	14	14	0	0
SHEN0565	HAZEL RIVER	Yes	14	14	0	0
SHEN0566	LAKE ARROWHEAD - STATION 100' FROM DAME PAGE CO.	No	199	108	91	0
SHEN0567	N F DRY RUN NEAR THORNTON GAP, VA	No	108	0	108	0
SHEN0568	ROUTE 620 BRIDGE	No	1542	957	559	26

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0569	PASS RUN NEAR THORNTON GAP, VA	Yes	107	0	107	0
SHEN0570	Pass Run	Yes	5	5	0	0
SHEN0571	South Fork Thornton River	Yes	5	5	0	0
SHEN0572	Pass Run	Yes	22	22	0	0
SHEN0573	RT. 600	No	226	0	226	0
SHEN0574	HAWKSBILL CR. OFF US 340 S LURAY	No	22	0	0	22
SHEN0575	VARA501R	Yes	11	0	11	0
SHEN0576	South Fork Thornton River	Yes	13	13	0	0
SHEN0577	VARA510R	No	12	0	12	0
SHEN0578	Pass Run	Yes	5	5	0	0
SHEN0579	RT. 522 BRIDGE	No	1024	0	311	713
SHEN0580	Pass Run	Yes	10	10	0	0
SHEN0581	VA. OAK TANNERY LURAY UPSTREAM	No	0	0	0	0
SHEN0582	HAWKSBILL CK RT 675UPSTREAM STP	No	62	0	0	62
SHEN0583	ROUTE 675 BRIDGE IN LURAY	No	1828	0	792	1036
SHEN0584	South Fork Thornton River	Yes	5	5	0	0
SHEN0585	IMMEDIATELY BELOW TOWN OF LURAY STP	No	1264	0	742	522
SHEN0586	RT. 612	No	696	0	0	696
SHEN0587	STP LURY OFF RT 340 AND	No	54	0	0	54
SHEN0588	TOWN OF LURAY STP	No	338	0	0	338
SHEN0589	RT. 211 BRIDGE	No	0	0	0	0
SHEN0590	VAPA501R	No	11	0	11	0
SHEN0591	ROCKY BRANCH NEAR THORNTON GAP, VA	No	107	0	107	0
SHEN0592	HAWKSBILL CK OFF RT 340 N OF STP	No	60	0	0	60
SHEN0593	HAWKSBILL CR. OFF US 340 N LURAY	No	10	0	0	10
SHEN0594	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0595	NF THORNTON RIVER	No	570	570	0	0
SHEN0596	North Fork Thornton River	No	31	31	0	0
SHEN0597	NF THORNTON RIVER	No	28	28	0	0
SHEN0598	NORTH FORK THORNTON RIVER	Yes	9	9	0	0
SHEN0599	N F THORNTON RIVER NEAR SPERRYVILLE, VA	Yes	105	0	105	0
SHEN0600	NF THORNTON RIVER	No	14	14	0	0
SHEN0601	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0602	FCWA. OCCOQUAN RESERVOIR	Yes	0	0	0	0
SHEN0603	NF THORNTON RIVER	No	14	14	0	0
SHEN0604	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0605	North Fork Thornton River	Yes	27	27	0	0
SHEN0606	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0607	PINEY RIVER NEAR SPERRYVILLE, VA	No	106	0	106	0
SHEN0608	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0609	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0610	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0611	North Fork Thornton River	Yes	5	5	0	0
SHEN0612	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0613	Piney River	No	23	23	0	0
SHEN0614	Piney River	No	99	99	0	0
SHEN0615	PINEY RIVER	No	98	98	0	0
SHEN0616	PINEY RIVER	No	462	462	0	0
SHEN0617	Piney River	No	5	5	0	0
SHEN0618	PINEY RIVER	No	9	9	0	0
SHEN0619	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0620	PINEY RIVER	Yes	3687	3687	0	0
SHEN0621	PINEY RIVER	Yes	3059	3059	0	0
SHEN0622	PINEY RIVER	Yes	2785	2785	0	0
SHEN0623	PINEY RIVER	Yes	98	98	0	0
SHEN0624	North Fork Thornton River	Yes	15	15	0	0
SHEN0625	PINEY RIVER TRIBUTARY	Yes	84	84	0	0
SHEN0626	PINEY RIVER TRIBUTARY	Yes	5	5	0	0
SHEN0627	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0628	PINEY RIVER	Yes	98	98	0	0
SHEN0629	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0630	RT. 626 BRIDGE	No	354	0	326	28
SHEN0631	RT. 658 BRIDGE	No	136	136	0	0
SHEN0632	S FK SHEN RT 675 NEAR LURAY	No	26	0	0	26
SHEN0633	HAWKSBILL CK RT 648NCAR MOUTH	No	57	0	0	57
SHEN0634	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0635	ROUTE 648 BRIDGE BELOW LURAY	No	6649	3631	2000	1018
SHEN0636	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0637	North Fork Thornton River	Yes	15	15	0	0
SHEN0638	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0639	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0640	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0641	PINEY RIVER	Yes	84	84	0	0
SHEN0642	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0643	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0644	Piney River	Yes	5	5	0	0
SHEN0645	JEREMYS RUN	Yes	14	14	0	0
SHEN0646	JEREMYS RUN	Yes	13	13	0	0
SHEN0647	JEREMYS RUN	Yes	14	14	0	0
SHEN0648	Jeremys Run	Yes	10	10	0	0
SHEN0649	JEREMYS RUN	Yes	14	14	0	0
SHEN0650	Jeremys Run	Yes	23	23	0	0
SHEN0651	ROUTES 211/522 BRIDGE	No	899	899	0	0
SHEN0652	JEREMYS RUN	Yes	14	14	0	0
SHEN0653	VAPA502R	No	12	0	12	0
SHEN0654	JEREMYS RUN	Yes	14	14	0	0
SHEN0655	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0656	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0657	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0658	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0659	RUSH RIVER AT WASHINGTON, VA	No	18	0	0	18
SHEN0660	JEREMYS RUN	Yes	14	14	0	0
SHEN0661	Jeremys Run	Yes	6	6	0	0
SHEN0662	JEREMYS RUN	Yes	9	9	0	0
SHEN0663	Jeremys Run	Yes	18	18	0	0
SHEN0664	JEREMYS RUN	Yes	28	28	0	0
SHEN0665	JEREMYS RUN	Yes	583	583	0	0
SHEN0666	Jeremys Run	Yes	30	30	0	0
SHEN0667	PINEY RIVER	Yes	98	98	0	0
SHEN0668	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0669	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0670	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0671	JEREMYS RUN	Yes	14	14	0	0
SHEN0672	Piney River	Yes	17	17	0	0
SHEN0673	Piney Branch/Piney Ridge	Yes	5	5	0	0
SHEN0674	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0675	PINEY RIVER	Yes	98	98	0	0
SHEN0676	JEREMYS RUN NEAR OAK HILL, VA	No	104	0	104	0
SHEN0677	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0678	ROUTE 211 (RAPPAHANNOCK COUNTY)	No	19	0	19	0
SHEN0679	JEREMYS RUN	Yes	14	14	0	0
SHEN0680	Jeremys Run	Yes	22	22	0	0
SHEN0681	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0682	PINEY RIVER	Yes	98	98	0	0
SHEN0683	NF THORNTON RIVER TRIBUTARY	Yes	14	14	0	0
SHEN0684	NF THORNTON RIVER	Yes	14	14	0	0
SHEN0685	JEREMYS RUN	Yes	14	14	0	0
SHEN0686	Piney River	Yes	27	27	0	0
SHEN0687	JEREMYS RUN	Yes	14	14	0	0
SHEN0688	JEREMYS RUN	Yes	14	14	0	0
SHEN0689	PINEY RIVER	Yes	98	98	0	0
SHEN0690	Piney River	Yes	5	5	0	0
SHEN0691	PINEY RIVER	Yes	98	98	0	0
SHEN0692	PINEY RIVER TRIBUTARY	Yes	84	84	0	0
SHEN0693	PINEY RIVER TRIBUTARY	Yes	5	5	0	0
SHEN0694	RUSH RIVER AT RT 622 NEAR WASHINGTON, VA	No	105	0	105	0
SHEN0695	JEREMYS RUN	Yes	14	14	0	0
SHEN0696	PINEY RIVER	Yes	98	98	0	0
SHEN0697	Piney River	Yes	20	20	0	0
SHEN0698	Piney River	Yes	83	83	0	0
SHEN0699	PINEY RIVER	Yes	84	84	0	0
SHEN0700	Piney River	Yes	5	5	0	0
SHEN0701	PINEY RIVER TRIBUTARY	Yes	98	98	0	0
SHEN0702	PINEY RIVER TRIBUTARY	Yes	5	5	0	0
SHEN0703	JEREMYS RUN TRIBUTARY	Yes	14	14	0	0
SHEN0704	JEREMYS RUN	Yes	14	14	0	0
SHEN0705	Jeremys Run	Yes	23	23	0	0
SHEN0706	PINEY RIVER TRIBUTARY	Yes	70	70	0	0
SHEN0707	JEREMYS RUN	Yes	14	14	0	0
SHEN0708	Jeremys Run	Yes	69	69	0	0
SHEN0709	RUSH RIVER	No	9	9	0	0
SHEN0710	JEREMYS RUN	Yes	14	14	0	0

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0711 ¹	PINEY RIVER	Yes	98	98	0	0
SHEN0712	WHITIG TRACT POND	No	10	0	10	0
SHEN0713 ²	PINEY RIVER TRIBUTARY	Yes	70	70	0	0
SHEN0714	JEREMYS RUN	Yes	14	14	0	0
SHEN0715 ¹	PINEY RIVER	Yes	56	56	0	0
SHEN0716 ²	PINEY RIVER TRIBUTARY	Yes	98	98	0	0
SHEN0717	JEREMYS RUN	Yes	14	14	0	0
SHEN0718	VAPA505R	No	11	0	11	0
SHEN0719	ROUTE 522 (RAPPAHANNOCK COUNTY)	No	21	0	21	0
SHEN0720	ROUTE 522 (RAPPAHANNOCK COUNTY)	No	20	0	20	0
SHEN0721	GREASY RUN NEAR BROWNTOWN, VA	No	107	0	107	0
SHEN0722	Overall Run	Yes	26	26	0	0
SHEN0723	ROUTE 522 (RAPPAHANNOCK COUNTY)	No	20	0	20	0
SHEN0724	PHILS ARM RUN TRIB NEAR BROWNTOWN, VA	No	106	0	106	0
SHEN0725	PHILS ARM RUN NEAR BROWNTOWN, VA	No	106	0	106	0
SHEN0726	Overall Run	Yes	5	5	0	0
SHEN0727	OVERALL RUN	No	9	9	0	0
SHEN0728	BOLTON BRANCH	No	9	9	0	0
SHEN0729	Bolton Branch	Yes	17	17	0	0
SHEN0730	SMITH CREEK NEAR BROWNTOWN, VA	No	104	0	104	0
SHEN0731	Bolton Branch	Yes	7	7	0	0
SHEN0732	VAWA505R	No	12	0	12	0
SHEN0733	LANDS RUN NEAR BROWNTOWN, VA	No	106	0	106	0
SHEN0734	Lands Run	Yes	20	20	0	0
SHEN0735	LANDS RUN	No	9	9	0	0
SHEN0736	Lands Run	Yes	7	7	0	0
SHEN0737	Lands Run	Yes	79	79	0	0
SHEN0738	GOONEY RUN NEAR GLEN ECHO, VA	No	173	0	0	173
SHEN0739	HAPPY CREEK TRIB NEAR GLEN ECHO, VA	No	108	0	108	0
SHEN0740	NO NAME	No	2	2	0	0
SHEN0741	NO NAME	No	2	2	0	0
SHEN0742	MILL RUN TRIBUTARY	No	54	54	0	0
SHEN0743	MILL RUN	No	54	54	0	0
SHEN0744	KARO LANDING	No	0	0	0	0
SHEN0745	S FORK SHEN AT RT 619 FRONT ROYA	No	0	0	0	0
SHEN0746	S FORK SHEN AT RT 619 FRONTROYAL	No	40	0	0	40
SHEN0747	APPROX. 1 MI. UPSTREAM OF RT. 619 BRIDGE	No	305	0	0	305
SHEN0748	HAPPY CREEK AT FRONT ROYAL, VA	No	53	0	0	53
SHEN0749	VAWA519R	No	12	0	12	0
SHEN0750 ¹	ROUTE 55 BRIDGE AT FRONT ROYAL	No	1424	0	727	697
SHEN0751	FRONT ROYAL UPSTRM OF FMC.ETC.	No	0	0	0	0
SHEN0752	S.F.SHEN.R. LURAY AV BR FRNT RYL	No	40	0	0	40
SHEN0753	S.F.SHEN.R. LURAY AV BR FRNT RYL	No	20	0	0	20
SHEN0754	DGIF BOAT LAUNCH LURAY AVE - WARREN COUNTY	No	161	161	0	0
SHEN0755 ¹	RT. 619 BRIDGE AT GAGING STATION	No	6486	3755	1988	743
SHEN0756 ¹	S F SHENANDOAH RIVER AT FRONT ROYAL, VA	No	11995	317	2887	8791
SHEN0757	FMC CORP. FRONT ROYAL OTFL #01	No	0	0	0	0
SHEN0758	FMC CORP. FRONT ROYAL OTFL 002	No	0	0	0	0
SHEN0759	FRONT ROYAL MUNICIPAL TAP WATER	No	0	0	0	0
SHEN0760	HAPPY CREEK RT 647 FRONT ROYAL	No	53	0	0	53
SHEN0761	FMC CORP. FRONT ROYAL OTFL 003	No	0	0	0	0
SHEN0762	HAPPY CREEK AT CROSBY STADIUM AT FRONT ROYAL, VA	No	78	78	0	0
SHEN0763	FMC CORP. FRONT ROYAL OTFL 004	No	0	0	0	0
SHEN0764	ALLIED CHEM CO FRONT ROYAL OF 01	No	0	0	0	0
SHEN0765	FRONT ROYAL STP ON HAPPY CREEK	No	45	0	0	45
SHEN0766	OLD VA,INC. FRONT ROYAL OTFL 01	No	0	0	0	0
SHEN0767	SF SHENENDOAH RIVER BL CABIN RUN AT FRONT ROYAL	No	60	60	0	0
SHEN0768	S FORK SHEN RT 340 FRONT ROYAL	No	63	0	0	63
SHEN0769	HAPPY CREEK NEAR MOUTH	No	53	0	0	53
SHEN0770	S.F.SHEN.R. RTE 340 BR FRNT ROYL	No	40	0	0	40
SHEN0771	S.F.SHEN.R. US 340 BR FRNT ROYAL	No	21	0	0	21
SHEN0772 ¹	AT RIVERTON JUNCTION	No	1766	0	750	1016
SHEN0773	RIGHT SIDE AT THREE ISLANDS - WARREN COUNTY	No	0	0	0	0
SHEN0774 ²	APPROX. 0.4 MILE BELOW RT340/522 BRIDGE	No	4785	1408	2659	718
SHEN0775 ¹	APPROX. 0.4 MILE BELOW RT340/522 BRIDGE	No	2884	2884	0	0
SHEN0776	N FORK SHEN RT 340 FRONT ROYAL	No	0	0	0	0
SHEN0777 ¹	APPROX. 0.1 MILE BELOW RT. 340/522 BRIDGE	No	6927	3869	2391	667
SHEN0778	N.F.SHEN.R. RTE 340 BR FRNT ROYL	No	40	0	0	40
SHEN0779	N.F.SHEN.R. US 340 BR FRONT ROYL	No	20	0	0	20
SHEN0780 ¹	UPSTREAM FROM DAM	No	455	267	188	0
SHEN0781	POWER POOL (WARREN CO)	No	128	128	0	0

**Station Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station Ident.	Location Description	In Park	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75
SHEN0782	SHENANDOAH R. PEPCO DAM FRNT RYL	No	32	0	0	32
SHEN0783 ¹	RIVERTON CORP. BRIDGE	No	3144	2084	1060	0
SHEN0784 ¹	OPPOSITE FRONT ROYAL COUNTRY CLUB	No	1477	0	649	828
SHEN0785	DOWNSTREAM OF FRONT ROYAL COUNTRY CLUB	No	51	51	0	0
SHEN0786	SHENANDOAH RIVER AT FRONT ROYAL	No	128	0	128	0

¹Longer Term Station With At Least 6 Parameters Having An Average of 1 Or More Observations Per Year During a Period of Record Extending At Least 2 Years.

**Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Parameter Code	Name	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Stations	
						Total	Park
00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	3631	1384	936	1311	53	0
00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	2039	0	728	1311	31	0
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12775	8652	2336	1787	669	450
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	35	21	14	0	8	1
00023	SAMPLE WEIGHT IN POUNDS	37	21	16	0	5	0
00024	SAMPLE LENGTH IN INCHES	37	21	16	0	5	0
00025	BAROMETRIC PRESSURE (MM OF HG)	32	19	13	0	9	1
00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	283	28	255	0	69	19
00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	307	28	279	0	69	19
00031	LIGHT,INCIDENT, PERCENT REMAINING AT CERTAIN DEPTH	1	0	1	0	1	0
00040	WIND DIRECTION, AZIMUTH	1	0	1	0	1	0
00041	WEATHER (WMO CODE 4501)	4565	1847	1446	1272	55	0
00060	FLOW, STREAM, MEAN DAILY CFS	570	0	33	537	20	1
00061	FLOW, STREAM, INSTANTANEOUS CFS	415	18	397	0	70	22
00064	DEPTH OF STREAM, MEAN (FT)	24	24	0	0	12	5
00065	STAGE, STREAM (FEET)	14	11	3	0	5	1
00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)	2	0	2	0	2	0
00070	TURBIDITY, (JACKSON CANDLE UNITS)	366	286	0	80	45	0
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	779	779	0	0	25	0
00077	TRANSPARENCY, SECCHI DISC (INCHES)	1	0	1	0	1	0
00078	TRANSPARENCY, SECCHI DISC (METERS)	12	2	10	0	2	0
00080	COLOR (PLATINUM-COBALT UNITS)	937	325	100	512	49	6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	1501	938	563	0	168	138
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	9816	8616	708	492	367	278
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	1228	1207	21	0	43	5
00300	OXYGEN, DISSOLVED MG/L	4659	1565	1493	1601	274	153
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	8	8	0	0	8	6
00310	BOD, 5 DAY, 20 DEG C MG/L	2835	1773	637	425	91	1
00311	BOD, DISSOLVED, 5 DAY MG/L	30	0	0	30	16	0
00315	BOD, 7 DAY, 20 DEG C MG/L	1	0	1	0	1	0
00340	COD, .25N K2CR2O7 MG/L	2321	1783	538	0	34	1
00400	PH (STANDARD UNITS)	13459	9128	2460	1871	536	336
00402	SPECIFIC CONDUCTANCE,NON-TEMPERATURE CORR.UMHOS/CM	7780	7204	576	0	278	268
00403	PH, LAB, STANDARD UNITS SU	2754	1831	677	246	131	27
00405	CARBON DIOXIDE (MG/L AS CO2)	58	0	6	52	9	0
00406	PH, FIELD, STANDARD UNITS SU	611	611	0	0	157	151
00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	7837	7243	594	0	280	263
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	2806	1842	388	576	171	47
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	17	0	0	17	7	0
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	21	0	0	21	20	0
00440	BICARBONATE ION (MG/L AS HCO3)	596	24	58	514	29	6
00445	CARBONATE ION (MG/L AS CO3)	309	0	6	303	14	1
00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	2	2	0	0	2	0
00453	BICARBONATE, WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	6	6	0	0	6	0
00500	RESIDUE, TOTAL (MG/L)	997	433	268	296	47	1
00505	RESIDUE, TOTAL VOLATILE (MG/L)	992	430	268	294	46	1
00510	RESIDUE, TOTAL FIXED (MG/L)	993	431	269	293	46	1
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	17	9	2	6	9	0
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	2844	1800	739	305	60	1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	2820	1797	736	287	58	1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	2825	1799	738	288	58	1
00545	RESIDUE, SETTLEABLE (ML/L)	28	0	24	4	5	0
00600	NITROGEN, TOTAL (MG/L AS N)	1	0	1	0	1	0
00603	NITROGEN TOTAL, BOTTOM DEPOSITS (MG/KG-N DRY WGT)	2	0	0	2	2	0
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	2	0	2	0	2	0
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	342	8	332	2	71	22
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	3944	1779	1426	739	100	1
00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	3	0	1	2	2	0
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	132	19	98	15	10	1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	3811	1778	1418	615	58	1
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	178	1	78	99	7	0
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	3546	1778	1155	613	56	1
00621	NITRATE NITROGEN, BOTTOM DEPOS. (MG/KG-N DRY WGT)	2	0	0	2	2	0
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	6	6	0	0	6	0
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	3996	1763	1423	810	110	2
00626	NITROGEN,ORG. KJEL.,BOT. DEPOS. (MG/KG-N DRY WGT)	3	0	1	2	2	0
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	406	2	277	127	71	0
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	462	19	430	13	72	22
00633	NITRITE PLUS NITRATE,BOT. DEPOS. (MG/KG-N DRY WT)	1	0	1	0	1	0
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	187	0	1	186	9	1
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	232	0	84	148	34	0

**Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Parameter Code	Name	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Stations	
						Total	Park
00665	PHOSPHORUS, TOTAL (MG/L AS P)	2343	1759	571	13	45	2
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	33	33	0	0	20	6
00668	PHOSPHORUS, TOTAL BOTTOM DEPOSIT (MG/KG-P DRY WGT)	4	0	2	2	3	0
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	1362	663	669	30	40	2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	2254	1362	826	66	76	1
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	309	309	0	0	25	16
00686	CARBON, INORGANIC, IN BED MATERIAL (GM/KG AS C)	1	0	1	0	1	0
00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	1	0	1	0	1	0
00690	CARBON, TOTAL (MG/L AS C)	67	0	0	67	25	0
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	24	24	0	0	12	5
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	41	0	1	40	3	0
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	3051	1770	622	659	111	21
00901	HARDNESS, CARBONATE (MG/L AS CaCO3)	3	0	0	3	2	0
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	573	0	74	499	15	1
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	8858	7322	1026	510	434	337
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	8873	7322	1040	511	448	339
00927	MAGNESIUM, TOTAL (MG/L AS Mg)	2	2	0	0	2	0
00930	SODIUM, DISSOLVED (MG/L AS Na)	8781	7319	1050	412	455	340
00931	SODIUM ADSORPTION RATIO	693	1	418	274	74	21
00932	SODIUM, PERCENT	693	1	418	274	74	21
00933	SODIUM, PLUS POTASSIUM (MG/L)	5	0	5	0	1	0
00935	POTASSIUM, DISSOLVED (MG/L AS K)	8708	7319	1026	363	430	337
00940	CHLORIDE, TOTAL IN WATER MG/L	2294	1430	439	425	115	23
00941	CHLORIDE, DISSOLVED IN WATER MG/L	7896	7302	594	0	349	315
00945	SULFATE, TOTAL (MG/L AS SO4)	2559	1487	498	574	130	22
00946	SULFATE, DISSOLVED (MG/L AS SO4)	7896	7302	594	0	349	315
00950	FLUORIDE, DISSOLVED (MG/L AS F)	554	41	100	413	32	7
00951	FLUORIDE, TOTAL (MG/L AS F)	391	391	0	0	22	0
00955	SILICA, DISSOLVED (MG/L AS SiO2)	9055	7623	1025	407	390	295
01000	ARSENIC, DISSOLVED (UG/L AS AS)	24	10	0	14	9	0
01002	ARSENIC, TOTAL (UG/L AS AS)	288	9	163	116	37	0
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	64	43	19	2	30	0
01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	15	15	0	0	4	0
01012	BERYLLIUM, TOTAL (UG/L AS BE)	6	4	2	0	5	0
01013	BERYLLIUM IN BOTTOM DEPOSITS (MG/KG AS BE DRY WGT)	43	34	9	0	24	0
01020	BORON, DISSOLVED (UG/L AS B)	12	0	0	12	2	0
01025	CADMIUM, DISSOLVED (UG/L AS CD)	24	10	0	14	9	0
01027	CADMIUM, TOTAL (UG/L AS CD)	401	9	178	214	59	0
01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	63	43	18	2	30	0
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	64	43	19	2	30	0
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	14	10	0	4	9	0
01034	CHROMIUM, TOTAL (UG/L AS CR)	631	9	209	413	50	0
01035	COBALT, DISSOLVED (UG/L AS CO)	2	0	0	2	1	0
01037	COBALT, TOTAL (UG/L AS CO)	1	0	1	0	1	0
01038	COBALT IN BOTTOM DEPOSITS (MG/KG AS CO DRY WGT)	1	0	1	0	1	0
01040	COPPER, DISSOLVED (UG/L AS CU)	56	10	0	46	9	0
01042	COPPER, TOTAL (UG/L AS CU)	586	9	208	369	59	0
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	64	43	19	2	30	0
01045	IRON, TOTAL (UG/L AS FE)	149	9	47	93	56	0
01046	IRON, DISSOLVED (UG/L AS FE)	400	27	100	273	22	2
01049	LEAD, DISSOLVED (UG/L AS PB)	24	10	0	14	9	0
01051	LEAD, TOTAL (UG/L AS PB)	538	9	208	321	59	0
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	64	43	19	2	30	0
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	28	25	1	2	25	0
01055	MANGANESE, TOTAL (UG/L AS MN)	116	8	35	73	56	0
01056	MANGANESE, DISSOLVED (UG/L AS MN)	68	39	23	6	49	9
01057	THALLIUM, DISSOLVED (UG/L AS TL)	9	9	0	0	6	0
01059	THALLIUM, TOTAL (UG/L AS TL)	6	4	2	0	5	0
01065	NICKEL, DISSOLVED (UG/L AS NI)	312	10	156	146	37	0
01067	NICKEL, TOTAL (UG/L AS NI)	44	9	35	0	15	0
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	64	43	19	2	30	0
01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	15	15	0	0	4	0
01073	THALLIUM, TISSUE, WET WEIGHT, MG/KG	9	9	0	0	3	0
01075	SILVER, DISSOLVED (UG/L AS AG)	10	10	0	0	7	0
01077	SILVER, TOTAL (UG/L AS AG)	3	0	3	0	3	0
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	36	36	0	0	23	0
01085	VANADIUM, DISSOLVED (UG/L AS V)	29	0	29	0	29	3
01090	ZINC, DISSOLVED (UG/L AS ZN)	22	10	0	12	9	0
01092	ZINC, TOTAL (UG/L AS ZN)	767	9	314	444	59	0
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	64	43	19	2	30	0
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	10	10	0	0	7	0

**Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Parameter Code	Name	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Stations	
						Total	Park
01097	ANTIMONY, TOTAL (UG/L AS SB)	2	0	2	0	2	0
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	24	24	0	0	23	0
01105	ALUMINUM, TOTAL (UG/L AS AL)	39	24	1	14	15	5
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	38	10	28	0	35	3
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	24	24	0	0	23	0
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10	10	0	0	7	0
01147	SELENIUM, TOTAL (UG/L AS SE)	10	7	3	0	7	0
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	43	34	9	0	24	0
01149	SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	9	9	0	0	3	0
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	27	24	1	2	25	0
01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	2354	1819	535	0	31	0
04024	PROPACHLOR,DISSOLVED,WATER,TOTAL RECOVERABLE UG/L	4	4	0	0	4	0
04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	4	4	0	0	4	0
04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	4	4	0	0	4	0
04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	4	4	0	0	4	0
04040	DEETHYL ATRAZINE,DISSOLVED,WATER,TOT REC UG/L	4	4	0	0	4	0
04041	CYANAZINE,DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	4	4	0	0	4	0
04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	4	4	0	0	4	0
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	77	77	0	0	14	11
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	787	787	0	0	24	19
05053	INVALID PARAMETER	1	0	1	0	1	0
05301	INVALID PARAMETER	1	0	1	0	1	0
22703	URANIUM, NATURAL, DISSOLVED	29	0	29	0	29	3
30207	GAGE HEIGHT, ABOVE DATUM METERS	1	1	0	0	1	0
30282	METHIOCARB, WATER, WHOLE, RECOVERABLE, UG/L	1	1	0	0	1	0
30296	PROPOXUR, WATER, WHOLE, RECOVERABLE, UG/L	1	1	0	0	1	0
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	325	0	1	324	50	0
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	31	0	0	31	16	0
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	27	0	0	27	15	0
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	117	48	1	68	17	0
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	4107	1612	1395	1100	75	1
31625	FECAL COLIFORM, MF,M-FC, 0.7 UM	1	1	0	0	1	0
31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	2	2	0	0	2	1
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	1	0	1	0	1	0
32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	1	0	1	0	1	0
32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	1	0	1	0	1	0
32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	1	0	1	0	1	0
32104	BROMOFORM,WHOLE WATER,UG/L	1	0	1	0	1	0
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	1	0	1	0	1	0
32106	CHLOROFORM,WHOLE WATER,UG/L	1	0	1	0	1	0
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	41	3	7	31	18	0
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	1	1	0	0	1	0
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	1	1	0	0	1	0
32219	PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	1	1	0	0	1	0
32234	CHLOROPHYLL, TOTAL (A+B+C) (MG/L)	1	0	1	0	1	0
32240	TANNIN AND LIGNIN (MG/L)	21	21	0	0	12	0
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	50	0	12	38	21	0
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	1	0	1	0	1	0
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	1	0	1	0	1	0
34200	ACENAPHTHYLENE TOTWUG/L	1	0	1	0	1	0
34205	ACENAPHTHENE TOTWUG/L	1	0	1	0	1	0
34210	ACROLEIN TOTWUG/L	1	0	1	0	1	0
34215	ACRYLONITRILE TOTWUG/L	1	0	1	0	1	0
34220	ANTHRACENE TOTWUG/L	1	0	1	0	1	0
34230	BENZO(B)FLUORANTHENE,WHOLE WATER,UG/L	1	0	1	0	1	0
34242	BENZO(K)FLUORANTHENE, TOTAL, WATER UG/L	1	0	1	0	1	0
34247	BENZO-A-PYRENE TOTWUG/L	1	0	1	0	1	0
34252	BERYLLIUM WET WGTISMG/KG	9	9	0	0	3	0
34253	A-BHC-ALPHA DISSUG/L	4	4	0	0	4	0
34258	B-BHC-BETA WET WGTISMG/KG	17	17	0	0	6	0
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	10	8	2	0	9	0
34263	DELTA BENZENE HEXACHLORIDE WET WGTISMG/KG	17	17	0	0	6	0
34268	BIS (CHLOROMETHYL) ETHER TOTWUG/L	1	0	1	0	1	0
34273	BIS (2-CHLOROETHYL) ETHER TOTWUG/L	1	0	1	0	1	0
34278	BIS (2-CHLOROETHOXY) METHANE TOTWUG/L	1	0	1	0	1	0
34283	BIS (2-CHLOROISOPROPYL) ETHER TOTWUG/L	1	0	1	0	1	0
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	1	0	1	0	1	0
34301	CHLOROBENZENE TOTWUG/L	1	0	1	0	1	0
34311	CHLOROETHANE TOTWUG/L	1	0	1	0	1	0
34320	CHRYSENE TOTWUG/L	1	0	1	0	1	0
34336	DIETHYL PHTHALATE TOTWUG/L	1	0	1	0	1	0

**Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Parameter Code	Name	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Stations	
						Total	Park
34341	DIMETHYL PHTHALATE TOTWUG/L	1	0	1	0	1	0
34346	1,2-DIPHENYLHYDRAZINE TOTWUG/L	1	0	1	0	1	0
34351	ENDOSULFAN SULFATE TOTWUG/L	10	8	2	0	9	0
34356	ENDOSULFAN, BETA TOTWUG/L	10	8	2	0	9	0
34360	ENDOSULFAN, BETA WET WGT TISM/KG	16	16	0	0	5	0
34361	ENDOSULFAN, ALPHA TOTWUG/L	10	8	2	0	9	0
34365	ENDOSULFAN, ALPHA WET WGT TISM/KG	16	16	0	0	5	0
34366	ENDRIN ALDEHYDE TOTWUG/L	10	8	2	0	9	0
34371	ETHYLBENZENE TOTWUG/L	1	0	1	0	1	0
34376	FLUORANTHENE TOTWUG/L	1	0	1	0	1	0
34381	FLUORENE TOTWUG/L	1	0	1	0	1	0
34386	HEXACHLOROCYCLOPENTADIENE TOTWUG/L	1	0	1	0	1	0
34396	HEXACHLOROETHANE TOTWUG/L	1	0	1	0	1	0
34403	INDENO (1,2,3-CD) PYRENE TOTWUG/L	1	0	1	0	1	0
34408	ISOPHORONE TOTWUG/L	1	0	1	0	1	0
34413	METHYL BROMIDE TOTWUG/L	1	0	1	0	1	0
34418	METHYL CHLORIDE TOTWUG/L	1	0	1	0	1	0
34423	METHYLENE CHLORIDE TOTWUG/L	1	0	1	0	1	0
34428	N-NITROSODI-N-PROPYLAMINE TOTWUG/L	1	0	1	0	1	0
34433	N-NITROSODIPHENYLAMINE TOTWUG/L	1	0	1	0	1	0
34438	N-NITROSODIMETHYLAMINE TOTWUG/L	1	0	1	0	1	0
34447	NITROBENZENE TOTWUG/L	1	0	1	0	1	0
34452	PARACHLOROMETA CRESOL TOTWUG/L	1	0	1	0	1	0
34461	PHENANTHRENE TOTWUG/L	1	0	1	0	1	0
34469	PYRENE TOTWUG/L	1	0	1	0	1	0
34475	TETRACHLOROETHYLENE TOTWUG/L	1	0	1	0	1	0
34480	THALLIUM DRY WGT BOTM/KG	28	19	9	0	20	0
34488	TRICHLOROFLUOROMETHANE TOTWUG/L	1	0	1	0	1	0
34496	1,1-DICHLOROETHANE TOTWUG/L	1	0	1	0	1	0
34501	1,1-DICHLOROETHYLENE TOTWUG/L	1	0	1	0	1	0
34506	1,1,1-TRICHLOROETHANE TOTWUG/L	1	0	1	0	1	0
34511	1,1,2-TRICHLOROETHANE TOTWUG/L	1	0	1	0	1	0
34516	1,1,2,2-TETRACHLOROETHANE TOTWUG/L	1	0	1	0	1	0
34521	BENZO(GHI)PERYLENE,1,2-BENZOPERYLENE TOTWUG/L	1	0	1	0	1	0
34526	BENZO(A)ANTHRACENE,1,2-BENZANTHRACENE TOTWUG/L	1	0	1	0	1	0
34536	1,2-DICHLOROBENZENE TOTWUG/L	1	0	1	0	1	0
34541	1,2-DICHLOROPROPANE TOTWUG/L	1	0	1	0	1	0
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER UG/L	1	0	1	0	1	0
34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	1	0	1	0	1	0
34556	1,2,5,6-DIBENZANTHRACENE TOTWUG/L	1	0	1	0	1	0
34561	1,3-DICHLOROPROPENE TOTWUG/L	1	0	1	0	1	0
34566	1,3-DICHLOROBENZENE TOTWUG/L	1	0	1	0	1	0
34571	1,4-DICHLOROBENZENE TOTWUG/L	1	0	1	0	1	0
34576	2-CHLOROETHYL VINYL ETHER TOTWUG/L	1	0	1	0	1	0
34581	2-CHLORONAPHTHALENE TOTWUG/L	1	0	1	0	1	0
34586	2-CHLOROPHENOL TOTWUG/L	1	0	1	0	1	0
34591	2-NITROPHENOL TOTWUG/L	1	0	1	0	1	0
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	1	0	1	0	1	0
34601	2,4-DICHLOROPHENOL TOTWUG/L	1	0	1	0	1	0
34606	2,4-DIMETHYLPHENOL TOTWUG/L	1	0	1	0	1	0
34611	2,4-DINITROTOLUENE TOTWUG/L	1	0	1	0	1	0
34616	2,4-DINITROPHENOL TOTWUG/L	1	0	1	0	1	0
34621	2,4,6-TRICHLOROPHENOL TOTWUG/L	1	0	1	0	1	0
34626	2,6-DINITROTOLUENE TOTWUG/L	1	0	1	0	1	0
34631	3,3'-DICHLOROBENZIDINE TOTWUG/L	1	0	1	0	1	0
34636	4-BROMOPHENYL PHENYL ETHER TOTWUG/L	1	0	1	0	1	0
34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	1	0	1	0	1	0
34646	4-NITROPHENOL TOTWUG/L	1	0	1	0	1	0
34653	P,P'-DDE DISSUG/L	4	4	0	0	4	0
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL) TOTWUG/L	1	0	1	0	1	0
34664	PCB - 1221 WET WGT TISM/KG	14	14	0	0	5	0
34667	PCB - 1232 WET WGT TISM/KG	14	14	0	0	5	0
34669	PCB - 1248 WET WGT TISM/KG	14	14	0	0	5	0
34670	PCB - 1260 WET WGT TISM/KG	23	23	0	0	7	0
34671	PCB - 1016 TOTWUG/L	10	8	2	0	9	0
34674	PCB - 1016 WET WGT TISM/KG	14	14	0	0	5	0
34675	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD) TOTWUG/L	1	0	1	0	1	0
34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	35	23	12	0	6	0
34682	CHLORDANE(TECH MIX & METABS),TISSUE WET WGT, MG/KG	35	23	12	0	6	0
34685	ENDRIN WET WGT TISM/KG	35	23	12	0	6	0
34686	HEPTACHLOR EPOXIDE WET WGT TISM/KG	15	15	0	0	5	0

**Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Parameter Code	Name	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Stations	
						Total	Park
34687	HEPTACHLOR WET WGT TISM/G/KG	16	16	0	0	5	0
34688	HEXACHLOROBENZENE WET WGT TISM/G/KG	35	23	12	0	6	0
34689	PCB - 1242 WET WGT TISM/G/KG	14	14	0	0	5	0
34690	PCB - 1254 WET WGT TISM/G/KG	23	23	0	0	7	0
34691	TOXAPHENE WET WGT TISM/G/KG	17	17	0	0	6	0
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	1	0	1	0	1	0
34696	NAPHTHALENE TOTWUG/L	1	0	1	0	1	0
34790	SURFACTANTS, AS CTAS, WATER MG/L	3	3	0	0	3	0
34795	ANTIMONY,SED,BOT,	3	3	0	0	3	0
34800	ARSENIC,SED,BOT,WET SIEVE,	3	3	0	0	3	0
34810	BERYLLIUM,SED,BOT,WET SIEVE,	3	3	0	0	3	0
34816	BISMUTH,SED,BOT,WET SIEVE,	3	3	0	0	3	0
34825	CADMIUM,SED,BOT,	3	3	0	0	3	0
34830	CALCIUM,SED,BOT,	3	3	0	0	3	0
34835	CERIUM,SED,BOT,	3	3	0	0	3	0
34840	CHROMIUM,SED,BOT,	3	3	0	0	3	0
34845	COBALT,SED,BOT,	3	3	0	0	3	0
34850	COPPER,SED,BOT,	3	3	0	0	3	0
34855	EUROPIUM,SED,BOT,	3	3	0	0	3	0
34860	GALLIUM,SED,BOT,	3	3	0	0	3	0
34870	GOLD,SED,BOT,	3	3	0	0	3	0
34875	HOLMIUM,SED,BOT,	3	3	0	0	3	0
34880	IRON,SED,BOT,	3	3	0	0	3	0
34885	LANTHANUM,SED,BOT,	3	3	0	0	3	0
34890	LEAD,SED,BOT,	3	3	0	0	3	0
34895	LITHIUM,SED,BOT,	3	3	0	0	3	0
34900	MAGNESIUM,SED,BOT,	3	3	0	0	3	0
34905	MANGANESE,SED,BOT,	3	3	0	0	3	0
34910	MERCURY,SED,BOT,	3	3	0	0	3	0
34915	MOLYBDENUM,SED,BOT,	3	3	0	0	3	0
34920	NEODYMIUM,SED,BOT,	3	3	0	0	3	0
34925	NICKEL,SED,BOT,	3	3	0	0	3	0
34930	NIObIUM,SED,BOT,	3	3	0	0	3	0
34935	PHOSPHORUS,SED,BOT,	3	3	0	0	3	0
34940	POTASSIUM,SED,BOT,	3	3	0	0	3	0
34945	SCANDIUM,SED,BOT,	3	3	0	0	3	0
34950	SELENIUM,SED,BOT,	3	3	0	0	3	0
34955	SILVER,SED,BOT,	3	3	0	0	3	0
34960	SODIUM,SED,BOT,	3	3	0	0	3	0
34965	STRONTIUM,SED,BOT,	3	3	0	0	3	0
34970	SULFUR,SED,BOT,	3	3	0	0	3	0
34975	TANTALUM,SED,BOT,	3	3	0	0	3	0
34980	THORIUM,SED,BOT,	3	3	0	0	3	0
34985	TIN,SED,BOT,	3	3	0	0	3	0
35000	URANIUM,SED,BOT,	3	3	0	0	3	0
35005	VANADIUM,SED,BOT,	3	3	0	0	3	0
35010	YTTRIUM,SED,BOT,	3	3	0	0	3	0
35015	YTTERBIUM,SED,BOT,	3	3	0	0	3	0
35020	ZINC,SED,BOT,	3	3	0	0	3	0
38442	DICAMBA (BANVEL) WATER,DISSUG/L	1	1	0	0	1	0
38451	DICHLORPROP WATER,SUSPUG/L	4	4	0	0	4	0
38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	8	8	0	0	4	0
38745	2,4-DB WATER, TOTUG/L	5	5	0	0	5	0
38933	CHLORPYRIFOS,DISSOLVED UG/L	4	4	0	0	4	0
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	26	8	18	0	16	0
39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	3	3	0	0	3	0
39051	METHOMYL IN WHOLE WATER (UG/L)	1	1	0	0	1	0
39052	PROPHAM IN WHOLE WATER (UG/L)	1	1	0	0	1	0
39060	PCP (PENTACHLOROPHENOL) IN TISSUE WET WGT UG/G	19	6	13	0	2	0
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	48	48	0	0	30	0
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	17	0	17	0	9	0
39063	CHLORDANE-CIS ISOMER,TISSUE WET WGT (UG/G)	19	6	13	0	2	0
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	17	0	17	0	9	0
39066	CHLORDANE-TRANS ISOMER,TISSUE WET WGT (UG/G)	19	6	13	0	2	0
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	17	0	17	0	9	0
39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	35	23	12	0	6	0
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	17	0	17	0	9	0
39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	35	23	12	0	6	0
39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	35	23	12	0	6	0
39075	BHC- GAMMA ISOMER, TISSUE WET WGT (UG/G)	13	0	13	0	2	0
39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	6	6	0	0	6	0

**Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Parameter Code	Name	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Stations	
						Total	Park
39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	1	0	1	0	1	0
39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	1	0	1	0	1	0
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	1	0	1	0	1	0
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	1	0	1	0	1	0
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	1	0	1	0	1	0
39250	NAPHTHALENES, POLYCHLORINATED (UG/L)	1	0	1	0	1	0
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	30	23	7	0	6	0
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	27	8	19	0	17	0
39302	P P DDT IN TISSUE WET WGT (UG/G)	19	6	13	0	2	0
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	17	0	17	0	9	0
39309	O P DDT IN AQUATIC ORGANISMS WET WEIGHT BASIS(UG/G)	22	8	14	0	3	0
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	27	8	19	0	17	0
39312	P P DDD IN TISSUE WET WGT (UG/G)	19	6	13	0	2	0
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	17	0	17	0	9	0
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	27	8	19	0	17	0
39322	P,P'-DDE IN TISSUE WET WGT MG/KG	19	6	13	0	2	0
39325	O,P DDD IN TISSUE WET WGT (UG/G)	19	6	13	0	2	0
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	17	0	17	0	9	0
39329	O,P DDE IN TISSUE, WET WGT(UG/G)	19	6	13	0	2	0
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	40	8	29	3	19	0
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	50	38	10	2	25	0
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	10	8	2	0	9	0
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	10	8	2	0	9	0
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	14	8	3	3	11	0
39341	GAMMA-BHC(LINDANE),DISSOLVED,UG/L	4	4	0	0	4	0
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	3	0	1	2	2	0
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	26	3	20	3	16	0
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	51	48	1	2	32	0
39358	DDT TOTAL IN AQUATIC ORGANISMS WT WGT (UG/G)	13	0	13	0	2	0
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2	0
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	51	48	1	2	32	0
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2	0
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	51	48	1	2	32	0
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	11	0	1	10	6	0
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	51	48	1	2	32	0
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	32	8	20	4	20	0
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	4	4	0	0	4	0
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	51	48	1	2	32	0
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	33	8	20	5	21	0
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	51	48	1	2	32	0
39398	ETHION IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2	0
39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	1	0	1	0	1	0
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	14	8	3	3	11	0
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	49	48	1	0	31	0
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	30	23	7	0	6	0
39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	14	0	14	0	3	0
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	14	8	3	3	11	0
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	51	48	1	2	32	0
39415	METOLACHLOR, WATER, DISSOLVED UG/L	4	4	0	0	4	0
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	15	8	3	4	12	0
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	1	0	1	0	1	0
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	18	0	18	0	10	0
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	10	8	2	0	9	0
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	10	8	2	0	9	0
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	10	8	2	0	9	0
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	10	8	2	0	9	0
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	5	3	2	0	5	0
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	10	8	2	0	9	0
39515	PCBS (MG/KG) FISH TISSUE MG/KG	41	29	12	0	7	0
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	26	4	18	4	16	0
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	3	0	1	2	2	0
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	48	48	0	0	30	0
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	5	0	1	4	3	0
39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	1	0	1	0	1	0
39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	4	4	0	0	4	0
39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2	0
39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	1	0	1	0	1	0
39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	4	4	0	0	4	0
39570	DIAZINON IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2	0
39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	1	0	1	0	1	0
39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	4	4	0	0	4	0

**Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Parameter Code	Name	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Stations	
						Total	Park
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2	0
39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	1	0	1	0	1	0
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	12	0	11	1	11	0
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	9	0	9	0	9	0
39632	ATRAZINE DISSOLVED IN WATER PPB	4	4	0	0	4	0
39700	HEXACHLORO BENZENE IN WHOLE WATER SAMPLE (UG/L)	18	0	18	0	10	0
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	1	0	1	0	1	0
39720	PICLORAM IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	7	6	1	0	7	0
39731	2,4-D IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	1	0	1	0	1	0
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	7	6	1	0	7	0
39741	2,4,5-T IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	1	0	1	0	1	0
39750	SEVIN IN WHOLE WATER SAMPLE (UG/L)	1	1	0	0	1	0
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	7	6	1	0	7	0
39761	SILVEX IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	1	0	1	0	1	0
39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	19	6	13	0	3	0
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	1	0	0	1	1	0
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	30	23	7	0	6	0
39786	TRITHION IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2	0
39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	1	0	1	0	1	0
39790	METHYL TRITHION IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2	0
39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	1	0	1	0	1	0
45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	14	14	0	0	5	0
46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	4	4	0	0	4	0
46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	6	6	0	0	4	0
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	90	15	72	3	16	0
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	12	0	12	0	12	1
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	24	0	24	0	24	3
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	16	0	16	0	16	1
60050	ALGAE, TOTAL (CELLS/ML)	1	0	1	0	1	0
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	530	17	100	413	21	2
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	354	1	86	267	11	1
70302	SOLIDS, DISSOLVED-TONS PER DAY	293	0	82	211	8	1
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	359	0	85	274	13	1
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	282	282	0	0	132	126
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	1464	0	854	610	32	0
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	2727	1133	862	732	53	0
71835	OXYGEN CONSUMED, FILTERED MG/L	44	0	0	44	6	0
71840	OXYGEN CONSUMED, UNFILTERED MG/L	42	0	0	42	6	0
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	1669	972	695	2	74	30
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	8367	7302	670	395	366	316
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	92	0	77	15	4	0
71885	IRON (UG/L AS FE)	257	24	0	233	23	5
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	127	0	0	127	41	0
71887	NITROGEN, TOTAL, AS NO3 - MG/L	1	0	1	0	1	0
71890	MERCURY, DISSOLVED (UG/L AS HG)	10	10	0	0	7	0
71900	MERCURY, TOTAL (UG/L AS HG)	579	8	206	365	60	0
71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	19	6	13	0	3	0
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	64	43	19	2	30	0
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	33	21	12	0	4	0
71934	LEAD TOTAL IN FISH DRY WEIGHT BASIS	18	6	12	0	2	0
71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	27	21	6	0	4	0
71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	27	21	6	0	4	0
71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	15	15	0	0	4	0
71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	27	21	6	0	4	0
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	28	21	7	0	4	0
71941	CADMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	18	6	12	0	2	0
71942	COPPER,TOTAL IN FISH-DRY WEIGHT BASIS	18	6	12	0	2	0
71943	CHROMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	18	6	12	0	2	0
72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	2	2	0	0	2	1
72008	DEPTH, TOTAL OF WELL (FT BELOW LAND SURFACE DATUM)	1	0	1	0	1	0
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	26	26	0	0	14	5
72052	SLOPE OF TRANSECT, (F+/F+)	134	134	0	0	61	59
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	45	45	0	0	28	0
77441	1-NAPHTHOL WHOLE WATER,UG/L	1	1	0	0	1	0
77825	ALACHLOR WHOLE WATER,UG/L	5	5	0	0	5	0
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	44	44	0	0	27	0
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	5	1	3	1	2	0
81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	26	26	0	0	14	5
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	42	30	12	0	6	0
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	35	23	12	0	6	0

**Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Parameter Code	Name	Total Obs	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total	Stations Park
81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	8	8	0	0	4	0
81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	15	15	0	0	4	0
81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	17	17	0	0	6	0
81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	16	16	0	0	5	0
81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	17	17	0	0	6	0
82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	8	8	0	0	4	0
82032	CALCIUM - TOTAL UG/L (AS CA)	2	2	0	0	2	0
82036	CALCIUM-DISSOLVED UG/L (AS CA)	1	1	0	0	1	0
82037	MAGNESIUM - DISSOLVED UG/L (AS MG)	1	1	0	0	1	0
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	7813	7219	594	0	278	268
82052	BANVEL (DICAMBA) WHOLE WATER,UG/L	1	1	0	0	1	0
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	5	0	5	0	1	0
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	358	358	0	0	22	0
82079	TURBIDITY,LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	24	24	0	0	12	5
82183	2,4-DP (DICHLORPROP) TOTAL UG/L	1	1	0	0	1	0
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	29	0	29	0	29	3
82398	SAMPLING METHOD (CODES)	22	12	10	0	1	0
82584	3-HYDROXY CARBOFURAN, WATER, TOTAL RECOVERABLE,UG/L	1	1	0	0	1	0
82586	ALDICARB SULFOXIDE, WATER, TOTAL RECOVERABLE UG/L	1	1	0	0	1	0
82587	ALDICARB SULFONE, WH WATER, TOTAL RECOVERABLE,UG/L	1	1	0	0	1	0
82613	OXYAMYL, WHOLE WATER, TOTAL RECOVERABLE UG/L	1	1	0	0	1	0
82615	CARBOFURAN, WHOLE WATER, TOTAL RECOVERABLE UG/L	1	1	0	0	1	0
82619	ALDICARB, WHOLE WATER, TOTAL RECOVERABLE UG/L	1	1	0	0	1	0
82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	4	4	0	0	4	0
82660	DIETHYLANILINE, 2, 6,-0.7UM FILT,TOT RECV,WTR UG/L	4	4	0	0	4	0
82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	4	4	0	0	4	0
82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	7	7	0	0	6	0
82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	4	4	0	0	4	0
82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	4	4	0	0	4	0
83509	STREAM, WIDTH METER	161	161	0	0	73	64
83549	FLOW, CURRENT CUBIC METERS/SEC	134	134	0	0	59	57
84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	1	0	1	0	1	0
84001	AQUIFER NAME CODE (SEE USGS CATALOG)	1	0	1	0	1	0
84007	ANATOMY ALPHA CODE	43	30	13	0	6	0

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0001	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/10/92-04/27/98	5	27	
SHEN0002	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/20/67-06/11/74	6	52	
SHEN0004	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/17/74-12/15/98	24	119	
SHEN0006	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/23/97-08/04/97	0	4	
SHEN0017	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/07/68-10/27/77	9	90	
SHEN0019	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/23/97-08/04/97	0	4	
SHEN0021	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/23/97-08/04/97	0	4	
SHEN0024	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	11/29/94-07/29/97	2	5	
SHEN0033	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/20/67-11/02/77	10	93	
SHEN0051	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/02/70-11/02/77	7	85	
SHEN0162	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/20/67-12/21/98	31	177	
SHEN0164	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/10/93-12/21/98	5	67	
SHEN0204	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	04/30/79-12/21/98	19	93	
SHEN0225	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/02/70-11/02/77	7	85	
SHEN0226	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/24/98-06/24/98	0	2	
SHEN0234	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/02/70-11/02/77	7	85	
SHEN0235	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/07/68-11/02/77	9	92	
SHEN0252	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	04/24/79-12/21/98	19	88	
SHEN0256	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/22/93-12/10/98	5	69	
SHEN0282	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/27/92-11/30/98	6	28	
SHEN0287	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/16/68-11/02/77	9	93	
SHEN0297	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	10/22/74-11/05/98	24	66	
SHEN0311	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/12/97-11/30/98	1	7	
SHEN0316	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/20/67-11/02/77	10	95	
SHEN0324	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/20/92-07/29/97	5	11	
SHEN0366	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/20/92-07/29/97	5	11	
SHEN0372	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	10/22/74-09/29/98	23	49	
SHEN0381	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	08/15/68-11/02/77	9	89	
SHEN0386	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/15/89-12/07/98	9	83	
SHEN0450	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/20/92-12/07/98	6	68	
SHEN0499	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	06/25/98-06/25/98	0	2	
SHEN0500	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	04/26/76-04/12/78	1	12	
SHEN0542	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/20/92-07/21/97	5	14	
SHEN0568	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/17/74-09/29/98	24	59	
SHEN0573	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/18/76-05/03/78	1	11	
SHEN0579	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	02/04/68-05/03/78	10	79	
SHEN0583	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/16/68-05/31/78	9	96	
SHEN0585	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/31/72-05/31/78	5	59	
SHEN0586	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/01/68-08/24/74	6	59	
SHEN0588	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/06/72-04/12/74	1	18	
SHEN0630	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/17/74-05/03/78	3	20	
SHEN0631	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	08/04/94-07/21/97	2	5	
SHEN0635	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/16/68-12/07/98	30	187	
SHEN0651	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	11/19/90-04/22/98	7	26	
SHEN0747	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/04/72-04/12/74	1	20	
SHEN0750	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	07/16/68-05/31/78	9	91	
SHEN0755	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/03/70-12/02/98	28	179	
SHEN0772	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	08/15/68-05/31/78	9	86	
SHEN0774	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	09/19/67-08/02/88	20	214	
SHEN0775	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	11/09/88-12/01/98	10	108	
SHEN0777	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/04/70-12/01/98	28	320	
SHEN0783	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	05/09/79-07/14/97	18	41	
SHEN0784	No	00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)	03/04/70-05/18/78	8	84	
SHEN0002	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/20/67-06/11/74	6	52	
SHEN0004	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	05/17/74-11/02/77	3	34	
SHEN0017	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/07/68-11/02/77	9	92	
SHEN0033	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/20/67-11/02/77	10	93	
SHEN0051	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/02/70-11/02/77	7	85	
SHEN0162	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/20/67-11/02/77	10	85	
SHEN0225	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/02/70-11/02/77	7	85	
SHEN0234	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/02/70-11/02/77	7	85	
SHEN0235	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/07/68-11/02/77	9	92	
SHEN0287	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/16/68-11/02/77	9	93	
SHEN0297	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	10/22/74-04/07/76	1	9	
SHEN0316	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/20/67-11/02/77	10	95	
SHEN0372	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	10/22/74-04/12/78	3	21	
SHEN0381	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	08/15/68-11/02/77	9	89	
SHEN0500	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	04/26/76-04/12/78	1	12	
SHEN0568	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/17/74-05/03/78	3	31	
SHEN0573	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	05/18/76-05/03/78	1	11	
SHEN0579	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	02/04/68-05/03/78	10	78	
SHEN0583	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/16/68-05/31/78	9	96	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0585	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/31/72-05/31/78	5	59	
SHEN0586	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/01/68-08/24/74	6	59	
SHEN0588	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/06/72-04/12/74	1	18	
SHEN0630	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/17/74-05/03/78	3	20	
SHEN0635	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/16/68-05/31/78	9	93	
SHEN0747	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	05/04/72-04/12/74	1	20	
SHEN0750	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	07/16/68-05/31/78	9	91	
SHEN0755	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/03/70-05/31/78	8	86	
SHEN0772	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	08/15/68-05/31/78	9	87	
SHEN0774	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	09/19/67-05/31/78	10	94	
SHEN0777	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/04/70-05/18/78	8	90	
SHEN0784	No	00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)	03/04/70-05/18/78	8	84	
SHEN0001	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/91-04/27/98	6	29	
SHEN0002	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	6	50	
SHEN0003	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/28/86-04/11/86	0	2	
SHEN0004	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	24	249	
SHEN0005	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/05/68-05/21/69	1	2	
SHEN0006	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/23/97-08/04/97	0	2	
SHEN0007	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/22/67	0	4	
SHEN0008	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0009	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/16/73	0	4	
SHEN0014	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/28/86-04/11/86	0	2	
SHEN0015	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/17/73	0	3	
SHEN0017	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	10	99	
SHEN0018	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/77-01/17/77	0	1	
SHEN0019	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/78-08/04/97	19	10	
SHEN0020	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/11/77-03/11/77	0	1	
SHEN0021	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/23/97-08/04/97	0	2	
SHEN0022	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/11/77-03/11/77	0	1	
SHEN0023	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/10/77-01/10/77	0	1	
SHEN0024	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/29/94-07/29/97	2	5	
SHEN0025	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-06/24/82	0	6	
SHEN0028	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/94-09/16/97	3	8	
SHEN0029	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/96-06/18/96	0	1	
SHEN0030	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	0	9	
SHEN0031	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0032	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/16/73	0	4	
SHEN0033	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	11	100	
SHEN0034	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/15/77-01/15/77	0	1	
SHEN0036	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/10/77-01/10/77	0	1	
SHEN0037	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/23/82	0	6	
SHEN0038	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/13/93-09/13/93	0	1	
SHEN0042	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/23/82	0	6	
SHEN0043	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/15/77-10/06/80	3	57	
SHEN0044	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-06/23/82	13	7	
SHEN0047	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/95-06/19/95	0	1	
SHEN0048	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/27/82-06/24/82	0	4	
SHEN0049	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/15/95-06/09/98	2	7	
SHEN0050	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/16/73	0	4	
SHEN0051	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	8	93	
SHEN0052	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-06/24/82	0	6	
SHEN0054	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-07/30/97	7	29	
SHEN0056	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-10/29/97	2	6	
SHEN0057	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/94-06/15/98	3	10	
SHEN0059	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0061	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/94-06/22/94	0	1	
SHEN0062	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0068	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/15/95-06/11/98	2	4	
SHEN0069	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/01/86-04/15/86	0	2	
SHEN0071	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/94-06/15/98	3	7	
SHEN0072	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0073	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/95-06/19/95	0	1	
SHEN0075	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/95-06/11/98	2	4	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0076	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	0	4	
SHEN0077	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/95-06/20/95	0	1	
SHEN0078	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/01/86-04/15/86	0	2	
SHEN0086	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/95-06/10/98	2	6	
SHEN0087	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0089	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	0	2	
SHEN0090	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	4	
SHEN0091	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	0	1	
SHEN0092	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0093	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/95-06/17/98	3	4	
SHEN0094	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	4	
SHEN0096	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	0	1	
SHEN0097	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	0	1	
SHEN0098	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	0	4	
SHEN0100	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	6	
SHEN0101	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0104	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/95-05/31/95	0	1	
SHEN0106	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/17/98	3	4	
SHEN0107	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0109	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/95-05/31/95	0	3	
SHEN0110	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0111	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	0	1	
SHEN0112	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	6	
SHEN0113	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	0	1	
SHEN0114	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	5	
SHEN0115	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	0	2	
SHEN0116	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	0	4	
SHEN0117	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	5	
SHEN0121	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	0	1	
SHEN0122	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0123	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/95-05/31/95	0	1	
SHEN0124	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/23/81-06/24/82	0	5	
SHEN0125	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	6	
SHEN0126	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/29/97	4	258	
SHEN0127	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-04/26/95	4	20	
SHEN0131	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-04/26/95	0	1	
SHEN0132	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/23/94-06/16/98	3	7	
SHEN0134	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/89-05/13/97	7	37	
SHEN0135	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0136	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	0	1	
SHEN0137	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/14/77-01/14/77	0	1	
SHEN0138	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0139	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	0	2	
SHEN0140	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	6	
SHEN0141	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	0	1	
SHEN0142	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0146	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/07/95-06/07/95	0	1	
SHEN0147	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0148	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/25/82	0	6	
SHEN0149	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0151	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/07/95-06/07/95	0	1	
SHEN0152	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/89-05/21/97	7	39	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0153	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	0	4	
SHEN0154	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	2	7	
SHEN0158	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/13/77-01/13/77	0	1	
SHEN0159	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	0	9	
SHEN0160	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0161	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/08/69-06/06/94	25	3	
SHEN0162	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	31	298	
SHEN0163	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/13/93-09/13/93	0	1	
SHEN0164	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/93-12/21/98	5	67	
SHEN0165	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/95-06/21/95	0	1	
SHEN0166	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/95-06/21/95	0	2	
SHEN0169	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0170	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/25/82	0	6	
SHEN0171	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	9	394	
SHEN0175	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	9	426	
SHEN0176	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	6	309	
SHEN0180	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	5	272	
SHEN0182	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0183	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/28/86-04/17/86	0	2	
SHEN0185	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	17	767	
SHEN0186	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/16/97-09/16/97	0	1	
SHEN0187	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	0	1	
SHEN0188	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/92-06/22/92	0	1	
SHEN0189	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	13	499	
SHEN0191	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/24/82	0	6	
SHEN0192	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/96-05/21/97	0	3	
SHEN0193	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	9	415	
SHEN0194	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/27/68-06/24/82	14	12	
SHEN0195	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/15/94-06/15/94	0	3	
SHEN0196	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/16/73	0	4	
SHEN0197	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/05/94-07/05/94	0	4	
SHEN0198	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/22/67	0	4	
SHEN0199	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0200	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0201	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/05/68-06/06/94	26	7	
SHEN0202	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	0	3	
SHEN0204	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	19	207	
SHEN0205	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/05/94-07/05/94	0	1	
SHEN0206	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/25/82	0	6	
SHEN0207	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/94-07/07/94	0	4	
SHEN0208	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/95-07/12/95	0	1	
SHEN0210	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/28/86-04/17/86	0	2	
SHEN0211	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	17	616	
SHEN0212	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/95-07/12/95	0	1	
SHEN0213	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/22/67	0	4	
SHEN0215	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/86-04/15/86	0	2	
SHEN0216	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/94-07/07/94	0	4	
SHEN0219	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/94-07/06/94	0	1	
SHEN0220	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/29/82-06/24/82	0	3	
SHEN0221	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/94-06/21/94	0	4	
SHEN0222	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	0	9	
SHEN0223	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0224	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	0	3	
SHEN0225	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	8	94	
SHEN0226	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/24/98-06/24/98	0	1	
SHEN0227	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/97-06/17/97	0	1	
SHEN0228	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	0	9	
SHEN0229	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0230	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/94-07/06/94	0	1	
SHEN0231	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-02/19/74	4	48	
SHEN0233	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	0	3	
SHEN0234	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	7	84	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0235	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	10	100	
SHEN0236	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/82-06/21/82	0	3	
SHEN0239	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/77-01/17/77	0	1	
SHEN0240	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/86-04/15/86	0	2	
SHEN0241	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/77-01/17/77	0	1	
SHEN0243	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/04/96-09/15/97	1	3	
SHEN0245	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	1	3	
SHEN0247	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/21/97	7	34	
SHEN0248	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	1	3	
SHEN0249	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/82-06/25/82	0	2	
SHEN0251	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-05/14/73	3	43	
SHEN0252	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	19	203	
SHEN0253	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	0	9	
SHEN0254	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0255	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/94-06/23/98	3	6	
SHEN0256	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/93-12/10/98	5	69	
SHEN0257	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/94-07/12/94	0	4	
SHEN0258	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-08/19/93	1	4	
SHEN0261	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-08/19/93	1	4	
SHEN0262	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-06/28/94	0	1	
SHEN0263	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/05/68-05/23/69	1	3	
SHEN0264	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/94-06/23/98	3	9	
SHEN0265	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-11/19/94	2	5	
SHEN0270	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-06/24/98	3	4	
SHEN0271	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/14/97	7	37	
SHEN0272	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-06/24/98	3	6	
SHEN0274	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-07/30/97	7	29	
SHEN0276	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-10/29/97	2	6	
SHEN0277	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/25/82	0	6	
SHEN0279	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/95-06/22/98	2	2	
SHEN0281	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/77-01/17/77	0	1	
SHEN0282	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/07/92-11/30/98	6	30	
SHEN0283	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/25/81-09/25/81	0	1	
SHEN0284	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/22/82	0	6	
SHEN0285	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/98-06/22/98	0	1	
SHEN0286	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/25/81-09/25/81	0	1	
SHEN0287	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	10	101	
SHEN0289	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/25/81-09/25/81	0	1	
SHEN0291	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/12/77-01/12/77	0	1	
SHEN0292	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	0	9	
SHEN0293	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0294	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/21/82	0	6	
SHEN0295	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/22/82	0	6	
SHEN0297	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	24	65	
SHEN0299	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/95-08/17/95	0	1	
SHEN0301	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	4	
SHEN0302	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/12/77-01/12/77	0	1	
SHEN0303	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/18/77-01/18/77	0	1	
SHEN0304	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/12/77-01/12/77	0	1	
SHEN0305	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	3	
SHEN0306	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	4	
SHEN0307	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	4	
SHEN0310	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/22/82	0	6	
SHEN0311	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/12/97-11/30/98	1	7	
SHEN0312	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/08/95-08/08/95	0	1	
SHEN0314	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	0	9	
SHEN0315	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0316	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	11	100	
SHEN0317	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/31/76-08/31/76	0	1	
SHEN0318	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/22/82	0	6	
SHEN0321	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/81-06/21/82	0	6	
SHEN0324	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/18/91-07/29/97	5	14	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0325	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/18/77-01/18/77	0	1	
SHEN0326	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/95-07/06/98	2	5	
SHEN0327	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	8	
SHEN0329	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/23/82	0	6	
SHEN0331	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/95-06/29/98	2	4	
SHEN0332	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	4	254	
SHEN0334	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-04/27/95	4	20	
SHEN0337	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-04/27/95	0	1	
SHEN0338	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	7	39	
SHEN0341	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0342	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/95-05/24/95	0	1	
SHEN0343	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-10/05/94	2	3	
SHEN0346	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	4	
SHEN0348	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/95-05/24/95	0	2	
SHEN0349	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0350	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0352	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/95-07/26/95	0	1	
SHEN0353	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/95-06/30/98	3	5	
SHEN0354	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0357	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/25/95-05/25/95	0	2	
SHEN0358	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0359	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/30/95-05/30/95	0	2	
SHEN0360	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0361	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/30/95-07/08/98	3	5	
SHEN0362	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0363	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0364	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/30/95-05/30/95	0	2	
SHEN0365	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/81-06/21/82	0	6	
SHEN0366	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/18/91-07/29/97	5	14	
SHEN0367	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0368	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	6	
SHEN0370	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/25/95-07/08/98	3	5	
SHEN0371	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/96-07/07/98	1	3	
SHEN0372	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-09/29/98	23	58	
SHEN0373	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	0	3	
SHEN0374	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	5	7	
SHEN0375	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/25/95-07/25/95	0	1	
SHEN0376	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	7	38	
SHEN0377	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/81-06/21/82	0	6	
SHEN0378	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/10/96-07/07/98	1	3	
SHEN0380	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/94-07/01/96	1	3	
SHEN0381	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	10	95	
SHEN0382	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	4	
SHEN0383	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	0	9	
SHEN0384	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0386	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	10	108	
SHEN0387	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/20/77-01/20/77	0	1	
SHEN0388	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/25/94-07/01/96	1	5	
SHEN0389	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	3	
SHEN0390	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/10/96-07/07/98	1	4	
SHEN0393	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/20/77-01/20/77	0	1	
SHEN0395	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/94-08/02/94	0	1	
SHEN0397	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0401	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/22/95-07/13/98	2	4	
SHEN0402	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0405	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	7	34	
SHEN0406	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/08/95-06/08/95	0	1	
SHEN0407	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	0	6	
SHEN0408	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-07/30/97	6	29	
SHEN0409	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-10/29/97	2	6	
SHEN0411	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0413	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0416	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/08/89-05/28/97	7	34	
SHEN0417	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0418	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/95-07/13/98	2	4	
SHEN0419	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0421	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/96-07/13/98	2	3	
SHEN0422	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0423	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/20/77-01/20/77	0	1	
SHEN0424	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0425	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/77-04/22/77	0	1	
SHEN0426	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0427	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	0	6	
SHEN0429	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/94-08/24/94	0	4	
SHEN0430	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/77-04/11/77	0	1	
SHEN0431	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/14/95-08/14/95	0	1	
SHEN0433	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	0	1	
SHEN0434	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/97-08/13/97	0	1	
SHEN0435	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/94-08/24/94	0	1	
SHEN0436	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/21/82	0	6	
SHEN0437	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/21/82	0	6	
SHEN0438	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	7	34	
SHEN0440	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-07/30/97	6	29	
SHEN0441	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-10/29/97	2	6	
SHEN0442	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0443	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/95-08/10/95	0	1	
SHEN0444	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	0	6	
SHEN0445	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/14/81-06/21/82	0	6	
SHEN0446	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0447	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/94-06/25/97	2	5	
SHEN0449	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/94-08/25/94	0	2	
SHEN0450	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	7	72	
SHEN0451	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0456	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0457	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/21/81-06/24/82	0	6	
SHEN0458	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0460	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/89-05/28/97	7	32	
SHEN0461	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/86-04/11/86	0	2	
SHEN0463	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	4	
SHEN0466	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0469	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-07/30/97	6	29	
SHEN0473	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-10/29/97	2	8	
SHEN0474	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/09/95-08/09/95	0	1	
SHEN0475	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0476	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	0	6	
SHEN0477	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/98-08/03/98	0	1	
SHEN0478	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0480	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/20/77-01/20/77	0	1	
SHEN0481	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	0	6	
SHEN0482	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-06/25/97	2	5	
SHEN0483	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0489	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/16/95-09/23/97	2	5	
SHEN0490	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/95-07/21/98	2	4	
SHEN0491	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/21/82	0	6	
SHEN0492	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/77-04/11/77	0	1	
SHEN0493	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0494	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	0	2	
SHEN0498	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/21/81-06/24/82	0	6	
SHEN0499	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/25/98-06/25/98	0	1	
SHEN0500	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/76-06/06/79	3	19	
SHEN0501	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/77-04/22/77	0	1	
SHEN0502	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/25/96-07/21/98	1	3	
SHEN0505	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/24/96-07/20/98	1	3	
SHEN0507	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/95-07/16/98	2	2	
SHEN0508	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/24/96-07/20/98	1	3	
SHEN0510	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0511	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0512	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-07/30/97	6	29	
SHEN0513	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-10/29/97	2	6	
SHEN0514	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/22/82	0	6	
SHEN0515	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/94-07/08/96	1	6	
SHEN0516	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0518	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/89-05/27/97	7	35	
SHEN0519	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/01/94-06/30/97	2	4	
SHEN0522	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	4	
SHEN0536	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/94-08/11/94	0	4	
SHEN0537	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0539	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/22/94-08/22/94	0	8	
SHEN0540	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	4	
SHEN0541	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/81-06/24/82	0	6	
SHEN0542	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/18/91-07/21/97	5	17	
SHEN0543	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0547	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/22/94-07/02/96	1	2	
SHEN0548	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/89-05/29/97	7	33	
SHEN0549	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0551	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/94-08/11/94	0	1	
SHEN0552	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/07/89-05/14/97	7	37	
SHEN0553	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0556	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/01/94-06/18/98	3	6	
SHEN0557	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	10	484	
SHEN0558	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0561	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/94-07/02/96	1	8	
SHEN0562	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	0	1	
SHEN0566	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/07/80-07/31/90	10	3	
SHEN0567	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/81-06/24/82	0	6	
SHEN0568	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/17/74-09/29/98	24	73	
SHEN0569	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/81-06/24/82	0	6	
SHEN0570	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/16/95-05/16/95	0	1	
SHEN0571	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/95-05/17/95	0	1	
SHEN0572	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/12/96-06/18/98	2	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0573	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/18/76-05/15/79	2	17	
SHEN0574	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	0	2	
SHEN0575	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/08/77-04/08/77	0	1	
SHEN0576	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/21/95-07/09/98	2	2	
SHEN0577	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/77-04/11/77	0	1	
SHEN0578	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/95-05/17/95	0	1	
SHEN0579	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	10	83	
SHEN0580	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/27/94-07/27/94	0	4	
SHEN0582	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	4	
SHEN0583	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	10	98	
SHEN0584	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/95-05/17/95	0	1	
SHEN0585	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	6	62	
SHEN0586	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-08/24/74	6	57	
SHEN0587	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/17/73	0	5	
SHEN0588	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/72-04/12/74	1	16	
SHEN0590	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/12/77-04/12/77	0	1	
SHEN0591	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/81-06/24/82	0	6	
SHEN0592	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	4	
SHEN0593	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/69-08/18/69	0	1	
SHEN0594	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0595	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-07/30/97	7	29	
SHEN0596	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-10/29/97	2	6	
SHEN0597	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	2	
SHEN0599	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/22/82	0	6	
SHEN0600	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0603	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0605	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/08/95-07/14/98	3	4	
SHEN0606	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0607	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/22/82	0	6	
SHEN0608	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0611	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/21/95-08/21/95	0	1	
SHEN0612	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0613	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/07/96-07/28/98	1	3	
SHEN0614	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/89-05/27/97	7	39	
SHEN0615	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0616	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-04/26/95	4	21	
SHEN0617	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-04/26/95	0	1	
SHEN0619	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	4	251	
SHEN0623	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0624	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/21/97-07/14/98	0	2	
SHEN0625	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	6	
SHEN0626	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/95-05/22/95	0	1	
SHEN0627	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0630	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/17/74-05/15/79	4	26	
SHEN0631	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/04/94-07/21/97	2	5	
SHEN0632	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	0	3	
SHEN0633	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	0	4	
SHEN0634	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0635	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	30	298	
SHEN0636	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0637	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/21/97-07/14/98	0	2	
SHEN0638	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0644	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/95-05/22/95	0	1	
SHEN0645	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0648	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/08/94-08/08/94	0	4	
SHEN0649	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0650	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/08/94-07/27/98	3	4	
SHEN0651	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/90-04/22/98	7	25	
SHEN0652	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0653	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/12/77-04/12/77	0	1	
SHEN0654	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0660	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0661	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/09/94-08/09/94	0	2	
SHEN0663	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/13/94-05/17/95	0	6	
SHEN0664	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-07/30/97	7	29	
SHEN0666	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-10/29/97	2	6	
SHEN0667	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0672	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/95-08/20/96	1	3	
SHEN0673	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/28/97-05/28/97	0	1	
SHEN0674	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0676	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/81-06/23/82	0	6	
SHEN0677	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0680	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/06/96-07/27/98	1	3	
SHEN0681	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0686	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/95-07/29/98	3	4	
SHEN0687	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0690	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	0	1	
SHEN0691	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	6	
SHEN0693	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	0	1	
SHEN0694	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/21/82	0	6	
SHEN0695	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0697	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	0	4	
SHEN0698	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/25/89-05/20/97	7	35	
SHEN0699	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	6	
SHEN0700	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	0	1	
SHEN0701	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0702	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	0	1	
SHEN0703	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0705	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/09/94-07/22/98	3	4	
SHEN0706	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0708	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/89-09/20/95	6	32	
SHEN0710	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0712	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/27/80-08/27/80	0	1	
SHEN0713	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	0	1	
SHEN0718	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/12/77-04/12/77	0	1	
SHEN0721	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/81-06/23/82	0	6	
SHEN0722	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/94-07/15/98	3	4	
SHEN0724	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/81-06/23/82	0	6	
SHEN0725	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/81-06/23/82	0	6	
SHEN0726	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/18/95-05/18/95	0	1	
SHEN0729	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/94-08/12/97	2	5	
SHEN0730	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/23/82	0	6	
SHEN0731	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/97-08/12/97	0	1	
SHEN0732	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/06/77-04/06/77	0	1	
SHEN0733	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/23/82	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0734	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/94-08/16/95	1	6	
SHEN0736	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/96-06/20/96	0	1	
SHEN0737	Yes	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/89-05/20/97	7	35	
SHEN0738	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/26/68-10/01/68	0	5	
SHEN0739	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-06/22/82	0	6	
SHEN0742	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/27/86-04/10/86	0	2	
SHEN0743	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/27/86-04/10/86	0	2	
SHEN0746	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/13/73-04/18/73	0	2	
SHEN0747	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/72-04/12/74	1	19	
SHEN0748	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/21/69-05/21/69	0	1	
SHEN0749	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/08/77-04/08/77	0	1	
SHEN0750	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	10	91	
SHEN0752	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/67-06/16/67	0	9	
SHEN0753	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/69-08/18/69	0	2	
SHEN0755	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	28	295	
SHEN0756	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	26	289	
SHEN0760	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-04/18/73	0	3	
SHEN0762	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/93-09/10/93	0	1	
SHEN0765	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-04/18/73	0	3	
SHEN0767	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/92-09/15/92	0	2	
SHEN0768	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-04/18/73	0	3	
SHEN0769	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/13/73-04/18/73	0	2	
SHEN0770	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/67-06/16/67	0	10	
SHEN0771	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/69-08/18/69	0	2	
SHEN0772	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	10	87	
SHEN0774	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	20	202	
SHEN0775	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	10	105	
SHEN0777	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	28	311	
SHEN0778	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/67-06/16/67	0	10	
SHEN0779	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/69-08/19/69	0	2	
SHEN0782	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/67-06/16/67	0	8	
SHEN0783	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	18	133	
SHEN0784	No	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	8	88	
SHEN0038	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/13/93-09/13/93	0	1	
SHEN0161	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/06/94-06/06/94	0	1	
SHEN0163	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/13/93-09/13/93	0	1	
SHEN0188	Yes	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/22/92-06/22/92	0	1	
SHEN0201	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/23/92-06/06/94	1	2	
SHEN0756	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/23/83-06/08/94	11	27	
SHEN0762	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/93-09/10/93	0	1	
SHEN0767	No	00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/15/92-09/15/92	0	1	
SHEN0774	No	00023	SAMPLE WEIGHT IN POUNDS	07/26/79-06/06/90	10	16	
SHEN0775	No	00023	SAMPLE WEIGHT IN POUNDS	08/17/88-08/17/88	0	1	
SHEN0777	No	00023	SAMPLE WEIGHT IN POUNDS	07/26/79-07/28/83	4	3	
SHEN0780	No	00023	SAMPLE WEIGHT IN POUNDS	07/26/79-09/12/90	11	14	
SHEN0785	No	00023	SAMPLE WEIGHT IN POUNDS	06/06/90-06/06/90	0	3	
SHEN0774	No	00024	SAMPLE LENGTH IN INCHES	07/26/79-06/06/90	10	17	
SHEN0775	No	00024	SAMPLE LENGTH IN INCHES	08/17/88-08/17/88	0	1	
SHEN0777	No	00024	SAMPLE LENGTH IN INCHES	07/26/79-07/28/83	4	3	
SHEN0780	No	00024	SAMPLE LENGTH IN INCHES	07/26/79-09/12/90	11	13	
SHEN0785	No	00024	SAMPLE LENGTH IN INCHES	06/06/90-06/06/90	0	3	
SHEN0038	No	00025	BAROMETRIC PRESSURE (MM OF HG)	09/13/93-09/13/93	0	1	
SHEN0161	No	00025	BAROMETRIC PRESSURE (MM OF HG)	06/06/94-06/06/94	0	1	
SHEN0163	No	00025	BAROMETRIC PRESSURE (MM OF HG)	09/13/93-09/13/93	0	1	
SHEN0188	Yes	00025	BAROMETRIC PRESSURE (MM OF HG)	06/22/92-06/22/92	0	1	
SHEN0201	No	00025	BAROMETRIC PRESSURE (MM OF HG)	06/23/92-06/06/94	1	2	
SHEN0444	No	00025	BAROMETRIC PRESSURE (MM OF HG)	06/21/82-06/21/82	0	1	
SHEN0756	No	00025	BAROMETRIC PRESSURE (MM OF HG)	08/16/83-06/08/94	10	23	
SHEN0762	No	00025	BAROMETRIC PRESSURE (MM OF HG)	09/10/93-09/10/93	0	1	
SHEN0767	No	00025	BAROMETRIC PRESSURE (MM OF HG)	09/15/92-09/15/92	0	1	
SHEN0025	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/24/82	0	4	
SHEN0037	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/23/82	0	4	
SHEN0038	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/13/93-09/13/93	0	1	
SHEN0040	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	04/27/79-04/27/79	0	1	
SHEN0042	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/23/82	0	4	
SHEN0044	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/23/82	0	4	
SHEN0048	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/17/82-06/23/82	0	3	
SHEN0053	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/24/82	0	4	
SHEN0076	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/17/82-06/23/82	0	3	
SHEN0098	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/17/82-06/23/82	0	3	
SHEN0116	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/17/82-06/23/82	0	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0124	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/24/82	0	4	
SHEN0148	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/25/82	0	4	
SHEN0153	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/17/82-06/23/82	0	3	
SHEN0161	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	08/18/92-06/06/94	1	3	
SHEN0163	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/13/93-09/13/93	0	1	
SHEN0170	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/25/82	0	4	
SHEN0188	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/22/92-06/22/92	0	1	
SHEN0191	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/24/82	0	4	
SHEN0194	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/24/82	0	4	
SHEN0201	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/23/92-06/06/94	1	5	
SHEN0206	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/25/82	0	4	
SHEN0220	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/29/82-06/24/82	0	3	
SHEN0236	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	03/16/82-06/21/82	0	3	
SHEN0249	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/10/82-06/25/82	0	2	
SHEN0277	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/22/82	0	4	
SHEN0278	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/25/82	0	4	
SHEN0284	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/22/82	0	4	
SHEN0289	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	06/10/82-06/22/82	0	2	
SHEN0294	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/21/82	0	4	
SHEN0295	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/22/82	0	4	
SHEN0310	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/22/82	0	4	
SHEN0318	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/22/82	0	4	
SHEN0321	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/21/82	0	4	
SHEN0329	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/22/82	0	4	
SHEN0330	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/23/82	0	4	
SHEN0365	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/21/82	0	4	
SHEN0377	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/29/82-06/21/82	0	4	
SHEN0407	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/21/82	0	4	
SHEN0427	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/21/82	0	4	
SHEN0436	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/21/82	0	4	
SHEN0437	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/21/82	0	4	
SHEN0444	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/21/82	0	4	
SHEN0445	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/25/82-06/21/82	0	4	
SHEN0457	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/24/82	0	4	
SHEN0476	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/21/82	0	4	
SHEN0481	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/21/82	0	4	
SHEN0491	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/21/82	0	4	
SHEN0498	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/24/82	0	4	
SHEN0514	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/22/82	0	4	
SHEN0541	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/24/82	0	4	
SHEN0567	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/24/82	0	4	
SHEN0569	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/24/82	0	4	
SHEN0591	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/24/82	0	4	
SHEN0599	Yes	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/29/82-06/22/82	0	4	
SHEN0607	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/29/82-06/22/82	0	4	
SHEN0676	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/26/82-06/23/82	0	4	
SHEN0694	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/28/82-06/21/82	0	4	
SHEN0721	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/23/82	0	4	
SHEN0724	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/23/82	0	4	
SHEN0725	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/23/82	0	4	
SHEN0730	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/23/82	0	4	
SHEN0733	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/23/82	0	4	
SHEN0739	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	01/27/82-06/22/82	0	4	
SHEN0756	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	10/05/81-06/08/94	12	39	
SHEN0762	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	09/10/93-09/10/93	0	1	
SHEN0767	No	00027	CODE NO FOR AGENCY COLLECTING SAMPLE-SEE APPEND.	08/18/92-09/15/92	0	3	
SHEN0025	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/24/82	0	4	
SHEN0037	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/23/82	0	4	
SHEN0038	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/13/93-09/13/93	0	1	
SHEN0040	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	04/27/79-04/27/79	0	1	
SHEN0042	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/23/82	0	4	
SHEN0044	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/23/82	0	4	
SHEN0048	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	03/17/82-06/23/82	0	3	
SHEN0053	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/24/82	0	4	
SHEN0076	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	03/17/82-06/23/82	0	3	
SHEN0098	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	03/17/82-06/23/82	0	3	
SHEN0116	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	03/17/82-06/23/82	0	3	
SHEN0124	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/24/82	0	4	
SHEN0148	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/25/82	0	4	
SHEN0153	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	03/17/82-06/23/82	0	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0161	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/18/92-06/06/94	1	3	
SHEN0163	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/13/93-09/13/93	0	1	
SHEN0170	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/25/82	0	4	
SHEN0188	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/22/92-06/22/92	0	1	
SHEN0191	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/24/82	0	4	
SHEN0194	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/24/82	0	4	
SHEN0201	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/23/92-06/06/94	1	5	
SHEN0206	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/25/82	0	4	
SHEN0220	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/29/82-06/24/82	0	3	
SHEN0236	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	03/16/82-06/21/82	0	3	
SHEN0249	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/10/82-06/25/82	0	2	
SHEN0277	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/22/82	0	4	
SHEN0278	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/25/82	0	4	
SHEN0284	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/22/82	0	4	
SHEN0289	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/10/82-06/22/82	0	2	
SHEN0294	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/21/82	0	4	
SHEN0295	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/22/82	0	4	
SHEN0310	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/22/82	0	4	
SHEN0318	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/22/82	0	4	
SHEN0321	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/21/82	0	4	
SHEN0329	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/22/82	0	4	
SHEN0330	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/23/82	0	4	
SHEN0365	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/21/82	0	4	
SHEN0377	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/29/82-06/21/82	0	4	
SHEN0407	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/21/82	0	4	
SHEN0427	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/21/82	0	4	
SHEN0436	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/21/82	0	4	
SHEN0437	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/21/82	0	4	
SHEN0444	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/21/82	0	4	
SHEN0445	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/25/82-06/21/82	0	4	
SHEN0457	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/24/82	0	4	
SHEN0476	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/21/82	0	4	
SHEN0481	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/21/82	0	4	
SHEN0491	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/21/82	0	4	
SHEN0498	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/24/82	0	4	
SHEN0514	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/22/82	0	4	
SHEN0541	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/24/82	0	4	
SHEN0567	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/24/82	0	4	
SHEN0569	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/24/82	0	4	
SHEN0591	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/24/82	0	4	
SHEN0599	Yes	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/29/82-06/22/82	0	4	
SHEN0607	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/29/82-06/22/82	0	4	
SHEN0676	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/26/82-06/23/82	0	4	
SHEN0694	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/28/82-06/21/82	0	4	
SHEN0721	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/23/82	0	4	
SHEN0724	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/23/82	0	4	
SHEN0725	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/23/82	0	4	
SHEN0730	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/23/82	0	4	
SHEN0733	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/23/82	0	4	
SHEN0739	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	01/27/82-06/22/82	0	4	
SHEN0756	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	06/15/78-06/08/94	15	63	
SHEN0762	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	09/10/93-09/10/93	0	1	
SHEN0767	No	00028	CODE NO FOR AGENCY ANALYZING SAMPLE (SEE APPEND)	08/18/92-09/15/92	0	3	
SHEN0739	No	00031	LIGHT INCIDENT, PERCENT REMAING AT CERTAIN DEPTH	01/27/82-01/27/82	0	1	
SHEN0004	No	00040	WIND DIRECTION, AZIMUTH	09/28/82-09/28/82	0	1	
SHEN0001	No	00041	WEATHER (WMO CODE 4501)	07/30/91-04/27/98	6	29	
SHEN0002	No	00041	WEATHER (WMO CODE 4501)	02/25/68-06/11/74	6	51	
SHEN0004	No	00041	WEATHER (WMO CODE 4501)	05/17/74-12/15/98	24	245	
SHEN0006	No	00041	WEATHER (WMO CODE 4501)	07/23/97-08/04/97	0	2	
SHEN0017	No	00041	WEATHER (WMO CODE 4501)	07/07/68-03/01/79	10	99	
SHEN0019	No	00041	WEATHER (WMO CODE 4501)	06/28/78-08/04/97	19	9	
SHEN0021	No	00041	WEATHER (WMO CODE 4501)	07/23/97-08/04/97	0	2	
SHEN0024	No	00041	WEATHER (WMO CODE 4501)	11/29/94-07/29/97	2	5	
SHEN0033	No	00041	WEATHER (WMO CODE 4501)	09/20/67-03/01/79	11	99	
SHEN0043	No	00041	WEATHER (WMO CODE 4501)	05/15/77-09/03/78	1	20	
SHEN0051	No	00041	WEATHER (WMO CODE 4501)	03/02/70-03/01/79	8	90	
SHEN0162	No	00041	WEATHER (WMO CODE 4501)	09/20/67-12/21/98	31	298	
SHEN0164	No	00041	WEATHER (WMO CODE 4501)	06/10/93-12/21/98	5	67	
SHEN0204	No	00041	WEATHER (WMO CODE 4501)	04/30/79-12/21/98	19	204	
SHEN0225	No	00041	WEATHER (WMO CODE 4501)	03/02/70-03/01/79	8	91	
SHEN0226	No	00041	WEATHER (WMO CODE 4501)	06/24/98-06/24/98	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0234	No	00041	WEATHER (WMO CODE 4501)	03/02/70-11/02/77	7	80	
SHEN0235	No	00041	WEATHER (WMO CODE 4501)	07/07/68-03/01/79	10	97	
SHEN0252	No	00041	WEATHER (WMO CODE 4501)	04/24/79-12/21/98	19	206	
SHEN0256	No	00041	WEATHER (WMO CODE 4501)	07/22/93-12/10/98	5	69	
SHEN0282	No	00041	WEATHER (WMO CODE 4501)	01/07/92-11/30/98	6	30	
SHEN0287	No	00041	WEATHER (WMO CODE 4501)	07/16/68-03/01/79	10	99	
SHEN0297	No	00041	WEATHER (WMO CODE 4501)	10/22/74-11/05/98	24	67	
SHEN0311	No	00041	WEATHER (WMO CODE 4501)	06/12/97-11/30/98	1	7	
SHEN0316	No	00041	WEATHER (WMO CODE 4501)	02/25/68-03/01/79	11	98	
SHEN0324	No	00041	WEATHER (WMO CODE 4501)	12/18/91-07/29/97	5	14	
SHEN0366	No	00041	WEATHER (WMO CODE 4501)	12/18/91-07/29/97	5	14	
SHEN0372	No	00041	WEATHER (WMO CODE 4501)	10/22/74-09/29/98	23	58	
SHEN0381	No	00041	WEATHER (WMO CODE 4501)	08/15/68-03/01/79	10	89	
SHEN0386	No	00041	WEATHER (WMO CODE 4501)	02/08/88-12/07/98	10	109	
SHEN0450	No	00041	WEATHER (WMO CODE 4501)	07/29/91-12/07/98	7	73	
SHEN0499	No	00041	WEATHER (WMO CODE 4501)	06/25/98-06/25/98	0	1	
SHEN0500	No	00041	WEATHER (WMO CODE 4501)	04/26/76-06/06/79	3	18	
SHEN0542	No	00041	WEATHER (WMO CODE 4501)	12/18/91-07/21/97	5	17	
SHEN0566	No	00041	WEATHER (WMO CODE 4501)	07/31/90-07/31/90	0	5	
SHEN0568	No	00041	WEATHER (WMO CODE 4501)	09/17/74-09/29/98	24	73	
SHEN0573	No	00041	WEATHER (WMO CODE 4501)	05/18/76-05/15/79	2	16	
SHEN0579	No	00041	WEATHER (WMO CODE 4501)	02/04/68-05/15/79	11	85	
SHEN0583	No	00041	WEATHER (WMO CODE 4501)	07/16/68-02/06/79	10	95	
SHEN0585	No	00041	WEATHER (WMO CODE 4501)	07/31/72-02/06/79	6	60	
SHEN0586	No	00041	WEATHER (WMO CODE 4501)	07/01/68-08/24/74	6	59	
SHEN0588	No	00041	WEATHER (WMO CODE 4501)	07/06/72-04/12/74	1	16	
SHEN0630	No	00041	WEATHER (WMO CODE 4501)	09/17/74-05/15/79	4	26	
SHEN0631	No	00041	WEATHER (WMO CODE 4501)	08/04/94-07/21/97	2	5	
SHEN0635	No	00041	WEATHER (WMO CODE 4501)	07/16/68-12/07/98	30	298	
SHEN0651	No	00041	WEATHER (WMO CODE 4501)	11/19/90-04/22/98	7	26	
SHEN0747	No	00041	WEATHER (WMO CODE 4501)	05/04/72-04/12/74	1	18	
SHEN0750	No	00041	WEATHER (WMO CODE 4501)	07/16/68-02/06/79	10	93	
SHEN0755	No	00041	WEATHER (WMO CODE 4501)	03/03/70-12/02/98	28	292	
SHEN0772	No	00041	WEATHER (WMO CODE 4501)	08/15/68-02/06/79	10	87	
SHEN0774	No	00041	WEATHER (WMO CODE 4501)	02/25/68-08/02/88	20	206	
SHEN0775	No	00041	WEATHER (WMO CODE 4501)	11/09/88-12/01/98	10	104	
SHEN0777	No	00041	WEATHER (WMO CODE 4501)	03/04/70-12/01/98	28	314	
SHEN0783	No	00041	WEATHER (WMO CODE 4501)	05/09/79-07/14/97	18	140	
SHEN0784	No	00041	WEATHER (WMO CODE 4501)	03/04/70-03/02/79	8	89	
SHEN0005	No	00060	FLOW, STREAM, MEAN DAILY CFS	11/29/54-05/21/69	14	3	
SHEN0007	No	00060	FLOW, STREAM, MEAN DAILY CFS	06/21/67-06/23/67	0	3	
SHEN0011	No	00060	FLOW, STREAM, MEAN DAILY CFS	09/04/30-09/04/30	0	1	
SHEN0040	No	00060	FLOW, STREAM, MEAN DAILY CFS	08/02/45-08/02/45	0	1	
SHEN0044	No	00060	FLOW, STREAM, MEAN DAILY CFS	11/03/52-11/03/52	0	1	
SHEN0161	No	00060	FLOW, STREAM, MEAN DAILY CFS	09/04/30-04/08/69	38	40	S
SHEN0162	No	00060	FLOW, STREAM, MEAN DAILY CFS	03/02/70-09/20/73	3	42	
SHEN0194	Yes	00060	FLOW, STREAM, MEAN DAILY CFS	03/27/68-12/13/68	0	6	
SHEN0201	No	00060	FLOW, STREAM, MEAN DAILY CFS	09/04/30-05/21/69	38	22	
SHEN0213	No	00060	FLOW, STREAM, MEAN DAILY CFS	06/21/67-06/23/67	0	3	
SHEN0234	No	00060	FLOW, STREAM, MEAN DAILY CFS	03/02/70-09/20/73	3	42	
SHEN0253	No	00060	FLOW, STREAM, MEAN DAILY CFS	06/21/67-06/23/67	0	3	
SHEN0263	No	00060	FLOW, STREAM, MEAN DAILY CFS	09/14/30-05/23/69	38	9	
SHEN0587	No	00060	FLOW, STREAM, MEAN DAILY CFS	04/16/73-04/17/73	0	2	
SHEN0659	No	00060	FLOW, STREAM, MEAN DAILY CFS	01/20/56-01/20/56	0	1	
SHEN0738	No	00060	FLOW, STREAM, MEAN DAILY CFS	03/26/68-10/01/68	0	6	
SHEN0748	No	00060	FLOW, STREAM, MEAN DAILY CFS	10/10/52-05/21/69	16	2	
SHEN0752	No	00060	FLOW, STREAM, MEAN DAILY CFS	06/14/67-06/16/67	0	3	
SHEN0756	No	00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	46	379	T,S
SHEN0765	No	00060	FLOW, STREAM, MEAN DAILY CFS	04/18/73-04/18/73	0	1	
SHEN0025	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-06/24/82	0	6	
SHEN0037	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/23/82	0	6	
SHEN0038	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/13/93-09/13/93	0	1	
SHEN0042	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/23/82	0	6	
SHEN0044	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/23/82	0	6	
SHEN0048	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-06/24/82	0	6	
SHEN0076	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	0	4	
SHEN0098	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/23/81-06/24/82	0	5	
SHEN0148	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/25/82	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0153	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	0	4	
SHEN0163	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/13/93-09/13/93	0	1	
SHEN0170	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/25/82	0	6	
SHEN0188	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/22/92-06/22/92	0	1	
SHEN0191	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/24/82	0	6	
SHEN0201	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/23/92-06/23/92	0	1	
SHEN0204	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/19/95-09/19/95	0	1	
SHEN0206	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/25/82	0	6	
SHEN0220	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	01/29/82-06/24/82	0	3	
SHEN0236	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	03/16/82-06/21/82	0	3	
SHEN0249	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/10/82-06/25/82	0	2	
SHEN0277	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/25/82	0	6	
SHEN0283	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/25/81-09/25/81	0	1	
SHEN0284	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/25/81-09/25/81	0	1	
SHEN0289	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/21/82	0	6	
SHEN0295	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/22/82	0	6	
SHEN0310	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/22/82	0	6	
SHEN0318	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/22/82	0	6	
SHEN0321	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/11/81-06/21/82	0	6	
SHEN0329	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/11/81-06/21/82	0	6	
SHEN0377	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/11/81-06/21/82	0	6	
SHEN0407	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	0	6	
SHEN0427	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	0	6	
SHEN0436	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/21/82	0	6	
SHEN0437	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/21/82	0	6	
SHEN0444	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	0	6	
SHEN0445	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/14/81-06/21/82	0	6	
SHEN0457	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/21/81-06/24/82	0	6	
SHEN0476	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	0	6	
SHEN0481	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	0	6	
SHEN0491	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/21/82	0	6	
SHEN0498	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/21/81-06/24/82	0	6	
SHEN0514	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/22/82	0	6	
SHEN0541	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/10/81-06/24/82	0	6	
SHEN0567	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/10/81-06/24/82	0	6	
SHEN0591	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/11/81-06/24/82	0	6	
SHEN0599	Yes	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/22/82	0	6	
SHEN0607	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/22/82	0	6	
SHEN0676	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/12/81-06/23/82	0	6	
SHEN0694	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/21/82	0	6	
SHEN0721	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/12/81-06/23/82	0	6	
SHEN0724	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/12/81-06/23/82	0	6	
SHEN0725	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/12/81-06/23/82	0	6	
SHEN0730	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/23/82	0	6	
SHEN0733	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/23/82	0	6	
SHEN0739	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-06/22/82	0	6	
SHEN0756	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/76-06/17/86	9	77	
SHEN0762	No	00061	FLOW, STREAM, INSTANTANEOUS CFS	09/10/93-09/10/93	0	1	
SHEN0003	No	00064	DEPTH OF STREAM, MEAN (FT)	03/28/86-04/11/86	0	2	
SHEN0014	No	00064	DEPTH OF STREAM, MEAN (FT)	03/28/86-04/11/86	0	2	
SHEN0070	Yes	00064	DEPTH OF STREAM, MEAN (FT)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	00064	DEPTH OF STREAM, MEAN (FT)	04/01/86-04/15/86	0	2	
SHEN0183	Yes	00064	DEPTH OF STREAM, MEAN (FT)	03/28/86-04/17/86	0	2	
SHEN0210	No	00064	DEPTH OF STREAM, MEAN (FT)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	00064	DEPTH OF STREAM, MEAN (FT)	03/31/86-04/15/86	0	2	
SHEN0240	No	00064	DEPTH OF STREAM, MEAN (FT)	03/31/86-04/15/86	0	2	
SHEN0462	Yes	00064	DEPTH OF STREAM, MEAN (FT)	03/31/86-04/11/86	0	2	
SHEN0558	No	00064	DEPTH OF STREAM, MEAN (FT)	03/31/86-04/11/86	0	2	
SHEN0742	No	00064	DEPTH OF STREAM, MEAN (FT)	03/27/86-04/10/86	0	2	
SHEN0743	No	00064	DEPTH OF STREAM, MEAN (FT)	03/27/86-04/10/86	0	2	
SHEN0161	No	00065	STAGE, STREAM (FEET)	08/18/92-06/06/94	1	3	
SHEN0188	Yes	00065	STAGE, STREAM (FEET)	06/22/92-06/22/92	0	1	
SHEN0201	No	00065	STAGE, STREAM (FEET)	06/23/92-06/06/94	1	4	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0756	No	00065	STAGE, STREAM (FEET)	05/23/83-06/08/94	11	4	
SHEN0767	No	00065	STAGE, STREAM (FEET)	08/18/92-08/19/92	0	2	
SHEN0004	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)	12/11/79-12/11/79	0	1	
SHEN0777	No	00067	TIDE STAGE (REFER TO APPENDIX FOR CODES)	02/17/82-02/17/82	0	1	
SHEN0001	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	02/25/92-02/25/92	0	1	
SHEN0002	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/18/71-07/20/71	0	4	
SHEN0004	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/02/88-04/20/92	3	26	
SHEN0008	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0017	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/18/71-07/20/71	0	4	
SHEN0031	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0160	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0162	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/02/88-12/14/93	5	26	
SHEN0199	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0200	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0204	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/02/88-03/09/92	3	25	
SHEN0223	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0229	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0231	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/18/70-12/27/73	3	8	
SHEN0235	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/18/71-07/20/71	0	4	
SHEN0251	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/18/70-03/14/73	2	6	
SHEN0252	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/02/88-03/09/92	3	25	
SHEN0254	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0282	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	01/07/92-04/08/92	0	2	
SHEN0293	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0297	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	09/26/90-04/15/92	1	19	
SHEN0315	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0316	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/18/71-07/20/71	0	4	
SHEN0324	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	12/18/91-04/01/92	0	3	
SHEN0366	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	12/18/91-04/01/92	0	3	
SHEN0372	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/19/90-12/14/93	3	6	
SHEN0384	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0386	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/09/88-04/01/92	3	25	
SHEN0450	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/29/91-04/01/92	0	4	
SHEN0542	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	12/18/91-04/01/92	0	3	
SHEN0568	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/19/90-12/14/93	3	6	
SHEN0574	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	0	2	
SHEN0583	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/14/71-09/24/73	2	5	
SHEN0586	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/04/71-07/15/71	0	3	
SHEN0593	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	08/18/69-08/18/69	0	1	
SHEN0635	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/09/88-04/01/92	3	24	
SHEN0651	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/19/90-12/14/93	3	6	
SHEN0750	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/13/71-06/30/71	0	4	
SHEN0753	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/29/69-08/18/69	0	2	
SHEN0755	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/02/71-04/01/92	20	28	
SHEN0771	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/29/69-08/18/69	0	2	
SHEN0775	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/09/88-04/02/92	3	24	
SHEN0777	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/13/71-04/02/92	20	25	
SHEN0779	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/29/69-08/19/69	0	2	
SHEN0783	No	00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/09/88-04/02/92	3	12	
SHEN0001	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/22/94-04/27/98	3	16	
SHEN0004	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/12/94-12/15/98	4	54	
SHEN0024	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/29/94-07/29/97	2	4	
SHEN0162	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/15/94-12/21/98	4	53	
SHEN0164	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	5	54	
SHEN0204	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	5	54	
SHEN0252	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	5	54	
SHEN0256	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/16/94-12/10/98	4	57	
SHEN0282	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/14/94-11/30/98	4	17	
SHEN0297	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/21/94-11/05/98	4	17	
SHEN0311	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	06/12/97-11/30/98	1	7	
SHEN0324	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/01/94-07/29/97	2	4	
SHEN0366	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/01/94-07/29/97	2	4	
SHEN0372	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/20/94-09/29/98	4	16	
SHEN0386	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	4	53	
SHEN0450	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	4	53	
SHEN0542	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/06/94-07/21/97	2	5	
SHEN0568	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/20/94-09/29/98	4	16	
SHEN0631	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-07/21/97	2	4	
SHEN0635	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	4	52	
SHEN0651	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/94-04/22/98	3	13	
SHEN0755	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/94-12/02/98	4	53	
SHEN0775	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	4	53	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0777	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	4	54	
SHEN0783	No	00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/01/94-07/14/97	2	12	
SHEN0712	No	00077	TRANSPARENCY, SECCHI DISC (INCHES)	08/27/80-08/27/80	0	1	
SHEN0043	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	04/10/80-08/17/89	9	9	
SHEN0566	No	00078	TRANSPARENCY, SECCHI DISC (METERS)	04/07/80-10/14/80	0	3	
SHEN0001	No	00080	COLOR (PLATINUM-COBALT UNITS)	06/10/92-02/18/93	0	4	
SHEN0003	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/28/86-04/11/86	0	2	
SHEN0004	No	00080	COLOR (PLATINUM-COBALT UNITS)	04/30/91-12/15/92	1	21	
SHEN0005	No	00080	COLOR (PLATINUM-COBALT UNITS)	11/29/54-05/21/69	14	3	
SHEN0011	No	00080	COLOR (PLATINUM-COBALT UNITS)	09/04/30-09/04/30	0	1	
SHEN0014	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/28/86-04/11/86	0	2	
SHEN0020	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/11/77-03/11/77	0	1	
SHEN0022	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/11/77-03/11/77	0	1	
SHEN0040	No	00080	COLOR (PLATINUM-COBALT UNITS)	08/02/45-08/02/45	0	1	
SHEN0044	No	00080	COLOR (PLATINUM-COBALT UNITS)	11/03/52-07/16/68	15	3	
SHEN0070	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	04/01/86-04/15/86	0	2	
SHEN0161	No	00080	COLOR (PLATINUM-COBALT UNITS)	09/04/30-04/08/69	38	41	S
SHEN0162	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/18/91-02/08/93	1	22	
SHEN0183	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/28/86-04/17/86	0	2	
SHEN0194	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/27/68-12/13/68	0	6	
SHEN0201	No	00080	COLOR (PLATINUM-COBALT UNITS)	09/04/30-05/21/69	38	22	
SHEN0204	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/18/91-02/08/93	1	22	
SHEN0210	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/31/86-04/15/86	0	2	
SHEN0231	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/18/70-12/27/73	3	8	
SHEN0240	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/31/86-04/15/86	0	2	
SHEN0251	No	00080	COLOR (PLATINUM-COBALT UNITS)	05/18/70-03/14/73	2	6	
SHEN0252	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/18/91-02/08/93	1	21	
SHEN0263	No	00080	COLOR (PLATINUM-COBALT UNITS)	09/14/30-05/23/69	38	9	
SHEN0282	No	00080	COLOR (PLATINUM-COBALT UNITS)	01/07/92-11/12/92	0	4	
SHEN0297	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/27/91-11/24/92	1	21	
SHEN0317	No	00080	COLOR (PLATINUM-COBALT UNITS)	10/01/48-10/01/48	0	1	
SHEN0324	No	00080	COLOR (PLATINUM-COBALT UNITS)	12/18/91-11/05/92	0	5	
SHEN0366	No	00080	COLOR (PLATINUM-COBALT UNITS)	12/18/91-11/05/92	0	5	
SHEN0372	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/01/93	2	8	
SHEN0386	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/12/91-03/02/93	1	23	
SHEN0450	No	00080	COLOR (PLATINUM-COBALT UNITS)	07/29/91-11/05/92	1	6	
SHEN0462	Yes	00080	COLOR (PLATINUM-COBALT UNITS)	03/31/86-04/11/86	0	2	
SHEN0542	No	00080	COLOR (PLATINUM-COBALT UNITS)	12/18/91-11/05/92	0	5	
SHEN0558	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/31/86-04/11/86	0	2	
SHEN0568	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/01/93	2	8	
SHEN0635	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/12/91-03/02/93	1	21	
SHEN0651	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/01/93	2	8	
SHEN0659	No	00080	COLOR (PLATINUM-COBALT UNITS)	01/20/56-01/20/56	0	1	
SHEN0738	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/26/68-10/01/68	0	6	
SHEN0742	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/27/86-04/10/86	0	2	
SHEN0743	No	00080	COLOR (PLATINUM-COBALT UNITS)	03/27/86-04/10/86	0	2	
SHEN0748	No	00080	COLOR (PLATINUM-COBALT UNITS)	10/10/52-05/21/69	16	2	
SHEN0755	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/02/93	2	23	
SHEN0756	No	00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	55	512	T,S
SHEN0775	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/03/93	2	23	
SHEN0777	No	00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/03/93	2	22	
SHEN0783	No	00080	COLOR (PLATINUM-COBALT UNITS)	09/23/91-03/03/93	1	17	
SHEN0001	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/25/92-02/25/92	0	1	
SHEN0004	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	10	103	
SHEN0006	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/04/97-08/04/97	0	1	
SHEN0019	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/04/97-08/04/97	0	1	
SHEN0021	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	08/04/97-08/04/97	0	1	
SHEN0028	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/12/95-09/16/97	2	4	
SHEN0029	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/18/96-06/18/96	0	1	
SHEN0043	No	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/15/77-08/17/89	12	31	
SHEN0047	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/95-06/19/95	0	1	
SHEN0049	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/15/95-06/09/98	2	7	
SHEN0056	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/26/95-10/29/97	2	6	
SHEN0057	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/96-06/15/98	1	6	
SHEN0068	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/15/95-06/11/98	2	4	
SHEN0071	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/17/96-06/15/98	1	6	
SHEN0073	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/19/95-06/19/95	0	1	
SHEN0075	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/20/95-06/11/98	2	4	
SHEN0077	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/20/95-06/20/95	0	1	
SHEN0086	Yes	00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	06/14/95-06/10/98	2	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0089	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	0	2	
SHEN0091	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	0	1	
SHEN0093	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-06/17/98	3	4	
SHEN0096	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	0	1	
SHEN0097	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	0	1	
SHEN0104	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-05/31/95	0	1	
SHEN0106	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/17/98	3	4	
SHEN0109	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-05/31/95	0	3	
SHEN0111	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	0	1	
SHEN0113	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	0	1	
SHEN0115	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	0	2	
SHEN0121	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	0	1	
SHEN0123	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-05/31/95	0	1	
SHEN0131	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-04/26/95	0	1	
SHEN0132	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/26/96-06/16/98	1	4	
SHEN0134	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-05/13/97	1	6	
SHEN0136	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	0	1	
SHEN0139	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	0	2	
SHEN0141	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	0	1	
SHEN0146	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/07/95-06/07/95	0	1	
SHEN0151	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/07/95-06/07/95	0	1	
SHEN0152	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/07/95-05/21/97	1	5	
SHEN0162	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	19	104	
SHEN0165	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/21/95-06/21/95	0	1	
SHEN0166	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/21/95-06/21/95	0	2	
SHEN0186	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/16/97-09/16/97	0	1	
SHEN0192	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/26/96-05/21/97	0	3	
SHEN0204	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	12	104	
SHEN0208	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/12/95-07/12/95	0	1	
SHEN0212	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/12/95-07/12/95	0	1	
SHEN0226	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/24/98-06/24/98	0	1	
SHEN0227	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/17/97-06/17/97	0	1	
SHEN0243	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/04/96-09/15/97	1	3	
SHEN0247	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/11/95-05/21/97	1	2	
SHEN0252	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-08/08/89	10	101	
SHEN0255	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/04/96-06/23/98	2	5	
SHEN0256	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	01/07/98-01/07/98	0	1	
SHEN0264	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/04/96-06/23/98	2	5	
SHEN0270	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/24/96-06/24/98	2	3	
SHEN0271	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/13/95-05/14/97	1	4	
SHEN0272	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/24/96-06/24/98	2	3	
SHEN0276	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-10/29/97	2	6	
SHEN0279	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/11/95-06/22/98	2	2	
SHEN0285	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/22/98-06/22/98	0	1	
SHEN0297	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	11/19/91-11/05/98	6	46	
SHEN0299	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/17/95-08/17/95	0	1	
SHEN0312	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/08/95-08/08/95	0	1	
SHEN0326	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/13/95-07/06/98	2	5	
SHEN0331	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/13/95-06/29/98	2	4	
SHEN0337	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-04/27/95	0	1	
SHEN0338	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/24/95-05/15/97	1	7	
SHEN0342	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/24/95-05/24/95	0	1	
SHEN0348	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/24/95-05/24/95	0	2	
SHEN0352	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/26/95-07/26/95	0	1	
SHEN0353	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/24/95-06/30/98	3	5	
SHEN0357	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/25/95-05/25/95	0	2	
SHEN0359	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/30/95-05/30/95	0	2	
SHEN0361	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/30/95-07/08/98	3	5	
SHEN0364	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/30/95-05/30/95	0	2	
SHEN0370	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/25/95-07/08/98	3	5	
SHEN0371	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/11/96-07/07/98	1	3	
SHEN0372	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/18/91-09/29/98	6	26	
SHEN0375	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/25/95-07/25/95	0	1	
SHEN0376	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/25/95-05/15/97	1	5	
SHEN0378	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/10/96-07/07/98	1	3	
SHEN0380	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/01/96-07/01/96	0	1	
SHEN0386	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	02/08/88-06/09/98	10	9	
SHEN0388	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/01/96-07/01/96	0	1	
SHEN0390	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/10/96-07/07/98	1	4	
SHEN0401	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/22/95-07/13/98	2	4	
SHEN0405	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/21/95-05/22/97	1	3	
SHEN0406	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/08/95-06/08/95	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0409	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-10/29/97	2	6	
SHEN0416	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/21/95-05/28/97	1	2	
SHEN0418	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/26/95-07/13/98	2	4	
SHEN0421	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/11/96-07/13/98	2	3	
SHEN0431	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/14/95-08/14/95	0	1	
SHEN0434	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/13/97-08/13/97	0	1	
SHEN0438	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/08/95-05/22/97	1	4	
SHEN0441	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-10/29/97	2	6	
SHEN0443	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/10/95-08/10/95	0	1	
SHEN0447	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/25/97-06/25/97	0	1	
SHEN0460	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/28/95-05/28/97	1	2	
SHEN0473	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-10/29/97	2	8	
SHEN0474	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/09/95-08/09/95	0	1	
SHEN0477	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/03/98-08/03/98	0	1	
SHEN0482	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/25/97-06/25/97	0	1	
SHEN0489	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/16/95-09/23/97	2	5	
SHEN0490	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/15/95-07/21/98	2	4	
SHEN0499	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/25/98-06/25/98	0	1	
SHEN0502	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/25/96-07/21/98	1	3	
SHEN0505	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/24/96-07/20/98	1	3	
SHEN0507	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/17/95-07/16/98	2	2	
SHEN0508	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/24/96-07/20/98	1	3	
SHEN0513	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-10/29/97	2	6	
SHEN0515	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/23/95-07/08/96	0	2	
SHEN0518	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/27/95-05/27/97	1	3	
SHEN0519	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/30/97-06/30/97	0	1	
SHEN0547	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/02/96-07/02/96	0	1	
SHEN0548	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/28/95-05/29/97	1	2	
SHEN0552	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/14/97	1	4	
SHEN0556	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/19/96-06/18/98	1	3	
SHEN0561	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/24/95-07/02/96	0	4	
SHEN0566	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/07/80-07/24/80	0	7	
SHEN0568	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	02/25/91-09/29/98	7	26	
SHEN0570	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/16/95-05/16/95	0	1	
SHEN0571	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/17/95	0	1	
SHEN0572	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/12/96-06/18/98	2	3	
SHEN0576	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/21/95-07/09/98	2	2	
SHEN0578	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/17/95	0	1	
SHEN0584	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/17/95	0	1	
SHEN0596	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-10/29/97	2	6	
SHEN0605	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/08/95-07/14/98	3	4	
SHEN0611	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/21/95-08/21/95	0	1	
SHEN0613	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/07/96-07/28/98	1	3	
SHEN0614	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-05/27/97	2	6	
SHEN0617	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-04/26/95	0	1	
SHEN0624	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/21/97-07/14/98	0	2	
SHEN0626	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-05/22/95	0	1	
SHEN0635	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	10	101	
SHEN0637	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/21/97-07/14/98	0	2	
SHEN0644	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-05/22/95	0	1	
SHEN0650	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/06/96-07/27/98	1	3	
SHEN0651	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/18/91-04/22/98	6	22	
SHEN0663	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/17/95	0	1	
SHEN0666	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-10/29/97	2	6	
SHEN0672	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-08/20/96	1	3	
SHEN0673	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/28/97-05/28/97	0	1	
SHEN0680	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/06/96-07/27/98	1	3	
SHEN0686	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-07/29/98	3	4	
SHEN0690	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	0	1	
SHEN0693	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	0	1	
SHEN0697	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	0	4	
SHEN0698	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/14/95-05/20/97	1	4	
SHEN0700	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	0	1	
SHEN0702	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	0	1	
SHEN0705	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/05/96-07/22/98	1	3	
SHEN0708	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/20/95-09/20/95	0	1	
SHEN0722	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/23/96-07/15/98	1	3	
SHEN0726	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/18/95-05/18/95	0	1	
SHEN0729	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/12/97-08/12/97	0	1	
SHEN0731	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/12/97-08/12/97	0	1	
SHEN0734	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/18/95-08/16/95	0	2	
SHEN0736	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/20/96-06/20/96	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0737	Yes	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/18/95-05/20/97	2	3	
SHEN0755	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	18	110	
SHEN0774	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	9	108	
SHEN0775	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	11/09/88-06/09/98	9	10	
SHEN0777	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	18	111	
SHEN0783	No	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	12	96	
SHEN0001	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/92-04/27/98	5	24	
SHEN0003	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/28/86-04/11/86	0	2	
SHEN0004	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	9	101	
SHEN0005	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/29/54-05/21/69	14	3	
SHEN0014	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/28/86-04/11/86	0	2	
SHEN0018	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/77-01/17/77	0	1	
SHEN0020	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/11/77-03/11/77	0	1	
SHEN0022	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/11/77-03/11/77	0	1	
SHEN0023	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/10/77-01/10/77	0	1	
SHEN0024	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/29/94-07/29/97	2	4	
SHEN0034	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/15/77-01/15/77	0	1	
SHEN0036	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/10/77-01/10/77	0	1	
SHEN0038	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/13/93-09/13/93	0	1	
SHEN0044	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/03/52-07/16/68	15	3	
SHEN0054	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/87-07/30/97	9	41	
SHEN0059	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0078	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	4	
SHEN0100	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0107	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	5	
SHEN0117	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0125	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/11/92-01/19/95	2	100	
SHEN0135	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0137	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/14/77-01/14/77	0	1	
SHEN0138	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0143	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0149	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0154	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	2	7	
SHEN0158	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/13/77-01/13/77	0	1	
SHEN0161	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/01/48-06/06/94	45	40	S
SHEN0162	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	9	98	
SHEN0163	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/13/93-09/13/93	0	1	
SHEN0164	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/93-12/21/98	5	65	
SHEN0169	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0171	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	9	415	
SHEN0175	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	9	449	
SHEN0176	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	6	337	
SHEN0180	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0183	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/28/86-04/17/86	0	2	
SHEN0185	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	17	786	A
SHEN0187	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	0	1	
SHEN0188	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/92-06/22/92	0	1	
SHEN0189	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	16	584	
SHEN0193	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	9	435	
SHEN0194	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/27/68-12/13/68	0	6	
SHEN0201	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/12/48-06/06/94	45	22	
SHEN0204	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	9	97	
SHEN0210	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/28/86-04/17/86	0	2	
SHEN0211	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	17	823	A
SHEN0215	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/86-04/15/86	0	2	
SHEN0231	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/18/70-12/27/73	3	5	
SHEN0239	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/77-01/17/77	0	1	
SHEN0240	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/86-04/15/86	0	2	
SHEN0241	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/77-01/17/77	0	1	
SHEN0245	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	1	3	
SHEN0251	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/18/70-05/15/72	1	3	
SHEN0252	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	9	98	
SHEN0256	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/93-12/10/98	5	67	
SHEN0258	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-08/19/93	1	4	
SHEN0261	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-08/19/93	1	4	
SHEN0263	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/08/52-05/23/69	16	6	
SHEN0265	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-11/19/94	2	5	
SHEN0274	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/14/87-07/30/97	9	41	
SHEN0281	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/77-01/17/77	0	1	
SHEN0282	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/07/92-11/30/98	6	26	
SHEN0291	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/12/77-01/12/77	0	1	
SHEN0297	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	8	57	
SHEN0302	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/12/77-01/12/77	0	1	
SHEN0303	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-01/18/77	0	1	
SHEN0304	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/12/77-01/12/77	0	1	
SHEN0311	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/12/97-11/30/98	1	7	
SHEN0317	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/01/48-08/31/76	27	2	
SHEN0324	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/18/91-07/29/97	5	12	
SHEN0325	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-01/18/77	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0327	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0332	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/07/93-07/25/97	4	220	
SHEN0336	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-01/20/96	3	199	
SHEN0341	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-10/05/94	2	3	
SHEN0346	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	7	
SHEN0354	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0366	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/18/91-07/29/97	5	12	
SHEN0367	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	6	
SHEN0372	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/19/90-09/29/98	7	30	
SHEN0374	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	5	8	
SHEN0386	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	9	97	
SHEN0387	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/77-01/20/77	0	1	
SHEN0393	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/77-01/20/77	0	1	
SHEN0397	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0408	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/24/88-07/30/97	9	39	
SHEN0411	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0423	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/77-01/20/77	0	1	
SHEN0424	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0425	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/77-04/22/77	0	1	
SHEN0426	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0430	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/11/77-04/11/77	0	1	
SHEN0433	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	0	1	
SHEN0440	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0446	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0450	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	7	73	
SHEN0451	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0456	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0458	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/86-04/11/86	0	2	
SHEN0463	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0469	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0478	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0480	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/77-01/20/77	0	1	
SHEN0483	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0492	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/11/77-04/11/77	0	1	
SHEN0493	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	0	2	
SHEN0501	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/77-04/22/77	0	1	
SHEN0510	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0511	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0512	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/12/87-07/30/97	9	41	
SHEN0516	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0522	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	4	
SHEN0542	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/18/91-07/21/97	5	16	
SHEN0543	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0557	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	10	513	
SHEN0558	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0562	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	0	1	
SHEN0566	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/31/90-07/31/90	0	3	
SHEN0567	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/10/81-08/10/81	0	1	
SHEN0568	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/19/90-09/29/98	7	28	
SHEN0575	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/08/77-04/08/77	0	1	
SHEN0577	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/11/77-04/11/77	0	1	
SHEN0590	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/12/77-04/12/77	0	1	
SHEN0594	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0595	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/29/87-07/30/97	9	40	
SHEN0597	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	2	
SHEN0600	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0603	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0608	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0615	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0616	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/12/87-04/26/95	7	33	
SHEN0619	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0631	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/04/94-07/21/97	2	4	
SHEN0634	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0635	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	9	96	
SHEN0636	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0651	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/19/90-04/22/98	7	26	
SHEN0652	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0653	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/12/77-04/12/77	0	1	
SHEN0654	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0659	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/56-01/20/56	0	1	
SHEN0660	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0664	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0677	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	6	
SHEN0695	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0710	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0712	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/27/80-08/27/80	0	1	
SHEN0713	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	0	1	
SHEN0718	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/12/77-04/12/77	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0732	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/06/77-04/06/77	0	1	
SHEN0738	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/26/68-10/01/68	0	6	
SHEN0742	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/27/86-04/10/86	0	2	
SHEN0743	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/27/86-04/10/86	0	2	
SHEN0748	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/10/52-05/21/69	16	2	
SHEN0749	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/08/77-04/08/77	0	1	
SHEN0755	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	9	95	
SHEN0756	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	45	509	T,S
SHEN0762	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/10/93-09/10/93	0	1	
SHEN0767	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/92-09/15/92	0	2	
SHEN0775	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	9	95	
SHEN0777	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	9	98	
SHEN0783	No	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/23/91-07/14/97	5	36	
SHEN0001	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/25/92-04/27/98	6	27	
SHEN0003	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/28/86-04/11/86	0	2	
SHEN0004	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/24/92-12/15/98	6	81	
SHEN0006	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/04/97-08/04/97	0	1	
SHEN0014	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/28/86-04/11/86	0	2	
SHEN0019	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/04/97-08/04/97	0	1	
SHEN0021	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/04/97-08/04/97	0	1	
SHEN0024	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11/29/94-07/29/97	2	5	
SHEN0043	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/15/77-09/03/78	1	21	
SHEN0070	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/01/86-04/15/86	0	2	
SHEN0085	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/01/86-04/15/86	0	2	
SHEN0162	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	7	81	
SHEN0164	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/10/93-12/21/98	5	65	
SHEN0183	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/28/86-04/17/86	0	2	
SHEN0204	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	7	80	
SHEN0210	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/28/86-04/17/86	0	2	
SHEN0215	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/31/86-04/15/86	0	2	
SHEN0226	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/24/98-06/24/98	0	1	
SHEN0240	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/31/86-04/15/86	0	2	
SHEN0252	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	7	80	
SHEN0256	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/22/93-12/10/98	5	68	
SHEN0282	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/27/92-11/30/98	6	27	
SHEN0297	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11/19/91-11/05/98	6	45	
SHEN0311	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/12/97-11/30/98	1	6	
SHEN0324	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-07/29/97	5	12	
SHEN0366	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-07/29/97	5	12	
SHEN0372	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/18/91-09/29/98	6	27	
SHEN0386	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/17/91-12/07/98	6	79	
SHEN0450	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	6	69	
SHEN0462	Yes	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/31/86-04/11/86	0	2	
SHEN0499	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/25/98-06/25/98	0	1	
SHEN0542	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-08/28/96	4	14	
SHEN0558	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/31/86-04/11/86	0	2	
SHEN0568	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/18/91-09/29/98	6	26	
SHEN0631	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/04/94-08/28/96	2	4	
SHEN0635	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	7	79	
SHEN0651	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/20/92-04/22/98	6	22	
SHEN0742	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/27/86-04/10/86	0	2	
SHEN0743	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/27/86-04/10/86	0	2	
SHEN0755	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	6	80	
SHEN0775	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	6	79	
SHEN0777	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	6	80	
SHEN0783	No	00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-01/06/97	4	30	
SHEN0001	No	00300	OXYGEN, DISSOLVED MG/L	07/30/91-07/30/91	0	1	
SHEN0002	No	00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	6	50	
SHEN0004	No	00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	17	166	
SHEN0007	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	5	
SHEN0008	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0009	No	00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/16/73	0	4	
SHEN0015	No	00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/17/73	0	4	
SHEN0017	No	00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	10	97	
SHEN0019	No	00300	OXYGEN, DISSOLVED MG/L	06/28/78-03/01/79	0	7	
SHEN0028	Yes	00300	OXYGEN, DISSOLVED MG/L	06/14/94-09/16/97	3	7	
SHEN0029	Yes	00300	OXYGEN, DISSOLVED MG/L	06/18/96-06/18/96	0	1	
SHEN0030	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	10	
SHEN0031	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0032	No	00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/16/73	0	4	
SHEN0033	No	00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	11	99	
SHEN0038	No	00300	OXYGEN, DISSOLVED MG/L	09/13/93-09/13/93	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0043	No	00300	OXYGEN, DISSOLVED MG/L	09/18/77-08/17/89	11	38	
SHEN0047	Yes	00300	OXYGEN, DISSOLVED MG/L	06/19/95-06/19/95	0	1	
SHEN0049	Yes	00300	OXYGEN, DISSOLVED MG/L	06/15/95-06/09/98	2	7	
SHEN0050	No	00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/16/73	0	4	
SHEN0051	No	00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	8	90	
SHEN0056	Yes	00300	OXYGEN, DISSOLVED MG/L	04/26/95-10/29/97	2	6	
SHEN0057	Yes	00300	OXYGEN, DISSOLVED MG/L	06/22/94-06/15/98	3	9	
SHEN0068	Yes	00300	OXYGEN, DISSOLVED MG/L	06/15/95-06/11/98	2	4	
SHEN0071	Yes	00300	OXYGEN, DISSOLVED MG/L	06/17/96-06/15/98	1	6	
SHEN0073	Yes	00300	OXYGEN, DISSOLVED MG/L	06/19/95-06/19/95	0	1	
SHEN0075	Yes	00300	OXYGEN, DISSOLVED MG/L	06/20/95-06/11/98	2	4	
SHEN0077	Yes	00300	OXYGEN, DISSOLVED MG/L	06/20/95-06/20/95	0	1	
SHEN0086	Yes	00300	OXYGEN, DISSOLVED MG/L	06/14/95-06/10/98	2	6	
SHEN0089	Yes	00300	OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	0	2	
SHEN0091	Yes	00300	OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	0	1	
SHEN0093	Yes	00300	OXYGEN, DISSOLVED MG/L	05/31/95-06/17/98	3	4	
SHEN0096	Yes	00300	OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	0	1	
SHEN0097	Yes	00300	OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	0	1	
SHEN0104	Yes	00300	OXYGEN, DISSOLVED MG/L	05/31/95-05/31/95	0	1	
SHEN0106	Yes	00300	OXYGEN, DISSOLVED MG/L	06/01/95-06/17/98	3	4	
SHEN0109	Yes	00300	OXYGEN, DISSOLVED MG/L	05/31/95-05/31/95	0	3	
SHEN0111	Yes	00300	OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	0	1	
SHEN0113	Yes	00300	OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	0	1	
SHEN0115	Yes	00300	OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	0	2	
SHEN0121	Yes	00300	OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	0	1	
SHEN0123	Yes	00300	OXYGEN, DISSOLVED MG/L	05/31/95-05/31/95	0	1	
SHEN0131	Yes	00300	OXYGEN, DISSOLVED MG/L	04/26/95-04/26/95	0	1	
SHEN0132	Yes	00300	OXYGEN, DISSOLVED MG/L	06/23/94-06/16/98	3	7	
SHEN0134	Yes	00300	OXYGEN, DISSOLVED MG/L	05/23/89-05/13/97	7	32	
SHEN0136	Yes	00300	OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	0	1	
SHEN0139	Yes	00300	OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	0	2	
SHEN0141	Yes	00300	OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	0	1	
SHEN0146	Yes	00300	OXYGEN, DISSOLVED MG/L	06/07/95-06/07/95	0	1	
SHEN0151	Yes	00300	OXYGEN, DISSOLVED MG/L	06/07/95-06/07/95	0	1	
SHEN0152	Yes	00300	OXYGEN, DISSOLVED MG/L	05/22/89-05/21/97	7	31	
SHEN0159	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	10	
SHEN0160	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0161	No	00300	OXYGEN, DISSOLVED MG/L	08/19/92-06/06/94	1	2	
SHEN0162	No	00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	26	214	T,S
SHEN0163	No	00300	OXYGEN, DISSOLVED MG/L	09/13/93-09/13/93	0	1	
SHEN0165	Yes	00300	OXYGEN, DISSOLVED MG/L	06/21/95-06/21/95	0	1	
SHEN0166	Yes	00300	OXYGEN, DISSOLVED MG/L	06/21/95-06/21/95	0	2	
SHEN0186	Yes	00300	OXYGEN, DISSOLVED MG/L	09/16/97-09/16/97	0	1	
SHEN0188	Yes	00300	OXYGEN, DISSOLVED MG/L	06/22/92-06/22/92	0	1	
SHEN0192	Yes	00300	OXYGEN, DISSOLVED MG/L	06/26/96-05/21/97	0	3	
SHEN0195	Yes	00300	OXYGEN, DISSOLVED MG/L	06/15/94-06/15/94	0	3	
SHEN0196	No	00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/16/73	0	4	
SHEN0197	Yes	00300	OXYGEN, DISSOLVED MG/L	07/05/94-07/05/94	0	3	
SHEN0198	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	5	
SHEN0199	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0200	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0201	No	00300	OXYGEN, DISSOLVED MG/L	06/23/92-06/06/94	1	3	
SHEN0202	No	00300	OXYGEN, DISSOLVED MG/L	09/19/72-04/16/73	0	3	
SHEN0204	No	00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	14	126	
SHEN0207	Yes	00300	OXYGEN, DISSOLVED MG/L	07/07/94-07/07/94	0	3	
SHEN0208	Yes	00300	OXYGEN, DISSOLVED MG/L	07/12/95-07/12/95	0	1	
SHEN0212	Yes	00300	OXYGEN, DISSOLVED MG/L	07/12/95-07/12/95	0	1	
SHEN0213	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	5	
SHEN0216	Yes	00300	OXYGEN, DISSOLVED MG/L	07/07/94-07/07/94	0	3	
SHEN0221	Yes	00300	OXYGEN, DISSOLVED MG/L	06/21/94-06/21/94	0	3	
SHEN0222	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	10	
SHEN0223	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0224	No	00300	OXYGEN, DISSOLVED MG/L	09/19/72-04/16/73	0	3	
SHEN0225	No	00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	8	92	
SHEN0227	Yes	00300	OXYGEN, DISSOLVED MG/L	06/17/97-06/17/97	0	1	
SHEN0228	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	10	
SHEN0229	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0230	Yes	00300	OXYGEN, DISSOLVED MG/L	07/06/94-07/06/94	0	3	
SHEN0231	No	00300	OXYGEN, DISSOLVED MG/L	12/11/69-02/19/74	4	47	
SHEN0233	No	00300	OXYGEN, DISSOLVED MG/L	09/19/72-04/16/73	0	3	
SHEN0234	No	00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	7	84	
SHEN0235	No	00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	10	98	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0243	Yes	00300	OXYGEN, DISSOLVED MG/L	06/04/96-09/15/97	1	3	
SHEN0247	Yes	00300	OXYGEN, DISSOLVED MG/L	06/21/89-05/21/97	7	27	
SHEN0251	No	00300	OXYGEN, DISSOLVED MG/L	12/11/69-05/14/73	3	42	
SHEN0252	No	00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	12	123	
SHEN0253	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	10	
SHEN0254	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0255	Yes	00300	OXYGEN, DISSOLVED MG/L	06/04/96-06/23/98	2	5	
SHEN0264	Yes	00300	OXYGEN, DISSOLVED MG/L	07/11/94-06/23/98	3	8	
SHEN0270	Yes	00300	OXYGEN, DISSOLVED MG/L	06/24/96-06/24/98	2	3	
SHEN0271	Yes	00300	OXYGEN, DISSOLVED MG/L	06/21/89-05/14/97	7	30	
SHEN0272	Yes	00300	OXYGEN, DISSOLVED MG/L	06/28/94-06/24/98	3	6	
SHEN0276	Yes	00300	OXYGEN, DISSOLVED MG/L	04/26/95-10/29/97	2	5	
SHEN0279	Yes	00300	OXYGEN, DISSOLVED MG/L	07/11/95-06/22/98	2	2	
SHEN0282	No	00300	OXYGEN, DISSOLVED MG/L	01/07/92-04/08/92	0	2	
SHEN0285	Yes	00300	OXYGEN, DISSOLVED MG/L	06/22/98-06/22/98	0	1	
SHEN0287	No	00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	10	97	
SHEN0292	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	10	
SHEN0293	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	2	
SHEN0297	No	00300	OXYGEN, DISSOLVED MG/L	10/22/74-10/21/91	16	20	
SHEN0299	Yes	00300	OXYGEN, DISSOLVED MG/L	08/17/95-08/17/95	0	1	
SHEN0301	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	4	
SHEN0306	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	4	
SHEN0307	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	4	
SHEN0312	Yes	00300	OXYGEN, DISSOLVED MG/L	08/08/95-08/08/95	0	1	
SHEN0314	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	10	
SHEN0315	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0316	No	00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	11	99	
SHEN0317	No	00300	OXYGEN, DISSOLVED MG/L	08/31/76-08/31/76	0	1	
SHEN0324	No	00300	OXYGEN, DISSOLVED MG/L	12/18/91-04/01/92	0	2	
SHEN0326	Yes	00300	OXYGEN, DISSOLVED MG/L	07/13/95-07/06/98	2	5	
SHEN0331	Yes	00300	OXYGEN, DISSOLVED MG/L	07/13/95-06/29/98	2	4	
SHEN0337	Yes	00300	OXYGEN, DISSOLVED MG/L	04/27/95-04/27/95	0	1	
SHEN0338	Yes	00300	OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	7	33	
SHEN0342	Yes	00300	OXYGEN, DISSOLVED MG/L	05/24/95-05/24/95	0	1	
SHEN0348	Yes	00300	OXYGEN, DISSOLVED MG/L	05/24/95-05/24/95	0	2	
SHEN0352	Yes	00300	OXYGEN, DISSOLVED MG/L	07/26/95-07/26/95	0	1	
SHEN0353	Yes	00300	OXYGEN, DISSOLVED MG/L	05/24/95-06/30/98	3	5	
SHEN0357	Yes	00300	OXYGEN, DISSOLVED MG/L	05/25/95-05/25/95	0	2	
SHEN0359	Yes	00300	OXYGEN, DISSOLVED MG/L	05/30/95-05/30/95	0	2	
SHEN0361	Yes	00300	OXYGEN, DISSOLVED MG/L	05/30/95-07/08/98	3	5	
SHEN0364	Yes	00300	OXYGEN, DISSOLVED MG/L	05/30/95-05/30/95	0	2	
SHEN0366	No	00300	OXYGEN, DISSOLVED MG/L	12/18/91-04/01/92	0	2	
SHEN0370	Yes	00300	OXYGEN, DISSOLVED MG/L	05/25/95-07/08/98	3	5	
SHEN0371	Yes	00300	OXYGEN, DISSOLVED MG/L	07/11/96-07/07/98	1	3	
SHEN0372	No	00300	OXYGEN, DISSOLVED MG/L	10/22/74-06/13/91	16	31	
SHEN0373	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	4	
SHEN0375	Yes	00300	OXYGEN, DISSOLVED MG/L	07/25/95-07/25/95	0	1	
SHEN0376	Yes	00300	OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	7	31	
SHEN0378	Yes	00300	OXYGEN, DISSOLVED MG/L	07/10/96-07/07/98	1	3	
SHEN0380	Yes	00300	OXYGEN, DISSOLVED MG/L	07/01/96-07/01/96	0	1	
SHEN0381	No	00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	10	94	
SHEN0382	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	4	
SHEN0383	No	00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	0	10	
SHEN0384	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0386	No	00300	OXYGEN, DISSOLVED MG/L	02/08/88-04/01/92	4	27	
SHEN0388	Yes	00300	OXYGEN, DISSOLVED MG/L	07/01/96-07/01/96	0	1	
SHEN0390	Yes	00300	OXYGEN, DISSOLVED MG/L	07/10/96-07/07/98	1	4	
SHEN0394	No	00300	OXYGEN, DISSOLVED MG/L	02/04/76-02/04/76	0	1	
SHEN0401	Yes	00300	OXYGEN, DISSOLVED MG/L	08/22/95-07/13/98	2	4	
SHEN0405	Yes	00300	OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	7	29	
SHEN0406	Yes	00300	OXYGEN, DISSOLVED MG/L	06/08/95-06/08/95	0	1	
SHEN0409	Yes	00300	OXYGEN, DISSOLVED MG/L	04/27/95-10/29/97	2	6	
SHEN0416	Yes	00300	OXYGEN, DISSOLVED MG/L	06/08/89-05/28/97	7	28	
SHEN0418	Yes	00300	OXYGEN, DISSOLVED MG/L	07/26/95-07/13/98	2	4	
SHEN0421	Yes	00300	OXYGEN, DISSOLVED MG/L	07/11/96-07/13/98	2	3	
SHEN0429	Yes	00300	OXYGEN, DISSOLVED MG/L	08/24/94-08/24/94	0	3	
SHEN0431	Yes	00300	OXYGEN, DISSOLVED MG/L	08/14/95-08/14/95	0	1	
SHEN0434	Yes	00300	OXYGEN, DISSOLVED MG/L	08/13/97-08/13/97	0	1	
SHEN0438	Yes	00300	OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	7	29	
SHEN0441	Yes	00300	OXYGEN, DISSOLVED MG/L	04/27/95-10/29/97	2	6	
SHEN0443	Yes	00300	OXYGEN, DISSOLVED MG/L	08/10/95-08/10/95	0	1	
SHEN0447	Yes	00300	OXYGEN, DISSOLVED MG/L	07/13/94-06/25/97	2	4	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0449	Yes	00300	OXYGEN, DISSOLVED MG/L	08/25/94-08/25/94	0	4	
SHEN0450	No	00300	OXYGEN, DISSOLVED MG/L	07/29/91-04/01/92	0	2	
SHEN0452	No	00300	OXYGEN, DISSOLVED MG/L	10/23/75-10/23/75	0	1	
SHEN0460	Yes	00300	OXYGEN, DISSOLVED MG/L	05/31/89-05/28/97	7	29	
SHEN0471	Yes	00300	OXYGEN, DISSOLVED MG/L	10/23/75-10/23/75	0	1	
SHEN0473	Yes	00300	OXYGEN, DISSOLVED MG/L	04/27/95-10/29/97	2	8	
SHEN0474	Yes	00300	OXYGEN, DISSOLVED MG/L	08/09/95-08/09/95	0	1	
SHEN0477	Yes	00300	OXYGEN, DISSOLVED MG/L	08/03/98-08/03/98	0	1	
SHEN0482	Yes	00300	OXYGEN, DISSOLVED MG/L	07/14/94-06/25/97	2	4	
SHEN0489	Yes	00300	OXYGEN, DISSOLVED MG/L	05/16/95-09/23/97	2	5	
SHEN0490	Yes	00300	OXYGEN, DISSOLVED MG/L	08/15/95-07/21/98	2	4	
SHEN0500	No	00300	OXYGEN, DISSOLVED MG/L	04/26/76-06/06/79	3	19	
SHEN0502	Yes	00300	OXYGEN, DISSOLVED MG/L	07/25/96-07/21/98	1	3	
SHEN0505	Yes	00300	OXYGEN, DISSOLVED MG/L	07/24/96-07/20/98	1	3	
SHEN0507	Yes	00300	OXYGEN, DISSOLVED MG/L	08/17/95-07/16/98	2	2	
SHEN0508	Yes	00300	OXYGEN, DISSOLVED MG/L	07/24/96-07/20/98	1	3	
SHEN0513	No	00300	OXYGEN, DISSOLVED MG/L	04/27/95-10/29/97	2	6	
SHEN0515	No	00300	OXYGEN, DISSOLVED MG/L	08/23/95-07/08/96	0	2	
SHEN0518	Yes	00300	OXYGEN, DISSOLVED MG/L	06/20/89-05/27/97	7	29	
SHEN0519	Yes	00300	OXYGEN, DISSOLVED MG/L	08/01/94-06/30/97	2	4	
SHEN0536	Yes	00300	OXYGEN, DISSOLVED MG/L	08/11/94-08/11/94	0	3	
SHEN0539	Yes	00300	OXYGEN, DISSOLVED MG/L	08/22/94-08/22/94	0	6	
SHEN0542	No	00300	OXYGEN, DISSOLVED MG/L	12/18/91-04/01/92	0	2	
SHEN0547	Yes	00300	OXYGEN, DISSOLVED MG/L	08/22/94-07/02/96	1	4	
SHEN0548	Yes	00300	OXYGEN, DISSOLVED MG/L	06/26/89-05/29/97	7	28	
SHEN0552	Yes	00300	OXYGEN, DISSOLVED MG/L	06/07/89-05/14/97	7	29	
SHEN0556	Yes	00300	OXYGEN, DISSOLVED MG/L	08/01/94-06/18/98	3	6	
SHEN0561	Yes	00300	OXYGEN, DISSOLVED MG/L	08/16/94-07/02/96	1	7	
SHEN0566	No	00300	OXYGEN, DISSOLVED MG/L	04/07/80-07/31/90	10	3	
SHEN0568	No	00300	OXYGEN, DISSOLVED MG/L	09/17/74-06/13/91	16	47	
SHEN0570	Yes	00300	OXYGEN, DISSOLVED MG/L	05/16/95-05/16/95	0	1	
SHEN0571	Yes	00300	OXYGEN, DISSOLVED MG/L	05/17/95-05/17/95	0	1	
SHEN0572	Yes	00300	OXYGEN, DISSOLVED MG/L	06/12/96-06/18/98	2	3	
SHEN0573	No	00300	OXYGEN, DISSOLVED MG/L	05/18/76-05/15/79	2	17	
SHEN0574	No	00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	0	2	
SHEN0576	Yes	00300	OXYGEN, DISSOLVED MG/L	08/21/95-07/09/98	2	2	
SHEN0578	Yes	00300	OXYGEN, DISSOLVED MG/L	05/17/95-05/17/95	0	1	
SHEN0579	No	00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	10	83	
SHEN0580	Yes	00300	OXYGEN, DISSOLVED MG/L	07/27/94-07/27/94	0	3	
SHEN0582	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	4	
SHEN0583	No	00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	10	99	
SHEN0584	Yes	00300	OXYGEN, DISSOLVED MG/L	05/17/95-05/17/95	0	1	
SHEN0585	No	00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	6	63	
SHEN0586	No	00300	OXYGEN, DISSOLVED MG/L	07/01/68-08/24/74	6	58	
SHEN0588	No	00300	OXYGEN, DISSOLVED MG/L	07/06/72-04/12/74	1	17	
SHEN0592	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	4	
SHEN0593	No	00300	OXYGEN, DISSOLVED MG/L	08/18/69-08/18/69	0	1	
SHEN0596	No	00300	OXYGEN, DISSOLVED MG/L	04/26/95-10/29/97	2	6	
SHEN0605	Yes	00300	OXYGEN, DISSOLVED MG/L	06/08/95-07/14/98	3	4	
SHEN0611	Yes	00300	OXYGEN, DISSOLVED MG/L	08/21/95-08/21/95	0	1	
SHEN0613	No	00300	OXYGEN, DISSOLVED MG/L	08/07/96-07/28/98	1	3	
SHEN0614	No	00300	OXYGEN, DISSOLVED MG/L	06/26/89-05/27/97	7	32	
SHEN0617	No	00300	OXYGEN, DISSOLVED MG/L	04/26/95-04/26/95	0	1	
SHEN0624	Yes	00300	OXYGEN, DISSOLVED MG/L	07/21/97-07/14/98	0	2	
SHEN0626	Yes	00300	OXYGEN, DISSOLVED MG/L	05/22/95-05/22/95	0	1	
SHEN0630	No	00300	OXYGEN, DISSOLVED MG/L	09/17/74-05/15/79	4	26	
SHEN0632	No	00300	OXYGEN, DISSOLVED MG/L	09/19/72-04/16/73	0	3	
SHEN0633	No	00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	0	4	
SHEN0635	No	00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	23	218	T
SHEN0637	Yes	00300	OXYGEN, DISSOLVED MG/L	07/21/97-07/14/98	0	2	
SHEN0644	Yes	00300	OXYGEN, DISSOLVED MG/L	05/22/95-05/22/95	0	1	
SHEN0648	Yes	00300	OXYGEN, DISSOLVED MG/L	08/08/94-08/08/94	0	3	
SHEN0650	Yes	00300	OXYGEN, DISSOLVED MG/L	08/06/96-07/27/98	1	3	
SHEN0651	No	00300	OXYGEN, DISSOLVED MG/L	11/19/90-06/13/91	0	3	
SHEN0661	Yes	00300	OXYGEN, DISSOLVED MG/L	08/09/94-08/09/94	0	3	
SHEN0663	Yes	00300	OXYGEN, DISSOLVED MG/L	06/13/94-05/17/95	0	5	
SHEN0666	Yes	00300	OXYGEN, DISSOLVED MG/L	04/26/95-10/29/97	2	5	
SHEN0672	Yes	00300	OXYGEN, DISSOLVED MG/L	05/22/95-08/20/96	1	3	
SHEN0673	Yes	00300	OXYGEN, DISSOLVED MG/L	05/28/97-05/28/97	0	1	
SHEN0678	No	00300	OXYGEN, DISSOLVED MG/L	03/24/75-03/24/75	0	1	
SHEN0680	Yes	00300	OXYGEN, DISSOLVED MG/L	08/06/96-07/27/98	1	3	
SHEN0686	Yes	00300	OXYGEN, DISSOLVED MG/L	05/22/95-07/29/98	3	4	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0690	Yes	00300	OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	0	1	
SHEN0693	Yes	00300	OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	0	1	
SHEN0697	Yes	00300	OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	0	4	
SHEN0698	Yes	00300	OXYGEN, DISSOLVED MG/L	05/25/89-05/20/97	7	30	
SHEN0700	Yes	00300	OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	0	1	
SHEN0702	Yes	00300	OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	0	1	
SHEN0705	Yes	00300	OXYGEN, DISSOLVED MG/L	08/05/96-07/22/98	1	3	
SHEN0708	Yes	00300	OXYGEN, DISSOLVED MG/L	06/19/89-09/20/95	6	27	
SHEN0712	No	00300	OXYGEN, DISSOLVED MG/L	08/27/80-08/27/80	0	1	
SHEN0719	No	00300	OXYGEN, DISSOLVED MG/L	04/07/75-04/07/75	0	1	
SHEN0720	No	00300	OXYGEN, DISSOLVED MG/L	04/07/75-04/07/75	0	1	
SHEN0722	Yes	00300	OXYGEN, DISSOLVED MG/L	08/13/94-07/15/98	3	6	
SHEN0723	No	00300	OXYGEN, DISSOLVED MG/L	04/07/75-04/07/75	0	1	
SHEN0726	Yes	00300	OXYGEN, DISSOLVED MG/L	05/18/95-05/18/95	0	1	
SHEN0729	Yes	00300	OXYGEN, DISSOLVED MG/L	08/15/94-08/12/97	2	4	
SHEN0731	Yes	00300	OXYGEN, DISSOLVED MG/L	08/12/97-08/12/97	0	1	
SHEN0734	Yes	00300	OXYGEN, DISSOLVED MG/L	08/03/94-08/16/95	1	5	
SHEN0736	Yes	00300	OXYGEN, DISSOLVED MG/L	06/20/96-06/20/96	0	1	
SHEN0737	Yes	00300	OXYGEN, DISSOLVED MG/L	06/19/89-05/20/97	7	27	
SHEN0746	No	00300	OXYGEN, DISSOLVED MG/L	09/20/72-04/18/73	0	3	
SHEN0747	No	00300	OXYGEN, DISSOLVED MG/L	05/04/72-04/12/74	1	19	
SHEN0750	No	00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	10	92	
SHEN0752	No	00300	OXYGEN, DISSOLVED MG/L	06/14/67-06/16/67	0	9	
SHEN0753	No	00300	OXYGEN, DISSOLVED MG/L	07/29/69-08/18/69	0	2	
SHEN0755	No	00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	22	214	T
SHEN0756	No	00300	OXYGEN, DISSOLVED MG/L	08/16/83-06/08/94	10	23	
SHEN0760	No	00300	OXYGEN, DISSOLVED MG/L	05/24/72-04/18/73	0	4	
SHEN0762	No	00300	OXYGEN, DISSOLVED MG/L	09/10/93-09/10/93	0	1	
SHEN0767	No	00300	OXYGEN, DISSOLVED MG/L	08/18/92-09/15/92	0	2	
SHEN0768	No	00300	OXYGEN, DISSOLVED MG/L	05/24/72-04/18/73	0	4	
SHEN0769	No	00300	OXYGEN, DISSOLVED MG/L	05/24/72-04/18/73	0	4	
SHEN0770	No	00300	OXYGEN, DISSOLVED MG/L	06/14/67-06/16/67	0	10	
SHEN0771	No	00300	OXYGEN, DISSOLVED MG/L	07/29/69-08/18/69	0	2	
SHEN0772	No	00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	10	88	
SHEN0774	No	00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	20	204	T
SHEN0775	No	00300	OXYGEN, DISSOLVED MG/L	11/09/88-04/02/92	3	26	
SHEN0777	No	00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	22	232	T
SHEN0778	No	00300	OXYGEN, DISSOLVED MG/L	06/14/67-06/16/67	0	10	
SHEN0779	No	00300	OXYGEN, DISSOLVED MG/L	07/29/69-08/19/69	0	2	
SHEN0782	No	00300	OXYGEN, DISSOLVED MG/L	06/14/67-06/16/67	0	8	
SHEN0783	No	00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	12	102	
SHEN0784	No	00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	8	88	
SHEN0056	Yes	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/30/96-10/30/96	0	1	
SHEN0276	Yes	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/30/96-10/30/96	0	1	
SHEN0409	Yes	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	0	1	
SHEN0441	Yes	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	0	1	
SHEN0473	Yes	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	0	1	
SHEN0513	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	0	1	
SHEN0596	No	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	0	1	
SHEN0666	Yes	00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/30/96-10/30/96	0	1	
SHEN0001	No	00310	BOD, 5 DAY, 20 DEG C MG/L	02/25/92-04/27/98	6	25	
SHEN0002	No	00310	BOD, 5 DAY, 20 DEG C MG/L	02/25/68-03/08/71	3	7	
SHEN0004	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	19	202	
SHEN0007	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	5	
SHEN0009	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-04/16/73	0	4	
SHEN0015	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-04/17/73	0	4	
SHEN0017	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/03/68-09/17/76	7	12	
SHEN0024	No	00310	BOD, 5 DAY, 20 DEG C MG/L	11/29/94-07/29/97	2	4	
SHEN0030	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	10	
SHEN0032	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-04/16/73	0	4	
SHEN0033	No	00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	11	41	
SHEN0043	No	00310	BOD, 5 DAY, 20 DEG C MG/L	08/07/77-08/07/77	0	1	
SHEN0050	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-05/23/72	0	1	
SHEN0051	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-06/10/75	5	12	
SHEN0159	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	10	
SHEN0162	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	28	200	T,S
SHEN0164	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/10/93-12/21/98	5	63	
SHEN0196	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-05/23/72	0	1	
SHEN0198	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	5	
SHEN0204	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	19	194	
SHEN0213	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	5	
SHEN0222	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	10	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0225	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-02/24/76	5	7	
SHEN0228	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	10	
SHEN0231	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/20/70-02/19/74	3	8	
SHEN0234	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-03/08/71	1	6	
SHEN0235	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/03/68-11/17/71	2	14	
SHEN0251	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/19/70-12/13/72	2	4	
SHEN0252	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	19	194	
SHEN0253	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	10	
SHEN0256	No	00310	BOD, 5 DAY, 20 DEG C MG/L	07/22/93-12/10/98	5	67	
SHEN0282	No	00310	BOD, 5 DAY, 20 DEG C MG/L	01/07/92-11/30/98	6	26	
SHEN0287	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-04/18/71	2	12	
SHEN0292	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	10	
SHEN0297	No	00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	8	59	
SHEN0301	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	4	
SHEN0305	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	4	
SHEN0306	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	4	
SHEN0307	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	4	
SHEN0311	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/12/97-11/30/98	1	7	
SHEN0314	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	9	
SHEN0316	No	00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	11	41	
SHEN0324	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/18/91-07/29/97	5	12	
SHEN0366	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/18/91-07/29/97	5	12	
SHEN0372	No	00310	BOD, 5 DAY, 20 DEG C MG/L	11/19/90-09/29/98	7	30	
SHEN0373	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	4	
SHEN0381	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-02/17/71	2	10	
SHEN0382	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	4	
SHEN0383	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	0	10	
SHEN0386	No	00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	10	105	
SHEN0389	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	4	
SHEN0394	No	00310	BOD, 5 DAY, 20 DEG C MG/L	02/04/76-02/04/76	0	1	
SHEN0450	No	00310	BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	7	73	
SHEN0452	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00310	BOD, 5 DAY, 20 DEG C MG/L	10/23/75-10/23/75	0	1	
SHEN0542	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/18/91-07/21/97	5	16	
SHEN0568	No	00310	BOD, 5 DAY, 20 DEG C MG/L	11/19/90-09/29/98	7	29	
SHEN0579	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/08/68-02/10/71	2	8	
SHEN0582	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	4	
SHEN0583	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-06/22/78	9	14	
SHEN0585	No	00310	BOD, 5 DAY, 20 DEG C MG/L	07/31/72-06/22/78	5	4	
SHEN0586	No	00310	BOD, 5 DAY, 20 DEG C MG/L	10/08/68-02/10/71	2	7	
SHEN0587	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/17/73	0	5	
SHEN0588	No	00310	BOD, 5 DAY, 20 DEG C MG/L	07/31/72-12/07/72	0	4	
SHEN0592	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	0	3	
SHEN0631	No	00310	BOD, 5 DAY, 20 DEG C MG/L	08/04/94-07/21/97	2	4	
SHEN0633	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-05/22/72	0	1	
SHEN0635	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	30	243	T,S
SHEN0651	No	00310	BOD, 5 DAY, 20 DEG C MG/L	11/19/90-04/22/98	7	25	
SHEN0678	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/24/75-03/24/75	0	1	
SHEN0719	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/07/75-04/07/75	0	1	
SHEN0720	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/07/75-04/07/75	0	1	
SHEN0723	No	00310	BOD, 5 DAY, 20 DEG C MG/L	04/07/75-04/07/75	0	1	
SHEN0746	No	00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/72-04/18/73	0	3	
SHEN0747	No	00310	BOD, 5 DAY, 20 DEG C MG/L	11/17/72-11/17/72	0	1	
SHEN0750	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-01/27/72	3	10	
SHEN0752	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/14/67-06/16/67	0	9	
SHEN0755	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	28	214	T,S
SHEN0760	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/72-04/18/73	0	4	
SHEN0765	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/72-04/18/73	0	4	
SHEN0768	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/72-04/18/73	0	4	
SHEN0769	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/72-04/18/73	0	4	
SHEN0770	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/14/67-06/16/67	0	10	
SHEN0772	No	00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-06/22/78	9	19	
SHEN0774	No	00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	20	118	
SHEN0775	No	00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	10	103	
SHEN0777	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	28	214	T,S
SHEN0778	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/14/67-06/16/67	0	10	
SHEN0782	No	00310	BOD, 5 DAY, 20 DEG C MG/L	06/14/67-06/16/67	0	8	
SHEN0783	No	00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	18	133	
SHEN0784	No	00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-01/27/72	1	9	
SHEN0008	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0031	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0160	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0199	No	00311	BOD, DISSOLVED, 5 DAY MG/L	08/18/69-08/18/69	0	1	
SHEN0200	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0223	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0229	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0254	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0293	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0315	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0384	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0574	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	0	2	
SHEN0593	No	00311	BOD, DISSOLVED, 5 DAY MG/L	08/18/69-08/18/69	0	1	
SHEN0753	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/29/69-08/18/69	0	2	
SHEN0771	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/29/69-08/18/69	0	2	
SHEN0779	No	00311	BOD, DISSOLVED, 5 DAY MG/L	07/29/69-08/19/69	0	2	
SHEN0033	No	00315	BOD, 7 DAY, 20 DEG C MG/L	11/24/75-11/24/75	0	1	
SHEN0001	No	00340	COD, .25N K2CR207 MG/L	02/25/92-04/27/98	6	24	
SHEN0004	No	00340	COD, .25N K2CR207 MG/L	04/30/79-12/15/98	19	202	
SHEN0024	No	00340	COD, .25N K2CR207 MG/L	11/29/94-07/29/97	2	4	
SHEN0162	No	00340	COD, .25N K2CR207 MG/L	04/30/79-12/21/98	19	201	
SHEN0164	No	00340	COD, .25N K2CR207 MG/L	06/10/93-12/21/98	5	65	
SHEN0204	No	00340	COD, .25N K2CR207 MG/L	04/30/79-12/21/98	19	200	
SHEN0252	No	00340	COD, .25N K2CR207 MG/L	04/24/79-12/21/98	19	200	
SHEN0256	No	00340	COD, .25N K2CR207 MG/L	07/22/93-12/10/98	5	67	
SHEN0282	No	00340	COD, .25N K2CR207 MG/L	01/07/92-11/30/98	6	25	
SHEN0297	No	00340	COD, .25N K2CR207 MG/L	09/26/90-11/05/98	8	56	
SHEN0311	No	00340	COD, .25N K2CR207 MG/L	06/12/97-11/30/98	1	7	
SHEN0324	No	00340	COD, .25N K2CR207 MG/L	12/18/91-07/29/97	5	12	
SHEN0366	No	00340	COD, .25N K2CR207 MG/L	12/18/91-07/29/97	5	12	
SHEN0372	No	00340	COD, .25N K2CR207 MG/L	11/19/90-04/22/98	7	28	
SHEN0386	No	00340	COD, .25N K2CR207 MG/L	02/08/88-12/07/98	10	105	
SHEN0394	No	00340	COD, .25N K2CR207 MG/L	02/04/76-02/04/76	0	1	
SHEN0450	No	00340	COD, .25N K2CR207 MG/L	07/29/91-12/07/98	7	73	
SHEN0452	No	00340	COD, .25N K2CR207 MG/L	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00340	COD, .25N K2CR207 MG/L	10/23/75-10/23/75	0	1	
SHEN0542	No	00340	COD, .25N K2CR207 MG/L	12/18/91-07/21/97	5	16	
SHEN0566	No	00340	COD, .25N K2CR207 MG/L	07/31/90-07/31/90	0	3	
SHEN0568	No	00340	COD, .25N K2CR207 MG/L	11/19/90-04/22/98	7	27	
SHEN0631	No	00340	COD, .25N K2CR207 MG/L	08/04/94-07/21/97	2	4	
SHEN0635	No	00340	COD, .25N K2CR207 MG/L	04/24/79-12/07/98	19	199	
SHEN0651	No	00340	COD, .25N K2CR207 MG/L	11/19/90-04/22/98	7	25	
SHEN0678	No	00340	COD, .25N K2CR207 MG/L	03/24/75-03/24/75	0	1	
SHEN0719	No	00340	COD, .25N K2CR207 MG/L	04/07/75-04/07/75	0	1	
SHEN0720	No	00340	COD, .25N K2CR207 MG/L	04/07/75-04/07/75	0	1	
SHEN0723	No	00340	COD, .25N K2CR207 MG/L	04/07/75-04/07/75	0	1	
SHEN0755	No	00340	COD, .25N K2CR207 MG/L	04/24/79-12/02/98	19	204	
SHEN0774	No	00340	COD, .25N K2CR207 MG/L	12/14/78-08/02/88	9	109	
SHEN0775	No	00340	COD, .25N K2CR207 MG/L	11/09/88-12/01/98	10	103	
SHEN0777	No	00340	COD, .25N K2CR207 MG/L	03/01/79-12/01/98	19	209	
SHEN0783	No	00340	COD, .25N K2CR207 MG/L	05/09/79-07/14/97	18	134	
SHEN0001	No	00400	PH (STANDARD UNITS)	07/30/91-04/27/98	6	29	
SHEN0002	No	00400	PH (STANDARD UNITS)	09/20/67-06/11/74	6	50	
SHEN0004	No	00400	PH (STANDARD UNITS)	05/17/74-12/15/98	24	246	T,A
SHEN0005	No	00400	PH (STANDARD UNITS)	11/29/54-05/21/69	14	3	
SHEN0006	No	00400	PH (STANDARD UNITS)	07/23/97-08/04/97	0	2	
SHEN0009	No	00400	PH (STANDARD UNITS)	05/23/72-02/13/73	0	2	
SHEN0015	No	00400	PH (STANDARD UNITS)	05/23/72-02/13/73	0	2	
SHEN0017	No	00400	PH (STANDARD UNITS)	07/07/68-03/01/79	10	97	
SHEN0018	No	00400	PH (STANDARD UNITS)	01/17/77-01/17/77	0	1	
SHEN0019	No	00400	PH (STANDARD UNITS)	06/28/78-08/04/97	19	10	
SHEN0020	No	00400	PH (STANDARD UNITS)	03/11/77-03/11/77	0	1	
SHEN0021	No	00400	PH (STANDARD UNITS)	07/23/97-08/04/97	0	2	
SHEN0022	No	00400	PH (STANDARD UNITS)	03/11/77-03/11/77	0	1	
SHEN0023	No	00400	PH (STANDARD UNITS)	01/10/77-01/10/77	0	1	
SHEN0024	No	00400	PH (STANDARD UNITS)	11/29/94-07/29/97	2	5	
SHEN0025	No	00400	PH (STANDARD UNITS)	08/19/81-06/24/82	0	5	
SHEN0027	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0032	No	00400	PH (STANDARD UNITS)	05/23/72-02/13/73	0	2	
SHEN0033	No	00400	PH (STANDARD UNITS)	09/20/67-03/01/79	11	101	
SHEN0034	No	00400	PH (STANDARD UNITS)	01/15/77-01/15/77	0	1	
SHEN0036	No	00400	PH (STANDARD UNITS)	01/10/77-01/10/77	0	1	
SHEN0037	No	00400	PH (STANDARD UNITS)	08/17/81-06/23/82	0	6	
SHEN0038	No	00400	PH (STANDARD UNITS)	09/13/93-09/13/93	0	1	
SHEN0039	No	00400	PH (STANDARD UNITS)	04/24/87-04/24/87	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0040	No	00400	PH (STANDARD UNITS)	08/02/45-08/02/45	0	1	
SHEN0042	No	00400	PH (STANDARD UNITS)	08/17/81-06/23/82	0	6	
SHEN0043	No	00400	PH (STANDARD UNITS)	05/15/77-08/17/89	12	35	
SHEN0044	No	00400	PH (STANDARD UNITS)	11/03/52-06/23/82	29	9	
SHEN0045	Yes	00400	PH (STANDARD UNITS)	04/28/87-04/28/87	0	1	
SHEN0046	Yes	00400	PH (STANDARD UNITS)	04/28/87-04/28/87	0	1	
SHEN0048	No	00400	PH (STANDARD UNITS)	01/27/82-06/24/82	0	3	
SHEN0050	No	00400	PH (STANDARD UNITS)	05/23/72-02/13/73	0	2	
SHEN0051	No	00400	PH (STANDARD UNITS)	03/02/70-03/01/79	8	93	
SHEN0052	Yes	00400	PH (STANDARD UNITS)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00400	PH (STANDARD UNITS)	08/19/81-06/24/82	0	4	
SHEN0054	Yes	00400	PH (STANDARD UNITS)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00400	PH (STANDARD UNITS)	08/16/87-07/30/97	9	41	
SHEN0058	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0059	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0072	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0074	Yes	00400	PH (STANDARD UNITS)	04/24/87-04/24/87	0	1	
SHEN0076	Yes	00400	PH (STANDARD UNITS)	09/21/81-06/23/82	0	4	
SHEN0078	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00400	PH (STANDARD UNITS)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00400	PH (STANDARD UNITS)	03/12/92-11/01/94	2	5	
SHEN0087	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	4	
SHEN0098	No	00400	PH (STANDARD UNITS)	09/21/81-06/23/82	0	4	
SHEN0099	Yes	00400	PH (STANDARD UNITS)	04/29/87-04/29/87	0	1	
SHEN0100	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0105	No	00400	PH (STANDARD UNITS)	04/29/87-04/29/87	0	1	
SHEN0107	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	5	
SHEN0116	Yes	00400	PH (STANDARD UNITS)	09/21/81-06/23/82	0	4	
SHEN0117	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0124	Yes	00400	PH (STANDARD UNITS)	09/23/81-06/24/82	0	4	
SHEN0125	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00400	PH (STANDARD UNITS)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00400	PH (STANDARD UNITS)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00400	PH (STANDARD UNITS)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00400	PH (STANDARD UNITS)	11/11/92-01/19/95	2	100	
SHEN0133	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0135	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0137	No	00400	PH (STANDARD UNITS)	01/14/77-01/14/77	0	1	
SHEN0138	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00400	PH (STANDARD UNITS)	03/08/92-04/09/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0145	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0148	No	00400	PH (STANDARD UNITS)	08/17/81-06/25/82	0	6	
SHEN0149	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0153	Yes	00400	PH (STANDARD UNITS)	09/21/81-06/23/82	0	4	
SHEN0154	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00400	PH (STANDARD UNITS)	03/08/92-10/06/94	2	7	
SHEN0158	No	00400	PH (STANDARD UNITS)	01/13/77-01/13/77	0	1	
SHEN0161	No	00400	PH (STANDARD UNITS)	10/01/48-06/06/94	45	40	S
SHEN0162	No	00400	PH (STANDARD UNITS)	09/20/67-12/21/98	31	297	T,A,S
SHEN0163	No	00400	PH (STANDARD UNITS)	09/13/93-09/13/93	0	1	
SHEN0164	No	00400	PH (STANDARD UNITS)	06/10/93-12/21/98	5	68	
SHEN0167	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0168	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0169	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0170	No	00400	PH (STANDARD UNITS)	08/17/81-06/25/82	0	6	
SHEN0171	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00400	PH (STANDARD UNITS)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00400	PH (STANDARD UNITS)	03/29/86-06/20/95	9	450	
SHEN0176	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00400	PH (STANDARD UNITS)	10/16/86-07/22/93	6	339	
SHEN0180	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00400	PH (STANDARD UNITS)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0184	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0185	Yes	00400	PH (STANDARD UNITS)	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	00400	PH (STANDARD UNITS)	11/02/94-11/02/94	0	1	
SHEN0188	Yes	00400	PH (STANDARD UNITS)	06/22/92-06/22/92	0	1	
SHEN0189	Yes	00400	PH (STANDARD UNITS)	03/31/81-07/29/97	16	585	
SHEN0190	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0191	Yes	00400	PH (STANDARD UNITS)	08/18/81-06/24/82	0	6	
SHEN0193	Yes	00400	PH (STANDARD UNITS)	09/29/83-07/22/93	9	437	
SHEN0194	Yes	00400	PH (STANDARD UNITS)	03/27/68-06/24/82	14	11	
SHEN0196	No	00400	PH (STANDARD UNITS)	05/23/72-02/13/73	0	2	
SHEN0201	No	00400	PH (STANDARD UNITS)	10/12/48-06/06/94	45	22	
SHEN0202	No	00400	PH (STANDARD UNITS)	02/13/73-02/13/73	0	1	
SHEN0204	No	00400	PH (STANDARD UNITS)	04/30/79-12/21/98	19	203	
SHEN0206	No	00400	PH (STANDARD UNITS)	08/17/81-06/25/82	0	6	
SHEN0209	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0211	No	00400	PH (STANDARD UNITS)	11/02/79-07/29/97	17	842	A
SHEN0217	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0218	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0220	No	00400	PH (STANDARD UNITS)	05/20/82-06/24/82	0	2	
SHEN0224	No	00400	PH (STANDARD UNITS)	02/13/73-02/13/73	0	1	
SHEN0225	No	00400	PH (STANDARD UNITS)	03/02/70-03/01/79	8	94	
SHEN0226	No	00400	PH (STANDARD UNITS)	06/24/98-06/24/98	0	1	
SHEN0231	No	00400	PH (STANDARD UNITS)	11/19/69-02/19/74	4	49	
SHEN0233	No	00400	PH (STANDARD UNITS)	02/13/73-02/13/73	0	1	
SHEN0234	No	00400	PH (STANDARD UNITS)	03/02/70-11/02/77	7	85	
SHEN0235	No	00400	PH (STANDARD UNITS)	07/07/68-03/01/79	10	100	
SHEN0236	No	00400	PH (STANDARD UNITS)	03/16/82-06/24/82	0	2	
SHEN0237	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0238	Yes	00400	PH (STANDARD UNITS)	03/16/82-06/21/82	0	3	
SHEN0239	No	00400	PH (STANDARD UNITS)	01/17/77-01/17/77	0	1	
SHEN0241	No	00400	PH (STANDARD UNITS)	01/17/77-01/17/77	0	1	
SHEN0242	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0244	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0245	Yes	00400	PH (STANDARD UNITS)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00400	PH (STANDARD UNITS)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00400	PH (STANDARD UNITS)	03/13/92-04/01/93	1	3	
SHEN0249	No	00400	PH (STANDARD UNITS)	06/10/82-06/25/82	0	2	
SHEN0251	No	00400	PH (STANDARD UNITS)	11/19/69-05/14/73	3	44	
SHEN0252	No	00400	PH (STANDARD UNITS)	04/24/79-12/21/98	19	203	
SHEN0256	No	00400	PH (STANDARD UNITS)	07/22/93-12/10/98	5	69	
SHEN0258	Yes	00400	PH (STANDARD UNITS)	03/13/92-04/01/93	1	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0259	Yes	00400	PH (STANDARD UNITS)	03/13/92-08/19/93	1	4	
SHEN0260	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0261	Yes	00400	PH (STANDARD UNITS)	03/13/92-08/19/93	1	4	
SHEN0263	No	00400	PH (STANDARD UNITS)	10/08/52-05/23/69	16	6	
SHEN0265	Yes	00400	PH (STANDARD UNITS)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00400	PH (STANDARD UNITS)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00400	PH (STANDARD UNITS)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00400	PH (STANDARD UNITS)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00400	PH (STANDARD UNITS)	03/13/92-11/19/94	2	5	
SHEN0273	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0274	Yes	00400	PH (STANDARD UNITS)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00400	PH (STANDARD UNITS)	08/14/87-07/30/97	9	41	
SHEN0277	No	00400	PH (STANDARD UNITS)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00400	PH (STANDARD UNITS)	08/18/81-06/25/82	0	6	
SHEN0281	Yes	00400	PH (STANDARD UNITS)	01/17/77-01/17/77	0	1	
SHEN0282	No	00400	PH (STANDARD UNITS)	01/07/92-11/30/98	6	30	
SHEN0283	Yes	00400	PH (STANDARD UNITS)	09/25/81-09/25/81	0	1	
SHEN0284	No	00400	PH (STANDARD UNITS)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00400	PH (STANDARD UNITS)	09/25/81-09/25/81	0	1	
SHEN0287	No	00400	PH (STANDARD UNITS)	07/16/68-03/01/79	10	101	
SHEN0289	No	00400	PH (STANDARD UNITS)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00400	PH (STANDARD UNITS)	09/25/81-09/25/81	0	1	
SHEN0291	No	00400	PH (STANDARD UNITS)	01/12/77-01/12/77	0	1	
SHEN0294	Yes	00400	PH (STANDARD UNITS)	08/18/81-06/21/82	0	5	
SHEN0295	No	00400	PH (STANDARD UNITS)	08/17/81-06/22/82	0	6	
SHEN0297	No	00400	PH (STANDARD UNITS)	10/22/74-11/05/98	24	63	
SHEN0298	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0300	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0301	No	00400	PH (STANDARD UNITS)	05/22/72-02/13/73	0	2	
SHEN0302	No	00400	PH (STANDARD UNITS)	01/12/77-01/12/77	0	1	
SHEN0303	No	00400	PH (STANDARD UNITS)	01/18/77-01/18/77	0	1	
SHEN0304	No	00400	PH (STANDARD UNITS)	01/12/77-01/12/77	0	1	
SHEN0305	No	00400	PH (STANDARD UNITS)	05/22/72-02/14/73	0	2	
SHEN0306	No	00400	PH (STANDARD UNITS)	05/22/72-02/13/73	0	2	
SHEN0307	No	00400	PH (STANDARD UNITS)	05/22/72-02/13/73	0	2	
SHEN0308	Yes	00400	PH (STANDARD UNITS)	05/02/87-05/02/87	0	1	
SHEN0309	No	00400	PH (STANDARD UNITS)	05/02/87-05/02/87	0	1	
SHEN0310	No	00400	PH (STANDARD UNITS)	08/17/81-06/22/82	0	6	
SHEN0311	No	00400	PH (STANDARD UNITS)	06/12/97-11/30/98	1	7	
SHEN0316	No	00400	PH (STANDARD UNITS)	09/20/67-03/01/79	11	101	
SHEN0317	No	00400	PH (STANDARD UNITS)	10/01/48-08/31/76	27	2	
SHEN0318	No	00400	PH (STANDARD UNITS)	08/17/81-06/22/82	0	6	
SHEN0320	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0321	No	00400	PH (STANDARD UNITS)	08/11/81-06/21/82	0	6	
SHEN0322	No	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0323	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0324	No	00400	PH (STANDARD UNITS)	12/18/91-07/29/97	5	14	
SHEN0325	Yes	00400	PH (STANDARD UNITS)	01/18/77-01/18/77	0	1	
SHEN0327	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0328	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0329	Yes	00400	PH (STANDARD UNITS)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00400	PH (STANDARD UNITS)	08/17/81-06/23/82	0	6	
SHEN0332	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00400	PH (STANDARD UNITS)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00400	PH (STANDARD UNITS)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00400	PH (STANDARD UNITS)	04/16/93-07/25/97	4	223	
SHEN0336	Yes	00400	PH (STANDARD UNITS)	11/01/92-01/20/96	3	199	
SHEN0339	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0340	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0341	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00400	PH (STANDARD UNITS)	03/15/92-10/05/94	2	3	
SHEN0345	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0346	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	7	
SHEN0351	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0354	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0362	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0365	Yes	00400	PH (STANDARD UNITS)	08/11/81-06/21/82	0	6	
SHEN0366	No	00400	PH (STANDARD UNITS)	12/18/91-07/29/97	5	14	
SHEN0367	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	6	
SHEN0369	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0372	No	00400	PH (STANDARD UNITS)	10/22/74-09/29/98	23	56	
SHEN0373	No	00400	PH (STANDARD UNITS)	05/22/72-02/13/73	0	2	
SHEN0374	Yes	00400	PH (STANDARD UNITS)	03/15/92-05/08/97	5	8	
SHEN0377	Yes	00400	PH (STANDARD UNITS)	08/11/81-06/21/82	0	5	
SHEN0379	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0381	No	00400	PH (STANDARD UNITS)	08/15/68-03/01/79	10	94	
SHEN0382	No	00400	PH (STANDARD UNITS)	05/22/72-02/13/73	0	2	
SHEN0386	No	00400	PH (STANDARD UNITS)	02/08/88-12/07/98	10	108	
SHEN0387	No	00400	PH (STANDARD UNITS)	01/20/77-01/20/77	0	1	
SHEN0389	No	00400	PH (STANDARD UNITS)	05/22/72-02/14/73	0	2	
SHEN0391	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0392	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0393	No	00400	PH (STANDARD UNITS)	01/20/77-01/20/77	0	1	
SHEN0394	No	00400	PH (STANDARD UNITS)	02/04/76-02/04/76	0	1	
SHEN0396	No	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0397	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0407	Yes	00400	PH (STANDARD UNITS)	08/13/81-06/21/82	0	6	
SHEN0408	Yes	00400	PH (STANDARD UNITS)	04/24/88-07/30/97	9	39	
SHEN0410	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0411	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0423	No	00400	PH (STANDARD UNITS)	01/20/77-01/20/77	0	1	
SHEN0424	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0425	No	00400	PH (STANDARD UNITS)	04/22/77-04/22/77	0	1	
SHEN0426	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0427	No	00400	PH (STANDARD UNITS)	08/13/81-06/21/82	0	6	
SHEN0428	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0430	No	00400	PH (STANDARD UNITS)	04/11/77-04/11/77	0	1	
SHEN0432	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0433	Yes	00400	PH (STANDARD UNITS)	03/14/92-03/14/92	0	1	
SHEN0436	No	00400	PH (STANDARD UNITS)	08/20/81-06/21/82	0	6	
SHEN0437	No	00400	PH (STANDARD UNITS)	08/20/81-06/21/82	0	6	
SHEN0439	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0440	Yes	00400	PH (STANDARD UNITS)	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0444	No	00400	PH (STANDARD UNITS)	08/13/81-06/21/82	0	6	
SHEN0445	No	00400	PH (STANDARD UNITS)	08/14/81-06/21/82	0	6	
SHEN0446	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0448	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0450	No	00400	PH (STANDARD UNITS)	07/29/91-12/07/98	7	72	
SHEN0451	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0452	No	00400	PH (STANDARD UNITS)	10/23/75-10/23/75	0	1	
SHEN0453	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0454	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0455	Yes	00400	PH (STANDARD UNITS)	04/25/89-04/25/89	0	1	
SHEN0456	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0457	No	00400	PH (STANDARD UNITS)	08/21/81-06/24/82	0	6	
SHEN0458	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0463	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0465	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0468	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0469	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0471	Yes	00400	PH (STANDARD UNITS)	10/23/75-10/23/75	0	1	
SHEN0472	Yes	00400	PH (STANDARD UNITS)	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0476	No	00400	PH (STANDARD UNITS)	08/13/81-06/21/82	0	6	
SHEN0478	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0480	No	00400	PH (STANDARD UNITS)	01/20/77-01/20/77	0	1	
SHEN0481	No	00400	PH (STANDARD UNITS)	08/13/81-06/21/82	0	5	
SHEN0483	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00400	PH (STANDARD UNITS)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0491	No	00400	PH (STANDARD UNITS)	08/18/81-06/21/82	0	6	
SHEN0492	No	00400	PH (STANDARD UNITS)	04/11/77-04/11/77	0	1	
SHEN0493	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00400	PH (STANDARD UNITS)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00400	PH (STANDARD UNITS)	03/19/92-07/15/92	0	2	
SHEN0498	No	00400	PH (STANDARD UNITS)	08/21/81-06/24/82	0	6	
SHEN0499	No	00400	PH (STANDARD UNITS)	06/25/98-06/25/98	0	1	
SHEN0500	No	00400	PH (STANDARD UNITS)	04/26/76-06/06/79	3	19	
SHEN0501	No	00400	PH (STANDARD UNITS)	04/22/77-04/22/77	0	1	
SHEN0503	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0504	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0506	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0510	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0511	No	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0512	No	00400	PH (STANDARD UNITS)	08/12/87-07/30/97	9	41	
SHEN0514	No	00400	PH (STANDARD UNITS)	08/18/81-06/22/82	0	5	
SHEN0516	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0520	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0521	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0522	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00400	PH (STANDARD UNITS)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00400	PH (STANDARD UNITS)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	4	
SHEN0541	No	00400	PH (STANDARD UNITS)	08/10/81-06/24/82	0	5	
SHEN0542	No	00400	PH (STANDARD UNITS)	12/18/91-07/21/97	5	17	
SHEN0543	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0557	No	00400	PH (STANDARD UNITS)	03/12/87-07/28/97	10	513	
SHEN0559	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0560	No	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0562	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00400	PH (STANDARD UNITS)	03/21/92-03/21/92	0	1	
SHEN0566	No	00400	PH (STANDARD UNITS)	04/07/80-07/31/90	10	5	
SHEN0567	No	00400	PH (STANDARD UNITS)	08/10/81-06/24/82	0	6	
SHEN0568	No	00400	PH (STANDARD UNITS)	09/17/74-09/29/98	24	72	
SHEN0569	Yes	00400	PH (STANDARD UNITS)	08/10/81-06/24/82	0	6	
SHEN0573	No	00400	PH (STANDARD UNITS)	05/18/76-05/15/79	2	17	
SHEN0575	Yes	00400	PH (STANDARD UNITS)	04/08/77-04/08/77	0	1	
SHEN0577	No	00400	PH (STANDARD UNITS)	04/11/77-04/11/77	0	1	
SHEN0579	No	00400	PH (STANDARD UNITS)	07/01/68-05/15/79	10	84	
SHEN0582	No	00400	PH (STANDARD UNITS)	05/22/72-02/13/73	0	2	
SHEN0583	No	00400	PH (STANDARD UNITS)	07/16/68-12/14/78	10	96	
SHEN0585	No	00400	PH (STANDARD UNITS)	07/31/72-12/14/78	6	61	
SHEN0586	No	00400	PH (STANDARD UNITS)	07/01/68-08/24/74	6	58	
SHEN0587	No	00400	PH (STANDARD UNITS)	05/22/72-04/17/73	0	3	
SHEN0588	No	00400	PH (STANDARD UNITS)	07/06/72-04/12/74	1	15	
SHEN0590	No	00400	PH (STANDARD UNITS)	04/12/77-04/12/77	0	1	
SHEN0591	No	00400	PH (STANDARD UNITS)	08/11/81-06/24/82	0	6	
SHEN0592	No	00400	PH (STANDARD UNITS)	05/22/72-02/13/73	0	2	
SHEN0594	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0595	No	00400	PH (STANDARD UNITS)	10/29/87-07/30/97	9	40	
SHEN0597	No	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	2	
SHEN0598	Yes	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0599	Yes	00400	PH (STANDARD UNITS)	08/18/81-06/22/82	0	5	
SHEN0600	No	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0603	No	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0607	No	00400	PH (STANDARD UNITS)	08/18/81-06/22/82	0	6	
SHEN0608	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0615	No	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0616	No	00400	PH (STANDARD UNITS)	08/12/87-04/26/95	7	33	
SHEN0618	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0619	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00400	PH (STANDARD UNITS)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00400	PH (STANDARD UNITS)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00400	PH (STANDARD UNITS)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0630	No	00400	PH (STANDARD UNITS)	09/17/74-05/15/79	4	26	
SHEN0631	No	00400	PH (STANDARD UNITS)	08/04/94-07/21/97	2	5	
SHEN0632	No	00400	PH (STANDARD UNITS)	02/13/73-02/13/73	0	1	
SHEN0633	No	00400	PH (STANDARD UNITS)	05/22/72-02/13/73	0	3	
SHEN0634	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0635	No	00400	PH (STANDARD UNITS)	07/16/68-12/07/98	30	295	T,A,S
SHEN0636	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0651	No	00400	PH (STANDARD UNITS)	11/19/90-04/22/98	7	24	
SHEN0652	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0653	No	00400	PH (STANDARD UNITS)	04/12/77-04/12/77	0	1	
SHEN0654	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0657	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0659	No	00400	PH (STANDARD UNITS)	01/20/56-01/20/56	0	1	
SHEN0660	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0662	Yes	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0664	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00400	PH (STANDARD UNITS)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0676	No	00400	PH (STANDARD UNITS)	08/12/81-06/23/82	0	5	
SHEN0677	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0678	No	00400	PH (STANDARD UNITS)	03/24/75-03/24/75	0	1	
SHEN0679	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00400	PH (STANDARD UNITS)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	6	
SHEN0694	No	00400	PH (STANDARD UNITS)	08/18/81-06/21/82	0	5	
SHEN0695	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00400	PH (STANDARD UNITS)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0709	No	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0710	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0712	No	00400	PH (STANDARD UNITS)	08/27/80-08/27/80	0	1	
SHEN0713	Yes	00400	PH (STANDARD UNITS)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00400	PH (STANDARD UNITS)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00400	PH (STANDARD UNITS)	03/20/92-03/20/92	0	1	
SHEN0718	No	00400	PH (STANDARD UNITS)	04/12/77-04/12/77	0	1	
SHEN0719	No	00400	PH (STANDARD UNITS)	04/07/75-04/07/75	0	1	
SHEN0720	No	00400	PH (STANDARD UNITS)	04/07/75-04/07/75	0	1	
SHEN0721	No	00400	PH (STANDARD UNITS)	08/12/81-06/23/82	0	6	
SHEN0723	No	00400	PH (STANDARD UNITS)	04/07/75-04/07/75	0	1	
SHEN0724	No	00400	PH (STANDARD UNITS)	08/12/81-06/23/82	0	6	
SHEN0725	No	00400	PH (STANDARD UNITS)	08/12/81-06/23/82	0	6	
SHEN0727	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0728	No	00400	PH (STANDARD UNITS)	04/25/87-04/25/87	0	1	
SHEN0730	No	00400	PH (STANDARD UNITS)	08/20/81-06/23/82	0	5	
SHEN0732	No	00400	PH (STANDARD UNITS)	04/06/77-04/06/77	0	1	
SHEN0733	No	00400	PH (STANDARD UNITS)	08/20/81-06/23/82	0	5	
SHEN0735	No	00400	PH (STANDARD UNITS)	04/26/87-04/26/87	0	1	
SHEN0738	No	00400	PH (STANDARD UNITS)	03/26/68-10/01/68	0	6	
SHEN0739	No	00400	PH (STANDARD UNITS)	08/19/81-06/22/82	0	6	
SHEN0746	No	00400	PH (STANDARD UNITS)	02/13/73-04/18/73	0	2	
SHEN0747	No	00400	PH (STANDARD UNITS)	05/04/72-04/12/74	1	18	
SHEN0748	No	00400	PH (STANDARD UNITS)	10/10/52-05/21/69	16	2	
SHEN0749	No	00400	PH (STANDARD UNITS)	04/08/77-04/08/77	0	1	
SHEN0750	No	00400	PH (STANDARD UNITS)	07/16/68-12/14/78	10	90	
SHEN0755	No	00400	PH (STANDARD UNITS)	03/03/70-12/02/98	28	288	T,A,S
SHEN0756	No	00400	PH (STANDARD UNITS)	10/06/48-06/08/94	45	442	T,S
SHEN0760	No	00400	PH (STANDARD UNITS)	05/24/72-04/18/73	0	3	
SHEN0762	No	00400	PH (STANDARD UNITS)	09/10/93-09/10/93	0	1	
SHEN0765	No	00400	PH (STANDARD UNITS)	05/24/72-04/18/73	0	3	
SHEN0767	No	00400	PH (STANDARD UNITS)	08/18/92-09/15/92	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0768	No	00400	PH (STANDARD UNITS)	05/24/72-04/18/73	0	3	
SHEN0769	No	00400	PH (STANDARD UNITS)	05/24/72-04/18/73	0	3	
SHEN0772	No	00400	PH (STANDARD UNITS)	08/15/68-12/14/78	10	86	
SHEN0774	No	00400	PH (STANDARD UNITS)	09/19/67-08/02/88	20	196	T
SHEN0775	No	00400	PH (STANDARD UNITS)	11/09/88-12/01/98	10	105	
SHEN0777	No	00400	PH (STANDARD UNITS)	03/04/70-12/01/98	28	304	T,A,S
SHEN0783	No	00400	PH (STANDARD UNITS)	05/09/79-07/14/97	18	131	
SHEN0784	No	00400	PH (STANDARD UNITS)	03/04/70-03/02/79	8	86	
SHEN0054	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/16/87-07/30/97	9	41	
SHEN0059	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0072	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0078	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/92-11/01/94	2	5	
SHEN0087	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	4	
SHEN100	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN101	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN102	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	5	
SHEN103	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN107	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN108	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN110	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN112	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	6	
SHEN114	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	5	
SHEN117	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	5	
SHEN118	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN119	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN120	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	5	
SHEN122	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN125	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN126	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/01/92-07/29/97	4	263	
SHEN127	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN128	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/14/87-04/26/95	7	32	
SHEN129	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/16/93-06/05/97	4	151	
SHEN130	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/11/92-01/19/95	2	100	
SHEN135	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN138	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN140	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	6	
SHEN142	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN143	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN144	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-04/09/94	2	5	
SHEN145	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN147	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN149	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN150	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN154	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN155	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN156	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN157	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/08/92-10/06/94	2	7	
SHEN169	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN171	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN172	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN173	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN174	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	9	415	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0175	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	9	449	
SHEN0176	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10/16/86-07/22/93	6	337	
SHEN0180	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN0185	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	17	786	A
SHEN0187	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/94-11/02/94	0	1	
SHEN0189	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	16	584	
SHEN0193	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/29/83-07/22/93	9	435	
SHEN0211	No	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	17	823	A
SHEN0245	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-04/01/93	1	3	
SHEN0258	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-08/19/93	1	4	
SHEN0261	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-08/19/93	1	4	
SHEN0265	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-11/19/94	2	5	
SHEN0274	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/14/87-07/30/97	9	41	
SHEN0327	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0332	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	06/07/93-07/25/97	4	220	
SHEN0336	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/01/92-01/20/96	3	199	
SHEN0341	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-10/05/94	2	3	
SHEN0346	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	7	
SHEN0354	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0367	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	6	
SHEN0374	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/15/92-05/08/97	5	8	
SHEN0397	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0408	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/24/88-07/30/97	9	39	
SHEN0411	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0424	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0426	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0433	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/14/92-03/14/92	0	1	
SHEN0440	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/19/92-07/15/92	0	2	
SHEN0446	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/19/92-07/15/92	0	2	
SHEN0451	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/19/92-07/15/92	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0608	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0615	No	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0616	No	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/12/87-04/26/95	7	33	
SHEN0619	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0636	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0652	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0654	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0660	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0664	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0677	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	6	
SHEN0695	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0710	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/20/92-03/20/92	0	1	
SHEN0001	No	00403	PH, LAB, STANDARD UNITS SU	07/30/91-04/27/98	6	26	
SHEN0002	No	00403	PH, LAB, STANDARD UNITS SU	09/20/67-05/29/70	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0003	No	00403	PH, LAB, STANDARD UNITS SU	03/28/86-04/11/86	0	2	
SHEN0004	No	00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	14	147	
SHEN0014	No	00403	PH, LAB, STANDARD UNITS SU	03/28/86-04/11/86	0	2	
SHEN0017	No	00403	PH, LAB, STANDARD UNITS SU	12/03/68-09/28/71	2	8	
SHEN0024	No	00403	PH, LAB, STANDARD UNITS SU	11/29/94-07/29/97	2	4	
SHEN0025	No	00403	PH, LAB, STANDARD UNITS SU	08/19/81-06/24/82	0	6	
SHEN0033	No	00403	PH, LAB, STANDARD UNITS SU	09/20/67-05/29/70	2	8	
SHEN0037	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/23/82	0	6	
SHEN0038	No	00403	PH, LAB, STANDARD UNITS SU	09/13/93-09/13/93	0	1	
SHEN0042	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/23/82	0	6	
SHEN0043	No	00403	PH, LAB, STANDARD UNITS SU	05/15/77-10/06/80	3	54	
SHEN0044	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/23/82	0	6	
SHEN0048	No	00403	PH, LAB, STANDARD UNITS SU	01/27/82-06/24/82	0	4	
SHEN0051	No	00403	PH, LAB, STANDARD UNITS SU	03/02/70-05/29/70	0	3	
SHEN0052	Yes	00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00403	PH, LAB, STANDARD UNITS SU	08/19/81-06/24/82	0	6	
SHEN0070	Yes	00403	PH, LAB, STANDARD UNITS SU	04/01/86-04/15/86	0	2	
SHEN0076	Yes	00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	0	4	
SHEN0085	Yes	00403	PH, LAB, STANDARD UNITS SU	04/01/86-04/15/86	0	2	
SHEN0098	No	00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00403	PH, LAB, STANDARD UNITS SU	09/23/81-06/24/82	0	5	
SHEN0148	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/25/82	0	6	
SHEN0153	Yes	00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	0	4	
SHEN0162	No	00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	31	148	T,S
SHEN0163	No	00403	PH, LAB, STANDARD UNITS SU	09/13/93-09/13/93	0	1	
SHEN0164	No	00403	PH, LAB, STANDARD UNITS SU	06/10/93-12/21/98	5	65	
SHEN0170	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/25/82	0	6	
SHEN0183	Yes	00403	PH, LAB, STANDARD UNITS SU	03/28/86-04/17/86	0	2	
SHEN0188	Yes	00403	PH, LAB, STANDARD UNITS SU	06/22/92-06/22/92	0	1	
SHEN0191	Yes	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/24/82	0	6	
SHEN0201	No	00403	PH, LAB, STANDARD UNITS SU	06/23/92-06/23/92	0	1	
SHEN0204	No	00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	14	144	
SHEN0206	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/25/82	0	6	
SHEN0210	No	00403	PH, LAB, STANDARD UNITS SU	03/28/86-04/17/86	0	2	
SHEN0215	Yes	00403	PH, LAB, STANDARD UNITS SU	03/31/86-04/15/86	0	2	
SHEN0220	No	00403	PH, LAB, STANDARD UNITS SU	01/29/82-06/24/82	0	3	
SHEN0225	No	00403	PH, LAB, STANDARD UNITS SU	03/02/70-05/29/70	0	3	
SHEN0234	No	00403	PH, LAB, STANDARD UNITS SU	03/02/70-05/29/70	0	3	
SHEN0235	No	00403	PH, LAB, STANDARD UNITS SU	12/03/68-12/17/70	2	8	
SHEN0236	No	00403	PH, LAB, STANDARD UNITS SU	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00403	PH, LAB, STANDARD UNITS SU	03/16/82-06/21/82	0	3	
SHEN0240	No	00403	PH, LAB, STANDARD UNITS SU	03/31/86-04/15/86	0	2	
SHEN0249	No	00403	PH, LAB, STANDARD UNITS SU	06/10/82-06/25/82	0	2	
SHEN0252	No	00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	16	147	
SHEN0256	No	00403	PH, LAB, STANDARD UNITS SU	07/22/93-12/10/98	5	67	
SHEN0277	No	00403	PH, LAB, STANDARD UNITS SU	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/25/82	0	6	
SHEN0282	No	00403	PH, LAB, STANDARD UNITS SU	01/07/92-11/30/98	6	26	
SHEN0283	Yes	00403	PH, LAB, STANDARD UNITS SU	09/25/81-09/25/81	0	1	
SHEN0284	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00403	PH, LAB, STANDARD UNITS SU	09/25/81-09/25/81	0	1	
SHEN0287	No	00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/17/70	2	8	
SHEN0289	No	00403	PH, LAB, STANDARD UNITS SU	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00403	PH, LAB, STANDARD UNITS SU	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/21/82	0	6	
SHEN0295	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/22/82	0	6	
SHEN0297	No	00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	8	58	
SHEN0310	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/22/82	0	6	
SHEN0311	No	00403	PH, LAB, STANDARD UNITS SU	06/12/97-11/30/98	1	7	
SHEN0316	No	00403	PH, LAB, STANDARD UNITS SU	09/20/67-06/28/70	2	11	
SHEN0318	No	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/22/82	0	6	
SHEN0321	No	00403	PH, LAB, STANDARD UNITS SU	08/11/81-06/21/82	0	6	
SHEN0324	No	00403	PH, LAB, STANDARD UNITS SU	12/18/91-07/29/97	5	12	
SHEN0329	Yes	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00403	PH, LAB, STANDARD UNITS SU	08/11/81-06/21/82	0	6	
SHEN0366	No	00403	PH, LAB, STANDARD UNITS SU	12/18/91-07/29/97	5	12	
SHEN0372	No	00403	PH, LAB, STANDARD UNITS SU	11/19/90-09/29/98	7	30	
SHEN0377	Yes	00403	PH, LAB, STANDARD UNITS SU	08/11/81-06/21/82	0	6	
SHEN0381	No	00403	PH, LAB, STANDARD UNITS SU	12/05/68-09/24/73	4	9	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0386	No	00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	10	105	
SHEN0407	Yes	00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	0	6	
SHEN0427	No	00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	0	6	
SHEN0436	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/21/82	0	6	
SHEN0437	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/21/82	0	6	
SHEN0444	No	00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	0	6	
SHEN0445	No	00403	PH, LAB, STANDARD UNITS SU	08/14/81-06/21/82	0	6	
SHEN0450	No	00403	PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	7	73	
SHEN0457	No	00403	PH, LAB, STANDARD UNITS SU	08/21/81-06/24/82	0	6	
SHEN0462	Yes	00403	PH, LAB, STANDARD UNITS SU	03/31/86-04/11/86	0	2	
SHEN0476	No	00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	0	6	
SHEN0481	No	00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	0	6	
SHEN0491	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/21/82	0	6	
SHEN0498	No	00403	PH, LAB, STANDARD UNITS SU	08/21/81-06/24/82	0	6	
SHEN0514	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/22/82	0	6	
SHEN0541	No	00403	PH, LAB, STANDARD UNITS SU	08/10/81-06/24/82	0	6	
SHEN0542	No	00403	PH, LAB, STANDARD UNITS SU	12/18/91-07/21/97	5	16	
SHEN0558	No	00403	PH, LAB, STANDARD UNITS SU	03/31/86-04/11/86	0	2	
SHEN0566	No	00403	PH, LAB, STANDARD UNITS SU	04/07/80-07/31/90	10	9	
SHEN0567	No	00403	PH, LAB, STANDARD UNITS SU	08/10/81-06/24/82	0	6	
SHEN0568	No	00403	PH, LAB, STANDARD UNITS SU	11/19/90-09/29/98	7	29	
SHEN0569	Yes	00403	PH, LAB, STANDARD UNITS SU	08/10/81-06/24/82	0	6	
SHEN0579	No	00403	PH, LAB, STANDARD UNITS SU	10/08/68-07/21/78	9	7	
SHEN0583	No	00403	PH, LAB, STANDARD UNITS SU	12/05/68-09/24/73	4	9	
SHEN0585	No	00403	PH, LAB, STANDARD UNITS SU	09/24/73-09/24/73	0	1	
SHEN0586	No	00403	PH, LAB, STANDARD UNITS SU	10/08/68-05/07/70	1	6	
SHEN0588	No	00403	PH, LAB, STANDARD UNITS SU	09/24/73-09/24/73	0	1	
SHEN0591	No	00403	PH, LAB, STANDARD UNITS SU	08/11/81-06/24/82	0	6	
SHEN0599	Yes	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/22/82	0	6	
SHEN0607	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/22/82	0	6	
SHEN0631	No	00403	PH, LAB, STANDARD UNITS SU	08/04/94-07/21/97	2	4	
SHEN0635	No	00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	30	154	T,S
SHEN0651	No	00403	PH, LAB, STANDARD UNITS SU	11/19/90-04/22/98	7	26	
SHEN0676	No	00403	PH, LAB, STANDARD UNITS SU	08/12/81-06/23/82	0	6	
SHEN0694	No	00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/21/82	0	6	
SHEN0719	No	00403	PH, LAB, STANDARD UNITS SU	04/07/75-04/07/75	0	1	
SHEN0720	No	00403	PH, LAB, STANDARD UNITS SU	04/07/75-04/07/75	0	1	
SHEN0721	No	00403	PH, LAB, STANDARD UNITS SU	08/12/81-06/23/82	0	6	
SHEN0723	No	00403	PH, LAB, STANDARD UNITS SU	04/07/75-04/07/75	0	1	
SHEN0724	No	00403	PH, LAB, STANDARD UNITS SU	08/12/81-06/23/82	0	6	
SHEN0725	No	00403	PH, LAB, STANDARD UNITS SU	08/12/81-06/23/82	0	6	
SHEN0730	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/23/82	0	6	
SHEN0733	No	00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/23/82	0	6	
SHEN0739	No	00403	PH, LAB, STANDARD UNITS SU	08/19/81-06/22/82	0	6	
SHEN0742	No	00403	PH, LAB, STANDARD UNITS SU	03/27/86-04/10/86	0	2	
SHEN0743	No	00403	PH, LAB, STANDARD UNITS SU	03/27/86-04/10/86	0	2	
SHEN0747	No	00403	PH, LAB, STANDARD UNITS SU	05/04/72-04/12/74	1	15	
SHEN0750	No	00403	PH, LAB, STANDARD UNITS SU	12/05/68-09/24/73	4	9	
SHEN0755	No	00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	28	229	T,S
SHEN0756	No	00403	PH, LAB, STANDARD UNITS SU	10/02/80-06/17/86	5	46	
SHEN0762	No	00403	PH, LAB, STANDARD UNITS SU	09/10/93-09/10/93	0	1	
SHEN0772	No	00403	PH, LAB, STANDARD UNITS SU	12/05/68-09/24/73	4	9	
SHEN0774	No	00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	20	141	T
SHEN0775	No	00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	10	102	
SHEN0777	No	00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	28	216	T,S
SHEN0783	No	00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	15	86	
SHEN0784	No	00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	8	84	
SHEN0020	No	00405	CARBON DIOXIDE (MG/L AS CO2)	03/11/77-03/11/77	0	1	
SHEN0022	No	00405	CARBON DIOXIDE (MG/L AS CO2)	03/11/77-03/11/77	0	1	
SHEN0161	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/08/69-04/08/69	0	1	
SHEN0201	No	00405	CARBON DIOXIDE (MG/L AS CO2)	04/08/69-04/08/69	0	1	
SHEN0231	No	00405	CARBON DIOXIDE (MG/L AS CO2)	12/13/72-12/13/72	0	1	
SHEN0251	No	00405	CARBON DIOXIDE (MG/L AS CO2)	12/13/72-12/13/72	0	1	
SHEN0738	No	00405	CARBON DIOXIDE (MG/L AS CO2)	03/26/68-10/01/68	0	6	
SHEN0748	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/10/52-10/10/52	0	1	
SHEN0756	No	00405	CARBON DIOXIDE (MG/L AS CO2)	10/01/72-08/01/79	6	45	
SHEN0028	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/14/94-09/16/97	3	7	
SHEN0029	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/18/96-06/18/96	0	1	
SHEN0047	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/95-06/19/95	0	1	
SHEN0049	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/15/95-06/09/98	2	7	
SHEN0056	Yes	00406	PH, FIELD, STANDARD UNITS SU	04/26/95-10/29/97	2	6	
SHEN0057	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/22/94-06/15/98	3	9	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0068	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/15/95-06/11/98	2	4	
SHEN0071	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/17/96-06/15/98	1	6	
SHEN0073	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/19/95-06/19/95	0	1	
SHEN0075	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/20/95-06/11/98	2	4	
SHEN0077	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/20/95-06/20/95	0	1	
SHEN0086	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/14/95-06/10/98	2	6	
SHEN0089	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	0	2	
SHEN0091	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	0	1	
SHEN0093	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/31/95-06/17/98	3	4	
SHEN0096	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	0	1	
SHEN0097	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	0	1	
SHEN0104	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/31/95-05/31/95	0	1	
SHEN0106	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/01/95-06/17/98	3	4	
SHEN0109	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/31/95-05/31/95	0	3	
SHEN0111	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	0	1	
SHEN0113	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	0	1	
SHEN0115	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	0	2	
SHEN0121	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	0	1	
SHEN0123	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/31/95-05/31/95	0	1	
SHEN0131	Yes	00406	PH, FIELD, STANDARD UNITS SU	04/26/95-04/26/95	0	1	
SHEN0132	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/23/94-06/16/98	3	6	
SHEN0134	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/29/91-05/13/97	5	15	
SHEN0136	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	0	1	
SHEN0139	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	0	2	
SHEN0141	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	0	1	
SHEN0146	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/07/95-06/07/95	0	1	
SHEN0151	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/07/95-06/07/95	0	1	
SHEN0152	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/30/91-05/21/97	5	15	
SHEN0165	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/21/95-06/21/95	0	1	
SHEN0166	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/21/95-06/21/95	0	2	
SHEN0186	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/16/97-09/16/97	0	1	
SHEN0192	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/26/96-05/21/97	0	3	
SHEN0195	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/15/94-06/15/94	0	3	
SHEN0197	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/05/94-07/05/94	0	3	
SHEN0207	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/07/94-07/07/94	0	3	
SHEN0208	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/12/95-07/12/95	0	1	
SHEN0212	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/12/95-07/12/95	0	1	
SHEN0216	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/07/94-07/07/94	0	3	
SHEN0221	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/21/94-06/21/94	0	4	
SHEN0227	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/17/97-06/17/97	0	1	
SHEN0243	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/04/96-09/15/97	1	3	
SHEN0247	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/16/91-05/21/97	5	10	
SHEN0255	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/04/96-06/23/98	2	5	
SHEN0257	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/12/94-07/12/94	0	3	
SHEN0264	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/11/94-06/23/98	3	8	
SHEN0270	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/24/96-06/24/98	2	3	
SHEN0271	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/29/91-05/14/97	5	15	
SHEN0272	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/28/94-06/24/98	3	5	
SHEN0276	Yes	00406	PH, FIELD, STANDARD UNITS SU	04/26/95-10/29/97	2	6	
SHEN0279	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/11/95-06/22/98	2	2	
SHEN0285	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/22/98-06/22/98	0	1	
SHEN0299	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/17/95-08/17/95	0	1	
SHEN0312	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/08/95-08/08/95	0	1	
SHEN0326	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/13/95-07/06/98	2	5	
SHEN0331	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/13/95-06/29/98	2	4	
SHEN0337	Yes	00406	PH, FIELD, STANDARD UNITS SU	04/27/95-04/27/95	0	1	
SHEN0338	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/28/91-05/15/97	5	17	
SHEN0342	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/24/95-05/24/95	0	1	
SHEN0348	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/24/95-05/24/95	0	2	
SHEN0352	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/26/95-07/26/95	0	1	
SHEN0353	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/24/95-06/30/98	3	5	
SHEN0357	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/25/95-05/25/95	0	2	
SHEN0359	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/30/95-05/30/95	0	2	
SHEN0361	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/30/95-07/08/98	3	5	
SHEN0364	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/30/95-05/30/95	0	2	
SHEN0370	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/25/95-07/08/98	3	5	
SHEN0371	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/11/96-07/07/98	1	3	
SHEN0375	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/25/95-07/25/95	0	1	
SHEN0376	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/11/91-05/15/97	5	15	
SHEN0378	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/10/96-07/07/98	1	3	
SHEN0380	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/02/94-07/01/96	1	2	
SHEN0388	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/25/94-07/01/96	1	4	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0390	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/10/96-07/07/98	1	4	
SHEN0395	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/02/94-08/02/94	0	1	
SHEN0401	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/22/95-07/13/98	2	4	
SHEN0405	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/28/91-05/22/97	5	13	
SHEN0406	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/08/95-06/08/95	0	1	
SHEN0409	Yes	00406	PH, FIELD, STANDARD UNITS SU	04/27/95-10/29/97	2	6	
SHEN0416	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/03/91-05/28/97	5	10	
SHEN0418	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/26/95-07/13/98	2	4	
SHEN0421	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/11/96-07/13/98	2	3	
SHEN0429	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/24/94-08/24/94	0	3	
SHEN0431	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/14/95-08/14/95	0	1	
SHEN0434	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/13/97-08/13/97	0	1	
SHEN0438	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/22/91-05/22/97	6	13	
SHEN0441	Yes	00406	PH, FIELD, STANDARD UNITS SU	04/27/95-10/29/97	2	6	
SHEN0443	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/10/95-08/10/95	0	1	
SHEN0447	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/13/94-06/25/97	2	4	
SHEN0460	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/03/91-05/28/97	5	9	
SHEN0473	Yes	00406	PH, FIELD, STANDARD UNITS SU	04/27/95-10/29/97	2	8	
SHEN0474	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/09/95-08/09/95	0	1	
SHEN0477	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/03/98-08/03/98	0	1	
SHEN0482	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/14/94-06/25/97	2	4	
SHEN0489	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/16/95-09/23/97	2	5	
SHEN0490	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/15/95-07/21/98	2	4	
SHEN0502	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/25/96-07/21/98	1	3	
SHEN0505	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/24/96-07/20/98	1	3	
SHEN0507	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/17/95-07/16/98	2	2	
SHEN0508	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/24/96-07/20/98	1	3	
SHEN0513	No	00406	PH, FIELD, STANDARD UNITS SU	04/27/95-10/29/97	2	6	
SHEN0515	No	00406	PH, FIELD, STANDARD UNITS SU	08/10/94-07/08/96	1	5	
SHEN0518	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/23/91-05/27/97	6	12	
SHEN0519	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/01/94-06/30/97	2	3	
SHEN0536	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/11/94-08/11/94	0	3	
SHEN0539	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/22/94-08/22/94	0	6	
SHEN0547	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/02/96-07/02/96	0	1	
SHEN0548	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/22/91-05/29/97	6	10	
SHEN0552	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/06/90-05/14/97	6	14	
SHEN0556	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/01/94-06/18/98	3	5	
SHEN0561	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/16/94-07/02/96	1	7	
SHEN0570	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/16/95-05/16/95	0	1	
SHEN0571	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/17/95-05/17/95	0	1	
SHEN0572	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/12/96-06/18/98	2	3	
SHEN0576	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/21/95-07/09/98	2	2	
SHEN0578	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/17/95-05/17/95	0	1	
SHEN0580	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/27/94-07/27/94	0	3	
SHEN0584	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/17/95-05/17/95	0	1	
SHEN0596	No	00406	PH, FIELD, STANDARD UNITS SU	04/26/95-10/29/97	2	6	
SHEN0605	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/08/95-07/14/98	3	4	
SHEN0611	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/21/95-08/21/95	0	1	
SHEN0613	No	00406	PH, FIELD, STANDARD UNITS SU	08/07/96-07/28/98	1	3	
SHEN0614	No	00406	PH, FIELD, STANDARD UNITS SU	05/23/91-05/27/97	6	16	
SHEN0617	No	00406	PH, FIELD, STANDARD UNITS SU	04/26/95-04/26/95	0	1	
SHEN0624	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/21/97-07/14/98	0	2	
SHEN0626	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/22/95-05/22/95	0	1	
SHEN0637	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/21/97-07/14/98	0	2	
SHEN0644	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/22/95-05/22/95	0	1	
SHEN0648	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/08/94-08/08/94	0	3	
SHEN0650	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/06/96-07/27/98	1	3	
SHEN0661	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/09/94-08/09/94	0	1	
SHEN0663	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/13/94-05/17/95	0	5	
SHEN0666	Yes	00406	PH, FIELD, STANDARD UNITS SU	04/26/95-10/29/97	2	6	
SHEN0672	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/22/95-08/20/96	1	3	
SHEN0673	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/28/97-05/28/97	0	1	
SHEN0680	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/06/96-07/27/98	1	3	
SHEN0686	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/22/95-07/29/98	3	4	
SHEN0690	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	0	1	
SHEN0693	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	0	1	
SHEN0697	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	0	4	
SHEN0698	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/10/91-05/20/97	5	10	
SHEN0700	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	0	1	
SHEN0702	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	0	1	
SHEN0705	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/05/96-07/22/98	1	3	
SHEN0708	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/12/91-09/20/95	4	8	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0722	Yes	00406	PH, FIELD, STANDARD UNITS SU	07/23/96-07/15/98	1	3	
SHEN0726	Yes	00406	PH, FIELD, STANDARD UNITS SU	05/18/95-05/18/95	0	1	
SHEN0729	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/15/94-08/12/97	2	4	
SHEN0731	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/12/97-08/12/97	0	1	
SHEN0734	Yes	00406	PH, FIELD, STANDARD UNITS SU	08/03/94-08/16/95	1	5	
SHEN0736	Yes	00406	PH, FIELD, STANDARD UNITS SU	06/20/96-06/20/96	0	1	
SHEN0737	Yes	00406	PH, FIELD, STANDARD UNITS SU	09/12/91-05/20/97	5	11	
SHEN0003	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/28/86-04/11/86	0	2	
SHEN0014	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/28/86-04/11/86	0	2	
SHEN0054	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	08/16/87-07/30/97	9	41	
SHEN0059	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0078	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	4	
SHEN0100	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0107	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	5	
SHEN0117	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0125	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	11/11/92-01/19/95	2	100	
SHEN0135	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0138	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0149	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0154	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	2	7	
SHEN0174	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	9	450	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0179	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	6	339	
SHEN0181	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	5	277	
SHEN0183	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/28/86-04/17/86	0	2	
SHEN0185	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	17	805	A
SHEN0189	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	16	586	
SHEN0193	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	9	437	
SHEN0210	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/28/86-04/17/86	0	2	
SHEN0211	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	17	857	A
SHEN0215	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/86-04/15/86	0	2	
SHEN0240	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/86-04/15/86	0	2	
SHEN0245	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	1	3	
SHEN0258	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-08/19/93	1	4	
SHEN0261	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-08/19/93	1	4	
SHEN0265	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-11/19/94	2	5	
SHEN0274	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	08/14/87-07/30/97	9	41	
SHEN0327	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0332	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/25/97	4	223	
SHEN0336	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-01/20/96	3	199	
SHEN0341	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-10/05/94	2	3	
SHEN0346	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	7	
SHEN0354	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0367	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	6	
SHEN0374	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	5	8	
SHEN0397	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0408	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	04/24/88-07/30/97	9	39	
SHEN0411	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0424	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0426	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0433	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	0	1	
SHEN0440	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	0	2	
SHEN0446	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	0	2	
SHEN0451	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	0	2	
SHEN0456	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	0	2	
SHEN0458	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0609	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0615	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0616	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	08/12/87-04/26/95	7	33	
SHEN0619	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0636	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0652	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0654	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0660	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0664	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0677	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	6	
SHEN0695	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0710	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	0	1	
SHEN0742	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/27/86-04/10/86	0	2	
SHEN0743	No	00409	ALKALINITY,TOTAL,LOW LEVEL GRAN ANALYSIS UEQ/L	03/27/86-04/10/86	0	2	
SHEN0001	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/30/91-04/27/98	6	26	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0002	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-05/29/70	2	5	
SHEN0004	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/20/84-12/15/98	14	146	
SHEN0005	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/05/68-05/21/69	1	2	
SHEN0009	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0015	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0017	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/03/68-09/28/71	2	8	
SHEN0018	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/17/77-01/17/77	0	1	
SHEN0020	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/11/77-03/11/77	0	1	
SHEN0022	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/11/77-03/11/77	0	1	
SHEN0023	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/10/77-01/10/77	0	1	
SHEN0024	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/29/94-07/29/97	2	4	
SHEN0027	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0032	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0033	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-05/29/70	2	8	
SHEN0034	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/15/77-01/15/77	0	1	
SHEN0036	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/10/77-01/10/77	0	1	
SHEN0039	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/24/87-04/24/87	0	1	
SHEN0043	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/15/77-08/17/89	12	31	
SHEN0044	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/16/68-07/16/68	0	1	
SHEN0045	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/28/87-04/28/87	0	1	
SHEN0046	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/28/87-04/28/87	0	1	
SHEN0050	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0051	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/02/70-05/29/70	0	3	
SHEN0058	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0074	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/24/87-04/24/87	0	1	
SHEN0099	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/29/87-04/29/87	0	1	
SHEN0105	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/29/87-04/29/87	0	1	
SHEN0133	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0137	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/14/77-01/14/77	0	1	
SHEN0158	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/13/77-01/13/77	0	1	
SHEN0161	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/08/69-04/08/69	0	1	
SHEN0162	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-12/21/98	31	147	T,S
SHEN0164	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/10/93-12/21/98	5	65	
SHEN0167	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0168	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0184	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0188	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/22/92-06/22/92	0	1	
SHEN0190	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0194	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/27/68-12/13/68	0	6	
SHEN0196	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0201	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/05/68-05/21/69	1	4	
SHEN0204	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/20/84-12/21/98	14	143	
SHEN0209	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0217	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0218	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0225	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/02/70-05/29/70	0	3	
SHEN0231	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/18/70-12/27/73	3	8	
SHEN0234	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/02/70-05/29/70	0	3	
SHEN0235	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/03/68-12/17/70	2	8	
SHEN0237	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0239	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/17/77-01/17/77	0	1	
SHEN0241	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/17/77-01/17/77	0	1	
SHEN0242	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0244	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0251	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/19/69-03/14/73	3	38	
SHEN0252	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/04/82-12/21/98	16	146	
SHEN0256	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/22/93-12/10/98	5	67	
SHEN0260	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0263	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/05/68-05/23/69	1	3	
SHEN0273	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0281	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/17/77-01/17/77	0	1	
SHEN0282	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/07/92-11/30/98	6	26	
SHEN0287	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/05/68-12/17/70	2	8	
SHEN0291	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/12/77-01/12/77	0	1	
SHEN0297	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/26/90-11/05/98	8	59	
SHEN0298	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0300	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0301	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0302	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/12/77-01/12/77	0	1	
SHEN0303	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/77-01/18/77	0	1	
SHEN0304	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/12/77-01/12/77	0	1	
SHEN0305	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0306	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0307	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0308	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/02/87-05/02/87	0	1	
SHEN0309	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/02/87-05/02/87	0	1	
SHEN0311	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	06/12/97-11/30/98	1	7	
SHEN0316	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/20/67-06/28/70	2	10	
SHEN0320	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0322	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0323	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0324	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/18/91-07/29/97	5	12	
SHEN0325	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/18/77-01/18/77	0	1	
SHEN0328	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0339	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0340	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0345	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0351	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0366	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/18/91-07/29/97	5	12	
SHEN0369	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0372	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/19/90-09/29/98	7	30	
SHEN0373	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0379	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0381	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/05/68-06/28/70	1	8	
SHEN0382	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0386	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/08/88-12/07/98	10	105	
SHEN0387	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/20/77-01/20/77	0	1	
SHEN0389	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0391	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0392	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0393	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/20/77-01/20/77	0	1	
SHEN0396	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0410	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0423	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/20/77-01/20/77	0	1	
SHEN0425	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/22/77-04/22/77	0	1	
SHEN0428	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0430	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/11/77-04/11/77	0	1	
SHEN0432	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0439	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0448	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0450	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	07/29/91-12/07/98	7	73	
SHEN0454	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0455	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/89-04/25/89	0	1	
SHEN0468	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0480	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	01/20/77-01/20/77	0	1	
SHEN0492	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/11/77-04/11/77	0	1	
SHEN0501	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/22/77-04/22/77	0	1	
SHEN0503	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0504	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0506	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0520	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0521	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0542	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/18/91-07/21/97	5	16	
SHEN0560	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0566	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/07/80-07/31/90	10	9	
SHEN0568	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/19/90-09/29/98	7	29	
SHEN0575	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/08/77-04/08/77	0	1	
SHEN0577	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/11/77-04/11/77	0	1	
SHEN0579	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/08/68-07/21/78	9	7	
SHEN0582	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0583	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/05/68-06/28/70	1	8	
SHEN0586	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/08/68-05/07/70	1	6	
SHEN0587	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0590	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/12/77-04/12/77	0	1	
SHEN0592	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0598	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0618	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0631	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/04/94-07/21/97	2	4	
SHEN0633	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	2	
SHEN0635	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/05/68-12/07/98	30	151	T,S
SHEN0651	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/19/90-04/22/98	7	26	
SHEN0653	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/12/77-04/12/77	0	1	
SHEN0662	Yes	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0709	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0712	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	08/27/80-08/27/80	0	1	
SHEN0718	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/12/77-04/12/77	0	1	
SHEN0719	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/07/75-04/07/75	0	1	
SHEN0720	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/07/75-04/07/75	0	1	
SHEN0723	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/07/75-04/07/75	0	1	
SHEN0727	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0728	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/25/87-04/25/87	0	1	
SHEN0732	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/06/77-04/06/77	0	1	
SHEN0735	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/26/87-04/26/87	0	1	
SHEN0738	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/26/68-10/01/68	0	6	
SHEN0747	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/04/72-04/12/74	1	17	
SHEN0748	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	10/10/52-05/21/69	16	2	
SHEN0749	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	04/08/77-04/08/77	0	1	
SHEN0750	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/05/68-01/10/73	4	8	
SHEN0755	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/03/70-12/02/98	28	227	T,S
SHEN0756	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/11/55-11/13/84	29	308	T,S
SHEN0760	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
SHEN0765	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
SHEN0768	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
SHEN0769	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
SHEN0772	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	12/05/68-01/10/73	4	8	
SHEN0774	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	09/19/67-08/02/88	20	142	T
SHEN0775	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	11/09/88-12/01/98	10	101	
SHEN0777	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/04/70-12/01/98	28	217	T,S
SHEN0783	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	02/04/82-07/14/97	15	86	
SHEN0784	No	00410	ALKALINITY, TOTAL (MG/L AS CACO3)	03/04/70-03/02/79	8	86	
SHEN0002	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	02/25/68-02/25/68	0	1	
SHEN0017	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	09/28/71-09/28/71	0	1	
SHEN0316	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	02/25/68-06/28/70	2	2	
SHEN0381	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	06/28/70-06/28/70	0	1	
SHEN0755	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/09/70-11/14/74	4	9	
SHEN0774	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	02/25/68-12/05/68	0	2	
SHEN0784	No	00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/09/70-07/09/70	0	1	
SHEN0009	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0015	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0032	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0050	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0196	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/23/72-05/23/72	0	1	
SHEN0301	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0305	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0306	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0307	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0373	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0382	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0389	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0582	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0587	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0592	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	1	
SHEN0633	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/22/72-05/22/72	0	2	
SHEN0760	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
SHEN0765	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
SHEN0768	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
SHEN0769	No	00435	ACIDITY, TOTAL (MG/L AS CACO3)	05/24/72-05/24/72	0	1	
SHEN0003	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/28/86-04/11/86	0	2	
SHEN0005	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/29/54-05/21/69	14	3	
SHEN0011	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/04/30-09/04/30	0	1	
SHEN0014	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/28/86-04/11/86	0	2	
SHEN0020	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/11/77-03/11/77	0	1	
SHEN0022	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/11/77-03/11/77	0	1	
SHEN0040	No	00440	BICARBONATE ION (MG/L AS HCO3)	08/02/45-08/02/45	0	1	
SHEN0044	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/03/52-07/16/68	15	3	
SHEN0070	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	04/01/86-04/15/86	0	2	
SHEN0161	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/04/30-04/08/69	38	41	S
SHEN0183	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/28/86-04/17/86	0	2	
SHEN0194	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/27/68-12/13/68	0	6	
SHEN0201	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/04/30-05/21/69	38	22	
SHEN0210	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/31/86-04/15/86	0	2	
SHEN0231	No	00440	BICARBONATE ION (MG/L AS HCO3)	05/18/70-12/27/73	3	5	
SHEN0240	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/31/86-04/15/86	0	2	
SHEN0251	No	00440	BICARBONATE ION (MG/L AS HCO3)	11/19/69-03/14/73	3	12	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0263	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/14/30-05/23/69	38	9	
SHEN0317	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/01/48-10/01/48	0	1	
SHEN0462	Yes	00440	BICARBONATE ION (MG/L AS HCO3)	03/31/86-04/11/86	0	2	
SHEN0558	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/31/86-04/11/86	0	2	
SHEN0659	No	00440	BICARBONATE ION (MG/L AS HCO3)	01/20/56-01/20/56	0	1	
SHEN0738	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/26/68-10/01/68	0	6	
SHEN0742	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/27/86-04/10/86	0	2	
SHEN0743	No	00440	BICARBONATE ION (MG/L AS HCO3)	03/27/86-04/10/86	0	2	
SHEN0748	No	00440	BICARBONATE ION (MG/L AS HCO3)	10/10/52-05/21/69	16	2	
SHEN0756	No	00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	48	457	T,S
SHEN0005	No	00445	CARBONATE ION (MG/L AS CO3)	03/05/68-05/21/69	1	2	
SHEN0011	No	00445	CARBONATE ION (MG/L AS CO3)	09/04/30-09/04/30	0	1	
SHEN0020	No	00445	CARBONATE ION (MG/L AS CO3)	03/11/77-03/11/77	0	1	
SHEN0022	No	00445	CARBONATE ION (MG/L AS CO3)	03/11/77-03/11/77	0	1	
SHEN0044	No	00445	CARBONATE ION (MG/L AS CO3)	07/16/68-07/16/68	0	1	
SHEN0161	No	00445	CARBONATE ION (MG/L AS CO3)	09/04/30-04/08/69	38	3	
SHEN0194	Yes	00445	CARBONATE ION (MG/L AS CO3)	03/27/68-12/13/68	0	6	
SHEN0201	No	00445	CARBONATE ION (MG/L AS CO3)	09/04/30-05/21/69	38	6	
SHEN0231	No	00445	CARBONATE ION (MG/L AS CO3)	09/27/72-12/27/73	1	4	
SHEN0251	No	00445	CARBONATE ION (MG/L AS CO3)	09/27/72-03/14/73	0	3	
SHEN0263	No	00445	CARBONATE ION (MG/L AS CO3)	09/14/30-05/23/69	38	5	
SHEN0738	No	00445	CARBONATE ION (MG/L AS CO3)	03/26/68-10/01/68	0	6	
SHEN0748	No	00445	CARBONATE ION (MG/L AS CO3)	05/21/69-05/21/69	0	1	
SHEN0756	No	00445	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	48	269	T,S
SHEN0038	No	00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	00452	CARBONATE,WATER,DISS,INCR TIT, FIELD, AS CO3, MG/L	06/06/94-06/06/94	0	1	
SHEN0038	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	09/13/93-09/13/93	0	1	
SHEN0161	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/06/94-06/06/94	0	1	
SHEN0163	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/06/94-06/06/94	0	1	
SHEN0756	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	06/08/94-06/08/94	0	1	
SHEN0762	No	00453	BICARBONATE,WATER,DISS,INCR TIT,FIELD,AS HCO3,MG/L	09/10/93-09/10/93	0	1	
SHEN0001	No	00500	RESIDUE, TOTAL (MG/L)	07/30/91-08/26/92	1	4	
SHEN0002	No	00500	RESIDUE, TOTAL (MG/L)	02/25/68-05/29/70	2	4	
SHEN0004	No	00500	RESIDUE, TOTAL (MG/L)	04/30/79-08/13/92	13	38	
SHEN0017	No	00500	RESIDUE, TOTAL (MG/L)	12/03/68-05/29/70	1	7	
SHEN0033	No	00500	RESIDUE, TOTAL (MG/L)	12/03/68-05/29/70	1	7	
SHEN0051	No	00500	RESIDUE, TOTAL (MG/L)	03/02/70-11/02/77	7	5	
SHEN0162	No	00500	RESIDUE, TOTAL (MG/L)	03/02/70-08/10/92	22	40	
SHEN0204	No	00500	RESIDUE, TOTAL (MG/L)	04/30/79-08/10/92	13	37	
SHEN0225	No	00500	RESIDUE, TOTAL (MG/L)	03/02/70-11/02/77	7	5	
SHEN0234	No	00500	RESIDUE, TOTAL (MG/L)	03/02/70-11/02/77	7	5	
SHEN0235	No	00500	RESIDUE, TOTAL (MG/L)	12/03/68-05/29/70	1	7	
SHEN0252	No	00500	RESIDUE, TOTAL (MG/L)	04/24/79-08/10/92	13	36	
SHEN0282	No	00500	RESIDUE, TOTAL (MG/L)	01/07/92-07/27/92	0	3	
SHEN0287	No	00500	RESIDUE, TOTAL (MG/L)	12/05/68-05/29/70	1	7	
SHEN0297	No	00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	8	59	
SHEN0316	No	00500	RESIDUE, TOTAL (MG/L)	12/05/68-06/28/70	1	8	
SHEN0324	No	00500	RESIDUE, TOTAL (MG/L)	12/18/91-07/20/92	0	4	
SHEN0366	No	00500	RESIDUE, TOTAL (MG/L)	12/18/91-07/20/92	0	4	
SHEN0372	No	00500	RESIDUE, TOTAL (MG/L)	11/19/90-09/29/98	7	28	
SHEN0381	No	00500	RESIDUE, TOTAL (MG/L)	12/05/68-06/28/70	1	8	
SHEN0386	No	00500	RESIDUE, TOTAL (MG/L)	11/09/88-08/04/92	3	28	
SHEN0394	No	00500	RESIDUE, TOTAL (MG/L)	02/04/76-02/04/76	0	1	
SHEN0450	No	00500	RESIDUE, TOTAL (MG/L)	07/29/91-07/20/92	0	5	
SHEN0452	No	00500	RESIDUE, TOTAL (MG/L)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00500	RESIDUE, TOTAL (MG/L)	10/23/75-10/23/75	0	1	
SHEN0542	No	00500	RESIDUE, TOTAL (MG/L)	12/18/91-07/20/92	0	4	
SHEN0568	No	00500	RESIDUE, TOTAL (MG/L)	11/19/90-09/29/98	7	28	
SHEN0579	No	00500	RESIDUE, TOTAL (MG/L)	10/08/68-11/26/70	2	7	
SHEN0583	No	00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	10	92	
SHEN0585	No	00500	RESIDUE, TOTAL (MG/L)	07/31/72-02/06/79	6	60	
SHEN0586	No	00500	RESIDUE, TOTAL (MG/L)	10/08/68-11/26/70	2	7	
SHEN0588	No	00500	RESIDUE, TOTAL (MG/L)	07/06/72-04/12/74	1	17	
SHEN0635	No	00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	23	120	T
SHEN0651	No	00500	RESIDUE, TOTAL (MG/L)	11/19/90-04/22/98	7	25	
SHEN0678	No	00500	RESIDUE, TOTAL (MG/L)	03/24/75-03/24/75	0	1	
SHEN0719	No	00500	RESIDUE, TOTAL (MG/L)	04/07/75-04/07/75	0	1	
SHEN0720	No	00500	RESIDUE, TOTAL (MG/L)	04/07/75-04/07/75	0	1	
SHEN0723	No	00500	RESIDUE, TOTAL (MG/L)	04/07/75-04/07/75	0	1	
SHEN0747	No	00500	RESIDUE, TOTAL (MG/L)	09/20/72-09/20/72	0	1	
SHEN0750	No	00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	10	41	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0755	No	00500	RESIDUE, TOTAL (MG/L)	03/03/70-08/04/92	22	40	
SHEN0772	No	00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	10	82	
SHEN0774	No	00500	RESIDUE, TOTAL (MG/L)	04/25/68-02/05/85	16	19	
SHEN0775	No	00500	RESIDUE, TOTAL (MG/L)	11/09/88-08/04/92	3	28	
SHEN0777	No	00500	RESIDUE, TOTAL (MG/L)	03/04/70-08/04/92	22	44	
SHEN0783	No	00500	RESIDUE, TOTAL (MG/L)	05/09/79-08/04/92	13	22	
SHEN0784	No	00500	RESIDUE, TOTAL (MG/L)	03/04/70-06/22/77	7	4	
SHEN0001	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/30/91-08/26/92	1	4	
SHEN0002	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	02/25/68-05/29/70	2	4	
SHEN0004	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/30/79-08/13/92	13	39	
SHEN0017	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0033	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0051	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0162	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-08/10/92	22	40	
SHEN0204	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/30/79-08/10/92	13	36	
SHEN0225	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0234	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0235	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0252	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/24/79-08/10/92	13	36	
SHEN0282	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	01/07/92-07/27/92	0	3	
SHEN0287	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-05/29/70	1	7	
SHEN0297	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	8	59	
SHEN0316	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-06/28/70	1	8	
SHEN0324	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/18/91-07/20/92	0	4	
SHEN0366	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/18/91-07/20/92	0	4	
SHEN0372	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/19/90-09/29/98	7	27	
SHEN0381	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-06/28/70	1	8	
SHEN0386	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/09/88-08/04/92	3	28	
SHEN0394	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	02/04/76-02/04/76	0	1	
SHEN0450	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/29/91-07/20/92	0	5	
SHEN0452	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/23/75-10/23/75	0	1	
SHEN0542	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/18/91-07/20/92	0	4	
SHEN0568	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/19/90-09/29/98	7	27	
SHEN0579	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/08/68-11/26/70	2	7	
SHEN0583	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	10	92	
SHEN0585	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/31/72-02/06/79	6	60	
SHEN0586	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/08/68-11/26/70	2	7	
SHEN0588	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/06/72-04/12/74	1	17	
SHEN0635	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	23	121	T
SHEN0651	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/19/90-04/22/98	7	24	
SHEN0678	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/24/75-03/24/75	0	1	
SHEN0719	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0720	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0723	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0750	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	10	41	
SHEN0755	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/03/70-08/04/92	22	39	
SHEN0772	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	10	82	
SHEN0774	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/05/85	16	18	
SHEN0775	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/09/88-08/04/92	3	28	
SHEN0777	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/04/70-08/04/92	22	44	
SHEN0783	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/09/79-08/04/92	13	22	
SHEN0784	No	00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/04/70-06/22/77	7	4	
SHEN0001	No	00510	RESIDUE, TOTAL FIXED (MG/L)	02/25/92-08/26/92	0	3	
SHEN0002	No	00510	RESIDUE, TOTAL FIXED (MG/L)	02/25/68-05/29/70	2	4	
SHEN0004	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/30/79-08/13/92	13	39	
SHEN0017	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/03/68-05/29/70	1	7	
SHEN0033	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/03/68-05/29/70	1	7	
SHEN0051	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-11/02/77	7	5	
SHEN0162	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-08/10/92	22	40	
SHEN0204	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/30/79-08/10/92	13	37	
SHEN0225	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-11/02/77	7	5	
SHEN0234	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-11/02/77	7	5	
SHEN0235	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/03/68-05/29/70	1	7	
SHEN0252	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/24/79-08/10/92	13	36	
SHEN0282	No	00510	RESIDUE, TOTAL FIXED (MG/L)	01/07/92-07/27/92	0	3	
SHEN0287	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-05/29/70	1	7	
SHEN0297	No	00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	8	59	
SHEN0316	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-06/28/70	1	8	
SHEN0324	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/18/91-07/20/92	0	4	
SHEN0366	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/18/91-07/20/92	0	4	
SHEN0372	No	00510	RESIDUE, TOTAL FIXED (MG/L)	11/19/90-09/29/98	7	27	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0381	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-06/28/70	1	8	
SHEN0386	No	00510	RESIDUE, TOTAL FIXED (MG/L)	11/09/88-08/04/92	3	28	
SHEN0394	No	00510	RESIDUE, TOTAL FIXED (MG/L)	02/04/76-02/04/76	0	1	
SHEN0450	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/29/91-07/20/92	0	5	
SHEN0452	No	00510	RESIDUE, TOTAL FIXED (MG/L)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00510	RESIDUE, TOTAL FIXED (MG/L)	10/23/75-10/23/75	0	1	
SHEN0542	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/18/91-07/20/92	0	4	
SHEN0568	No	00510	RESIDUE, TOTAL FIXED (MG/L)	11/19/90-09/29/98	7	27	
SHEN0579	No	00510	RESIDUE, TOTAL FIXED (MG/L)	10/08/68-11/26/70	2	7	
SHEN0583	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	10	92	
SHEN0585	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/31/72-02/06/79	6	60	
SHEN0586	No	00510	RESIDUE, TOTAL FIXED (MG/L)	10/08/68-11/26/70	2	7	
SHEN0588	No	00510	RESIDUE, TOTAL FIXED (MG/L)	07/06/72-04/12/74	1	17	
SHEN0635	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	23	120	T
SHEN0651	No	00510	RESIDUE, TOTAL FIXED (MG/L)	11/19/90-04/22/98	7	24	
SHEN0678	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/24/75-03/24/75	0	1	
SHEN0719	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/07/75-04/07/75	0	1	
SHEN0720	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/07/75-04/07/75	0	1	
SHEN0723	No	00510	RESIDUE, TOTAL FIXED (MG/L)	04/07/75-04/07/75	0	1	
SHEN0750	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	10	41	
SHEN0755	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/03/70-08/04/92	22	39	
SHEN0772	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	10	82	
SHEN0774	No	00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-06/09/86	17	19	
SHEN0775	No	00510	RESIDUE, TOTAL FIXED (MG/L)	11/09/88-08/04/92	3	28	
SHEN0777	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/04/70-07/07/97	27	45	S
SHEN0783	No	00510	RESIDUE, TOTAL FIXED (MG/L)	05/09/79-08/04/92	13	22	
SHEN0784	No	00510	RESIDUE, TOTAL FIXED (MG/L)	03/04/70-06/22/77	7	4	
SHEN0006	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/23/97-08/04/97	0	2	
SHEN0019	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/23/97-08/04/97	0	2	
SHEN0021	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/23/97-08/04/97	0	2	
SHEN0162	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/24/98-06/24/98	0	1	
SHEN0226	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/24/98-06/24/98	0	1	
SHEN0231	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/18/70-05/15/72	1	3	
SHEN0251	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/18/70-05/15/72	1	3	
SHEN0499	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/25/98-06/25/98	0	1	
SHEN0774	No	00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	12/14/82-03/17/83	0	2	
SHEN0001	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/25/92-04/27/98	6	25	
SHEN0002	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/25/68-05/29/70	2	4	
SHEN0004	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	19	203	
SHEN0006	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0017	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0019	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0021	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0024	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/29/94-07/29/97	2	4	
SHEN0033	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0043	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/10/80-10/06/80	0	7	
SHEN0051	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0162	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	28	205	T,S
SHEN0164	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/10/93-12/21/98	5	65	
SHEN0204	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	19	201	
SHEN0225	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0226	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/24/98-06/24/98	0	1	
SHEN0231	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/18/70-12/27/73	3	8	
SHEN0234	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0235	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0251	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/18/70-03/14/73	2	6	
SHEN0252	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	19	199	
SHEN0256	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/22/93-12/10/98	5	67	
SHEN0282	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	01/07/92-11/30/98	6	26	
SHEN0287	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-05/29/70	1	7	
SHEN0297	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	8	59	
SHEN0311	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/12/97-11/30/98	1	7	
SHEN0316	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-10/26/78	9	9	
SHEN0324	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/18/91-07/29/97	5	12	
SHEN0366	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/18/91-07/29/97	5	12	
SHEN0372	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/19/90-09/29/98	7	30	
SHEN0381	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-06/28/70	1	8	
SHEN0386	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	10	105	
SHEN0394	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/04/76-02/04/76	0	1	
SHEN0450	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	7	73	
SHEN0452	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/23/75-10/23/75	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0499	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/25/98-06/25/98	0	1	
SHEN0542	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/18/91-07/21/97	5	15	
SHEN0566	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/07/80-07/31/90	10	10	
SHEN0568	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/19/90-09/29/98	7	29	
SHEN0579	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/27/69-11/26/70	1	6	
SHEN0583	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	91	
SHEN0585	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/31/72-02/06/79	6	59	
SHEN0586	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/27/69-11/26/70	1	6	
SHEN0588	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/06/72-04/12/74	1	17	
SHEN0631	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/04/94-07/21/97	2	4	
SHEN0635	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	30	284	T,A,S
SHEN0651	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/19/90-04/22/98	7	26	
SHEN0678	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/24/75-03/24/75	0	1	
SHEN0719	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0720	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0723	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0750	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	41	
SHEN0755	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	28	207	T,S
SHEN0772	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	82	
SHEN0774	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	19	120	
SHEN0775	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	10	103	
SHEN0777	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	28	214	T,S
SHEN0783	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	18	133	
SHEN0784	No	00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-06/22/77	7	4	
SHEN0001	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/25/92-04/27/98	6	25	
SHEN0002	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-05/29/70	0	3	
SHEN0004	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	19	203	
SHEN0006	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0017	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0019	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0021	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0024	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/29/94-07/29/97	2	4	
SHEN0033	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0043	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/10/80-10/06/80	0	7	
SHEN0051	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0162	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	28	205	T,S
SHEN0164	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/10/93-12/21/98	5	65	
SHEN0204	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	19	200	
SHEN0225	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0226	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/24/98-06/24/98	0	1	
SHEN0234	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0235	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0252	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	19	199	
SHEN0256	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/22/93-12/10/98	5	67	
SHEN0282	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	01/07/92-11/30/98	6	26	
SHEN0287	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-05/29/70	1	7	
SHEN0297	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	8	59	
SHEN0311	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/12/97-11/30/98	1	7	
SHEN0316	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-10/26/78	9	9	
SHEN0324	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/18/91-07/29/97	5	12	
SHEN0366	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/18/91-07/29/97	5	12	
SHEN0372	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/19/90-09/29/98	7	30	
SHEN0381	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-06/28/70	1	8	
SHEN0386	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	10	105	
SHEN0394	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/04/76-02/04/76	0	1	
SHEN0450	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	7	73	
SHEN0452	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/23/75-10/23/75	0	1	
SHEN0499	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/25/98-06/25/98	0	1	
SHEN0542	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/18/91-07/21/97	5	15	
SHEN0566	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/07/80-07/31/90	10	9	
SHEN0568	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/19/90-09/29/98	7	29	
SHEN0579	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/27/69-11/26/70	1	6	
SHEN0583	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	91	
SHEN0585	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/31/72-02/06/79	6	58	
SHEN0586	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/22/69-11/26/70	1	5	
SHEN0588	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/06/72-04/12/74	1	17	
SHEN0631	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/04/94-07/21/97	2	4	
SHEN0635	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	30	284	T,A,S
SHEN0651	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/19/90-04/22/98	7	26	
SHEN0678	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/24/75-03/24/75	0	1	
SHEN0719	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0720	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0723	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0750	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	40	
SHEN0755	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	28	207	T,S
SHEN0772	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	82	
SHEN0774	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	19	119	
SHEN0775	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	10	102	
SHEN0777	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	28	211	T,S
SHEN0783	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	18	134	
SHEN0784	No	00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-06/22/77	7	4	
SHEN0001	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/25/92-04/27/98	6	25	
SHEN0002	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/25/68-05/29/70	2	4	
SHEN0004	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	19	203	
SHEN0006	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0017	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0019	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0021	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/23/97-08/04/97	0	2	
SHEN0024	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/29/94-07/29/97	2	4	
SHEN0033	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0043	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/10/80-10/06/80	0	7	
SHEN0051	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0162	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	28	205	T,S
SHEN0164	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/10/93-12/21/98	5	65	
SHEN0204	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	19	201	
SHEN0225	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0226	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/24/98-06/24/98	0	1	
SHEN0234	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-11/02/77	7	5	
SHEN0235	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/03/68-05/29/70	1	7	
SHEN0252	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	19	200	
SHEN0256	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/22/93-12/10/98	5	67	
SHEN0282	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	01/07/92-11/30/98	6	26	
SHEN0287	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-05/29/70	1	7	
SHEN0297	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	8	59	
SHEN0311	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/12/97-11/30/98	1	7	
SHEN0316	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-10/26/78	9	9	
SHEN0324	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/18/91-07/29/97	5	12	
SHEN0366	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/18/91-07/29/97	5	12	
SHEN0372	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/19/90-09/29/98	7	30	
SHEN0381	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-06/28/70	1	8	
SHEN0386	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	10	105	
SHEN0394	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/04/76-02/04/76	0	1	
SHEN0450	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	7	73	
SHEN0452	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10/23/75-10/23/75	0	1	
SHEN0499	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/25/98-06/25/98	0	1	
SHEN0542	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/18/91-07/21/97	5	15	
SHEN0566	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/07/80-07/31/90	10	10	
SHEN0568	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/19/90-09/29/98	7	29	
SHEN0579	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/27/69-11/26/70	1	6	
SHEN0583	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	88	
SHEN0585	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/31/72-02/06/79	6	59	
SHEN0586	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/27/69-11/26/70	1	6	
SHEN0588	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/06/72-04/12/74	1	17	
SHEN0631	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/04/94-07/21/97	2	4	
SHEN0635	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	30	283	T,A,S
SHEN0651	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/19/90-04/22/98	7	26	
SHEN0678	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/24/75-03/24/75	0	1	
SHEN0719	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0720	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0723	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/07/75-04/07/75	0	1	
SHEN0750	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	40	
SHEN0755	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	28	207	T,S
SHEN0772	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	82	
SHEN0774	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	19	119	
SHEN0775	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	10	103	
SHEN0777	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	28	213	T,S
SHEN0783	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	18	134	
SHEN0784	No	00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-06/22/77	7	4	
SHEN0017	No	00545	RESIDUE, SETTLEABLE (ML/L)	12/03/68-12/03/68	0	1	
SHEN0033	No	00545	RESIDUE, SETTLEABLE (ML/L)	12/03/68-12/03/68	0	1	
SHEN0235	No	00545	RESIDUE, SETTLEABLE (ML/L)	12/03/68-12/03/68	0	1	
SHEN0583	No	00545	RESIDUE, SETTLEABLE (ML/L)	04/14/71-04/14/71	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0585	No	00545	RESIDUE, SETTLEABLE (ML/L)	06/24/75-02/06/79	3	24	
SHEN0317	No	00600	NITROGEN, TOTAL (MG/L AS N)	08/31/76-08/31/76	0	1	
SHEN0317	No	00603	NITROGEN TOTAL, BOTTOM DEPOSITS (MG/KG-N DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0756	No	00603	NITROGEN TOTAL, BOTTOM DEPOSITS (MG/KG-N DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0317	No	00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	08/31/76-08/31/76	0	1	
SHEN0739	No	00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	05/18/82-05/18/82	0	1	
SHEN0025	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/19/81-06/24/82	0	6	
SHEN0037	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/23/82	0	6	
SHEN0038	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0042	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/23/82	0	6	
SHEN0044	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/23/82	0	6	
SHEN0048	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/19/81-06/24/82	0	6	
SHEN0076	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0098	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/23/81-06/24/82	0	5	
SHEN0148	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/25/82	0	6	
SHEN0153	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0161	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/06/94-06/06/94	0	1	
SHEN0163	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0170	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/25/82	0	6	
SHEN0188	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/22/92-06/22/92	0	1	
SHEN0191	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/24/82	0	6	
SHEN0201	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/23/92-06/06/94	1	2	
SHEN0206	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/25/82	0	6	
SHEN0220	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	01/29/82-06/24/82	0	3	
SHEN0231	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/73-12/27/73	0	2	
SHEN0236	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	03/16/82-06/21/82	0	3	
SHEN0249	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/10/82-06/25/82	0	2	
SHEN0277	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/25/82	0	6	
SHEN0283	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/25/81-09/25/81	0	1	
SHEN0284	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/25/81-09/25/81	0	1	
SHEN0289	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/21/82	0	6	
SHEN0295	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/22/82	0	6	
SHEN0310	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/22/82	0	6	
SHEN0318	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/22/82	0	6	
SHEN0321	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/11/81-06/21/82	0	6	
SHEN0329	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/11/81-06/21/82	0	6	
SHEN0377	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/11/81-06/21/82	0	6	
SHEN0407	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0427	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0436	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/20/81-06/21/82	0	6	
SHEN0437	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/20/81-06/21/82	0	6	
SHEN0444	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0445	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/14/81-06/21/82	0	6	
SHEN0457	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/21/81-06/24/82	0	6	
SHEN0476	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0481	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0491	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/21/82	0	6	
SHEN0498	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/21/81-06/24/82	0	6	
SHEN0514	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/22/82	0	6	
SHEN0541	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/10/81-06/24/82	0	6	
SHEN0567	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/10/81-06/24/82	0	6	
SHEN0591	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/11/81-06/24/82	0	6	
SHEN0599	Yes	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/22/82	0	6	
SHEN0607	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/22/82	0	6	
SHEN0676	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/12/81-06/23/82	0	6	
SHEN0694	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/21/82	0	6	
SHEN0721	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/12/81-06/23/82	0	6	
SHEN0724	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/12/81-06/23/82	0	6	
SHEN0725	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/12/81-06/23/82	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0730	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/20/81-06/23/82	0	6	
SHEN0733	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/20/81-06/23/82	0	6	
SHEN0739	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/19/81-06/22/82	0	6	
SHEN0756	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/08/94-06/08/94	0	1	
SHEN0762	No	00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/93-09/10/93	0	1	
SHEN0001	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/25/92-04/27/98	6	25	
SHEN0002	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/25/68-06/11/74	6	20	
SHEN0004	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	24	240	T,A
SHEN0008	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0009	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0015	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/17/73	0	4	
SHEN0017	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	65	
SHEN0019	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/28/78-03/01/79	0	7	
SHEN0024	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/29/94-07/29/97	2	4	
SHEN0031	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0032	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0033	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	65	
SHEN0043	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/15/77-08/17/89	12	31	
SHEN0050	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0051	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	8	60	
SHEN0160	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0162	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	28	258	T,A,S
SHEN0164	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/10/93-12/21/98	5	64	
SHEN0196	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0199	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0200	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0202	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0204	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	19	199	
SHEN0223	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0224	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0225	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	8	61	
SHEN0229	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0233	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0234	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	7	52	
SHEN0235	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	66	
SHEN0252	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	19	195	
SHEN0254	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0256	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/93-12/10/98	5	67	
SHEN0282	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/07/92-11/30/98	6	27	
SHEN0287	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	8	62	
SHEN0293	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0297	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	24	68	
SHEN0301	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0305	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0306	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0307	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0311	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/12/97-11/30/98	1	7	
SHEN0315	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0316	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	8	61	
SHEN0317	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/31/76-08/31/76	0	1	
SHEN0324	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/18/91-07/29/97	5	12	
SHEN0366	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/18/91-07/29/97	5	12	
SHEN0372	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-09/29/98	23	57	
SHEN0373	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0381	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	8	59	
SHEN0382	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0384	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0386	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	10	107	
SHEN0389	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0394	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/04/76-02/04/76	0	1	
SHEN0450	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	7	73	
SHEN0452	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/23/75-10/23/75	0	1	
SHEN0500	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/26/76-06/06/79	3	19	
SHEN0542	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/18/91-07/21/97	5	16	
SHEN0566	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/07/80-07/31/90	10	10	
SHEN0568	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/17/74-09/29/98	24	72	
SHEN0573	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/18/76-05/15/79	2	17	
SHEN0574	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0579	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/13/70-05/15/79	9	47	
SHEN0582	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0583	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-02/06/79	8	61	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0585	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	6	59	
SHEN0586	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/13/70-08/24/74	4	22	
SHEN0587	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/17/73	0	5	
SHEN0588	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-04/12/74	1	13	
SHEN0592	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0593	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/18/69-08/18/69	0	1	
SHEN0630	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/17/74-05/15/79	4	26	
SHEN0631	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/04/94-07/21/97	2	4	
SHEN0632	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0633	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0635	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	28	255	T,A,S
SHEN0651	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/19/90-04/22/98	7	26	
SHEN0678	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/75-03/24/75	0	1	
SHEN0719	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0720	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0723	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0746	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/20/72-04/18/73	0	3	
SHEN0747	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-04/12/74	1	12	
SHEN0750	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	58	
SHEN0753	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/69-07/29/69	0	1	
SHEN0755	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	28	263	T,A,S
SHEN0760	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0765	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0768	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0769	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0771	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/69-08/18/69	0	2	
SHEN0772	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	79	
SHEN0774	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	18	164	
SHEN0775	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	9	104	
SHEN0777	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	28	269	T,A,S
SHEN0779	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/69-07/29/69	0	1	
SHEN0783	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	18	131	
SHEN0784	No	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	8	60	
SHEN0317	No	00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	05/16/72-08/31/76	4	2	
SHEN0756	No	00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	05/16/72-05/16/72	0	1	
SHEN0020	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	03/11/77-03/11/77	0	1	
SHEN0022	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	03/11/77-03/11/77	0	1	
SHEN0038	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0161	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/06/94-06/06/94	0	1	
SHEN0163	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0188	Yes	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/22/92-06/22/92	0	1	
SHEN0201	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/23/92-06/06/94	1	2	
SHEN0231	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/10/73-12/27/73	0	2	
SHEN0756	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	19	121	
SHEN0762	No	00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/10/93-09/10/93	0	1	
SHEN0001	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/25/92-04/27/98	6	25	
SHEN0002	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/25/68-06/11/74	6	19	
SHEN0004	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	24	240	T
SHEN0017	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	64	
SHEN0019	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/28/78-03/01/79	0	7	
SHEN0024	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/29/94-07/29/97	2	4	
SHEN0033	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	63	
SHEN0043	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/15/77-08/17/89	12	27	
SHEN0051	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	8	58	
SHEN0162	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	28	257	T,A,S
SHEN0164	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	5	64	
SHEN0204	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	19	199	
SHEN0225	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	8	60	
SHEN0234	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	7	51	
SHEN0235	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	65	
SHEN0252	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	19	194	
SHEN0256	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	5	67	
SHEN0282	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/07/92-11/30/98	6	27	
SHEN0287	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	8	61	
SHEN0297	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	24	68	
SHEN0311	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/12/97-11/30/98	1	7	
SHEN0316	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	8	62	
SHEN0317	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/31/76-08/31/76	0	1	
SHEN0324	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/29/97	5	12	
SHEN0366	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/29/97	5	12	
SHEN0372	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-09/29/98	23	56	
SHEN0381	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	8	59	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0386	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	10	107	
SHEN0394	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/04/76-02/04/76	0	1	
SHEN0450	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	7	73	
SHEN0452	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/23/75-10/23/75	0	1	
SHEN0500	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/26/76-06/06/79	3	18	
SHEN0542	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/21/97	5	16	
SHEN0566	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/80-07/31/90	10	6	
SHEN0568	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	24	73	
SHEN0573	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/18/76-05/15/79	2	17	
SHEN0579	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/13/70-05/15/79	9	47	
SHEN0583	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-02/06/79	8	62	
SHEN0585	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	6	59	
SHEN0586	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/13/70-08/24/74	4	22	
SHEN0588	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-04/12/74	1	13	
SHEN0630	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/17/74-05/15/79	4	26	
SHEN0631	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/04/94-07/21/97	2	4	
SHEN0635	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	28	258	T,A,S
SHEN0651	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/19/90-04/22/98	7	26	
SHEN0678	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/75-03/24/75	0	1	
SHEN0719	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0720	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0747	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-04/12/74	1	12	
SHEN0750	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	61	
SHEN0755	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	28	263	T,A,S
SHEN0772	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	81	
SHEN0774	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	18	165	
SHEN0775	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	9	104	
SHEN0777	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	28	269	T,A,S
SHEN0783	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	18	131	
SHEN0784	No	00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	8	63	
SHEN0020	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/11/77-03/11/77	0	1	
SHEN0022	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/11/77-03/11/77	0	1	
SHEN0231	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/18/70-12/27/73	3	8	
SHEN0251	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/18/70-03/14/73	2	6	
SHEN0738	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/26/68-10/01/68	0	6	
SHEN0748	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/10/52-10/10/52	0	1	
SHEN0756	No	00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	14	155	
SHEN0001	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/25/92-04/27/98	6	25	
SHEN0002	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/25/68-06/11/74	6	19	
SHEN0004	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	24	228	T,A
SHEN0017	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	7	48	
SHEN0024	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/29/94-07/29/97	2	4	
SHEN0033	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	8	56	
SHEN0043	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/15/77-08/17/89	12	24	
SHEN0051	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	7	51	
SHEN0162	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	28	250	T,A,S
SHEN0164	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	5	64	
SHEN0204	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	19	199	
SHEN0225	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	7	52	
SHEN0234	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	7	51	
SHEN0235	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	8	57	
SHEN0252	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	19	195	
SHEN0256	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	5	67	
SHEN0282	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/07/92-11/30/98	6	27	
SHEN0287	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	7	53	
SHEN0297	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	24	68	
SHEN0311	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/12/97-11/30/98	1	7	
SHEN0316	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	7	54	
SHEN0317	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/31/76-08/31/76	0	1	
SHEN0324	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/29/97	5	12	
SHEN0366	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/29/97	5	12	
SHEN0372	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-09/29/98	23	41	
SHEN0381	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	7	52	
SHEN0386	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	10	107	
SHEN0394	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/04/76-02/04/76	0	1	
SHEN0450	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	7	73	
SHEN0452	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/23/75-10/23/75	0	1	
SHEN0542	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/21/97	5	16	
SHEN0566	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/31/90-07/31/90	0	3	
SHEN0568	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	24	43	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0579	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/13/70-09/24/76	6	33	
SHEN0583	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-05/31/78	8	56	
SHEN0585	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	5	52	
SHEN0586	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/13/70-08/24/74	4	22	
SHEN0588	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-04/12/74	1	13	
SHEN0630	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/24/76	2	12	
SHEN0631	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/04/94-07/21/97	2	4	
SHEN0635	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	28	251	T,A,S
SHEN0651	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/19/90-04/22/98	7	26	
SHEN0678	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/75-03/24/75	0	1	
SHEN0719	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0720	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0723	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0747	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-04/12/74	1	11	
SHEN0750	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	8	55	
SHEN0755	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	28	257	T,A,S
SHEN0772	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	8	74	
SHEN0774	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	18	160	
SHEN0775	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	9	104	
SHEN0777	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	28	262	T,A,S
SHEN0783	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	18	131	
SHEN0784	No	00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	8	57	
SHEN0317	No	00621	NITRATE NITROGEN, BOTTOM DEPOS. (MG/KG-N DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0756	No	00621	NITRATE NITROGEN, BOTTOM DEPOS. (MG/KG-N DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0038	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0161	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	06/06/94-06/06/94	0	1	
SHEN0163	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0201	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	06/06/94-06/06/94	0	1	
SHEN0756	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	06/08/94-06/08/94	0	1	
SHEN0762	No	00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/10/93-09/10/93	0	1	
SHEN0001	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	02/25/92-04/27/98	6	25	
SHEN0002	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	03/02/70-06/11/74	4	19	
SHEN0004	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/17/74-12/15/98	24	238	T
SHEN0008	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0009	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0015	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/23/72-04/17/73	0	4	
SHEN0017	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	65	
SHEN0019	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	06/28/78-03/01/79	0	7	
SHEN0024	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	11/29/94-07/29/97	2	4	
SHEN0031	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0032	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0033	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	65	
SHEN0038	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0043	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/15/77-08/17/89	12	31	
SHEN0050	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0051	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	03/02/70-03/01/79	8	60	
SHEN0160	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0161	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	06/06/94-06/06/94	0	1	
SHEN0162	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	03/02/70-12/21/98	28	257	T,A,S
SHEN0163	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0164	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	06/10/93-12/21/98	5	64	
SHEN0188	Yes	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	06/22/92-06/22/92	0	1	
SHEN0196	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0199	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0200	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0201	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	06/23/92-06/06/94	1	2	
SHEN0202	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0204	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	04/30/79-12/21/98	19	197	
SHEN0223	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0224	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0225	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	03/02/70-03/01/79	8	61	
SHEN0229	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0231	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	12/11/69-06/19/72	2	31	
SHEN0233	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0234	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	03/02/70-11/02/77	7	52	
SHEN0235	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	12/03/68-03/01/79	10	66	
SHEN0251	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	11/19/69-06/19/72	2	32	
SHEN0252	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	04/24/79-12/21/98	19	190	
SHEN0254	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0256	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	07/22/93-12/10/98	5	67	
SHEN0282	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	01/07/92-11/30/98	6	27	
SHEN0287	No	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	03/03/70-03/01/79	8	61	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0293	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0297	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	24	68	
SHEN0301	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0305	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0306	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0307	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0311	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/12/97-11/30/98	1	7	
SHEN0315	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0316	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	8	62	
SHEN0317	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/31/76-08/31/76	0	1	
SHEN0324	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/18/91-07/29/97	5	12	
SHEN0366	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/18/91-07/29/97	5	12	
SHEN0372	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-09/29/98	23	56	
SHEN0373	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0381	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	8	60	
SHEN0382	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0384	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0386	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	10	107	
SHEN0389	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0394	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	02/04/76-02/04/76	0	1	
SHEN0450	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	7	73	
SHEN0452	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/23/75-10/23/75	0	1	
SHEN0500	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/26/76-06/06/79	3	19	
SHEN0542	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/18/91-07/21/97	5	16	
SHEN0566	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/07/80-07/31/90	10	10	
SHEN0568	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/17/74-09/29/98	24	71	
SHEN0573	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/18/76-05/15/79	2	17	
SHEN0574	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0579	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/13/70-05/15/79	9	46	
SHEN0582	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0583	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-02/06/79	8	63	
SHEN0585	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	6	59	
SHEN0586	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/13/70-08/24/74	4	22	
SHEN0587	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/17/73	0	5	
SHEN0588	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-04/12/74	1	13	
SHEN0592	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0593	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/18/69-08/18/69	0	1	
SHEN0630	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/17/74-05/15/79	4	25	
SHEN0631	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/04/94-07/21/97	2	4	
SHEN0632	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0633	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0635	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	28	256	T,A,S
SHEN0651	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/19/90-04/22/98	7	26	
SHEN0678	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/75-03/24/75	0	1	
SHEN0712	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/27/80-08/27/80	0	1	
SHEN0719	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0720	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0723	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/07/75-04/07/75	0	1	
SHEN0746	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/20/72-04/18/73	0	3	
SHEN0747	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-04/12/74	1	12	
SHEN0750	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	8	60	
SHEN0753	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/69-07/29/69	0	1	
SHEN0755	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	28	259	T,A,S
SHEN0756	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/08/94-06/08/94	0	1	
SHEN0760	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0762	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/93-09/10/93	0	1	
SHEN0765	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0768	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0769	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0771	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/69-07/29/69	0	1	
SHEN0772	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	8	80	
SHEN0774	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	18	160	
SHEN0775	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	9	104	
SHEN0777	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	28	266	T,A,S
SHEN0779	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/69-07/29/69	0	1	
SHEN0783	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	18	128	
SHEN0784	No	00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	8	63	
SHEN0317	No	00626	NITROGEN,ORG. KJEL.,BOT. DEPOS. (MG/KG-N DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0756	No	00626	NITROGEN,ORG. KJEL.,BOT. DEPOS. (MG/KG-N DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0004	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	12/03/76-03/01/79	2	13	
SHEN0008	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0009	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0015	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/17/73	0	4	
SHEN0017	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	12/03/76-03/01/79	2	14	
SHEN0019	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	0	7	
SHEN0031	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0032	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0033	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	0	8	
SHEN0043	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/10/80-08/17/89	9	9	
SHEN0050	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0051	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	0	8	
SHEN0160	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0162	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	0	8	
SHEN0196	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/16/73	0	4	
SHEN0199	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0200	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0202	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0223	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0224	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0225	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	0	8	
SHEN0229	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0233	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0235	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	0	8	
SHEN0254	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0287	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	0	8	
SHEN0293	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0301	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0305	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0306	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0307	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0315	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0316	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	0	8	
SHEN0317	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/31/76-08/31/76	0	1	
SHEN0372	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/03/76-06/06/79	2	16	
SHEN0373	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0381	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/17/78-03/01/79	0	7	
SHEN0382	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0384	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0389	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0500	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/26/76-06/06/79	3	19	
SHEN0566	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/07/80-07/24/80	0	7	
SHEN0568	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	10/13/76-06/06/79	2	30	
SHEN0573	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/18/76-05/15/79	2	17	
SHEN0574	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	0	2	
SHEN0579	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	11/29/76-05/15/79	2	14	
SHEN0582	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0583	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	0	6	
SHEN0585	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	0	6	
SHEN0587	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/17/73	0	5	
SHEN0592	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0593	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/18/69-08/18/69	0	1	
SHEN0630	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	11/29/76-05/15/79	2	14	
SHEN0632	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/19/72-04/16/73	0	3	
SHEN0633	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	0	4	
SHEN0635	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	0	6	
SHEN0712	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/27/80-08/27/80	0	1	
SHEN0746	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/20/72-04/18/73	0	3	
SHEN0750	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	0	6	
SHEN0753	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/29/69-08/18/69	0	2	
SHEN0755	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	0	6	
SHEN0760	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0765	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0768	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0769	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/24/72-04/18/73	0	4	
SHEN0771	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/29/69-08/18/69	0	2	
SHEN0772	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	0	6	
SHEN0774	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	0	6	
SHEN0777	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/05/78-01/04/79	0	6	
SHEN0779	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/29/69-08/19/69	0	2	
SHEN0784	No	00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/06/78-03/02/79	0	6	
SHEN0020	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/11/77-03/11/77	0	1	
SHEN0022	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/11/77-03/11/77	0	1	
SHEN0025	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-06/24/82	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0037	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/23/82	0	6	
SHEN0038	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0042	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/23/82	0	6	
SHEN0044	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/23/82	0	6	
SHEN0048	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-06/24/82	0	6	
SHEN0076	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0098	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/23/81-06/24/82	0	5	
SHEN0148	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/25/82	0	6	
SHEN0153	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	0	4	
SHEN0161	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/06/94-06/06/94	0	1	
SHEN0163	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/13/93-09/13/93	0	1	
SHEN0170	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/25/82	0	6	
SHEN0188	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/22/92-06/22/92	0	1	
SHEN0191	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/24/82	0	6	
SHEN0201	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/23/92-06/06/94	1	2	
SHEN0206	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/25/82	0	6	
SHEN0220	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/29/82-06/24/82	0	3	
SHEN0236	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/16/82-06/21/82	0	3	
SHEN0249	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/10/82-06/25/82	0	2	
SHEN0277	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/25/82	0	6	
SHEN0283	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/25/81-09/25/81	0	1	
SHEN0284	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/25/81-09/25/81	0	1	
SHEN0289	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/21/82	0	6	
SHEN0295	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/22/82	0	6	
SHEN0310	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/22/82	0	6	
SHEN0318	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/22/82	0	6	
SHEN0321	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/11/81-06/21/82	0	6	
SHEN0329	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/11/81-06/21/82	0	6	
SHEN0377	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/11/81-06/21/82	0	6	
SHEN0407	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0427	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0436	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/21/82	0	6	
SHEN0437	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/21/82	0	6	
SHEN0444	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0445	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/14/81-06/21/82	0	6	
SHEN0457	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/21/81-06/24/82	0	6	
SHEN0476	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0481	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	0	6	
SHEN0491	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/21/82	0	6	
SHEN0498	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/21/81-06/24/82	0	6	
SHEN0514	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/22/82	0	6	
SHEN0541	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/10/81-06/24/82	0	6	
SHEN0567	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/10/81-06/24/82	0	6	
SHEN0591	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/11/81-06/24/82	0	6	
SHEN0599	Yes	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/22/82	0	6	
SHEN0607	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/22/82	0	6	
SHEN0676	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/12/81-06/23/82	0	6	
SHEN0694	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/21/82	0	6	
SHEN0721	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/12/81-06/23/82	0	6	
SHEN0724	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/12/81-06/23/82	0	6	
SHEN0725	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/12/81-06/23/82	0	6	
SHEN0730	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/23/82	0	6	
SHEN0733	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/23/82	0	6	
SHEN0739	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-06/22/82	0	6	
SHEN0756	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	19	121	
SHEN0762	No	00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/93-09/10/93	0	1	
SHEN0317	No	00633	NITRITE PLUS NITRATE,BOT. DEPOS. (MG/KG-N DRY WT)	08/31/76-08/31/76	0	1	
SHEN0005	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/05/68-05/21/69	1	2	
SHEN0044	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	07/16/68-07/16/68	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0194	Yes	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/27/68-12/13/68	0	6	
SHEN0201	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/05/68-05/21/69	1	3	
SHEN0263	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/05/68-05/23/69	1	3	
SHEN0712	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	08/27/80-08/27/80	0	1	
SHEN0738	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/26/68-10/01/68	0	6	
SHEN0748	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	05/21/69-05/21/69	0	1	
SHEN0756	No	00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/30/67-09/25/71	3	164	
SHEN0002	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/25/68-02/25/68	0	1	
SHEN0009	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/16/73	0	4	
SHEN0015	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/17/73	0	4	
SHEN0017	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	12/03/68-08/03/69	0	4	
SHEN0020	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	03/11/77-03/11/77	0	1	
SHEN0022	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	03/11/77-03/11/77	0	1	
SHEN0032	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/16/73	0	4	
SHEN0033	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	12/03/68-08/03/69	0	4	
SHEN0050	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/16/73	0	4	
SHEN0196	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/16/73	0	4	
SHEN0202	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/19/72-04/16/73	0	3	
SHEN0224	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/19/72-04/16/73	0	3	
SHEN0231	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/09/70-06/15/70	0	5	
SHEN0233	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/19/72-04/16/73	0	3	
SHEN0235	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	12/03/68-05/11/69	0	3	
SHEN0251	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	01/12/70-06/15/70	0	6	
SHEN0301	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0305	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0306	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0307	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0373	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0382	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0389	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0582	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	3	
SHEN0587	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/17/73	0	5	
SHEN0592	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0632	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/19/72-04/16/73	0	3	
SHEN0633	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	0	4	
SHEN0746	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/20/72-04/18/73	0	3	
SHEN0756	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	9	112	
SHEN0760	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-04/18/73	0	4	
SHEN0765	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-04/18/73	0	4	
SHEN0768	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-04/18/73	0	4	
SHEN0769	No	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-04/18/73	0	4	
SHEN0001	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/25/92-04/27/98	6	25	
SHEN0004	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	19	198	
SHEN0024	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/29/94-07/29/97	2	4	
SHEN0038	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/13/93-09/13/93	0	1	
SHEN0043	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/15/77-08/17/89	12	31	
SHEN0161	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/06/94-06/06/94	0	1	
SHEN0162	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	19	197	
SHEN0163	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/13/93-09/13/93	0	1	
SHEN0164	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/10/93-12/21/98	5	64	
SHEN0188	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/22/92-06/22/92	0	1	
SHEN0201	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/23/92-06/06/94	1	2	
SHEN0204	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	19	196	
SHEN0231	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/69-12/27/73	4	8	
SHEN0251	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/69-03/14/73	3	5	
SHEN0252	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	19	191	
SHEN0256	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/22/93-12/10/98	5	67	
SHEN0282	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/07/92-11/30/98	6	27	
SHEN0297	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	8	60	
SHEN0311	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/12/97-11/30/98	1	7	
SHEN0317	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/31/76-08/31/76	0	1	
SHEN0324	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	12/18/91-07/29/97	5	12	
SHEN0366	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	12/18/91-07/29/97	5	12	
SHEN0372	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/90-09/29/98	7	29	
SHEN0386	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	10	106	
SHEN0394	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/04/76-02/04/76	0	1	
SHEN0450	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	7	73	
SHEN0452	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/23/75-10/23/75	0	1	
SHEN0542	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	12/18/91-07/21/97	5	16	
SHEN0566	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/07/80-07/31/90	10	10	
SHEN0568	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/90-09/29/98	7	29	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0631	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/04/94-07/21/97	2	4	
SHEN0635	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	19	195	
SHEN0651	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/90-04/22/98	7	26	
SHEN0678	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/24/75-03/24/75	0	1	
SHEN0719	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/07/75-04/07/75	0	1	
SHEN0720	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/07/75-04/07/75	0	1	
SHEN0723	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/07/75-04/07/75	0	1	
SHEN0755	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	19	201	
SHEN0756	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/08/94-06/08/94	0	1	
SHEN0762	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/10/93-09/10/93	0	1	
SHEN0774	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	9	100	
SHEN0775	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	9	104	
SHEN0777	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	19	202	
SHEN0783	No	00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	18	128	
SHEN0003	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/28/86-04/11/86	0	2	
SHEN0014	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/28/86-04/11/86	0	2	
SHEN0038	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/13/93-09/13/93	0	1	
SHEN0070	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/01/86-04/15/86	0	2	
SHEN0161	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/06/94-06/06/94	0	1	
SHEN0163	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/13/93-09/13/93	0	1	
SHEN0183	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/28/86-04/17/86	0	2	
SHEN0188	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/22/92-06/22/92	0	1	
SHEN0201	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/23/92-06/06/94	1	2	
SHEN0210	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/31/86-04/15/86	0	2	
SHEN0240	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/31/86-04/15/86	0	2	
SHEN0462	Yes	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/31/86-04/11/86	0	2	
SHEN0558	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/31/86-04/11/86	0	2	
SHEN0742	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/27/86-04/10/86	0	2	
SHEN0743	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/27/86-04/10/86	0	2	
SHEN0756	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/08/94-06/08/94	0	1	
SHEN0762	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/10/93-09/10/93	0	1	
SHEN0777	No	00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/28/91-05/28/91	0	1	
SHEN0317	No	00668	PHOSPHORUS, TOTAL,BOTTOM DEPOSIT (MG/KG-P DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0756	No	00668	PHOSPHORUS, TOTAL,BOTTOM DEPOSIT (MG/KG-P DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	00668	PHOSPHORUS, TOTAL,BOTTOM DEPOSIT (MG/KG-P DRY WGT)	05/11/82-05/11/82	0	1	
SHEN0001	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/25/92-02/25/92	0	1	
SHEN0004	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	12	121	
SHEN0020	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/11/77-03/11/77	0	1	
SHEN0022	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/11/77-03/11/77	0	1	
SHEN0038	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/13/93-09/13/93	0	1	
SHEN0043	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/15/77-08/17/89	12	31	
SHEN0161	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/06/94-06/06/94	0	1	
SHEN0162	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	14	123	
SHEN0163	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/13/93-09/13/93	0	1	
SHEN0164	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/14/93-12/14/93	0	1	
SHEN0188	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/22/92-06/22/92	0	1	
SHEN0201	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/23/92-06/06/94	1	2	
SHEN0204	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	14	124	
SHEN0252	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	14	119	
SHEN0282	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/07/92-04/08/92	0	2	
SHEN0297	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/16/90-04/15/92	1	20	
SHEN0324	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/18/91-04/01/92	0	3	
SHEN0366	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/18/91-04/01/92	0	3	
SHEN0372	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11/19/90-12/14/93	3	6	
SHEN0386	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	08/02/88-04/01/92	3	27	
SHEN0394	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/04/76-02/04/76	0	1	
SHEN0450	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	07/29/91-04/01/92	0	4	
SHEN0452	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/23/75-10/23/75	0	1	
SHEN0542	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/18/91-04/01/92	0	3	
SHEN0566	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/07/80-07/31/90	10	10	
SHEN0568	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11/19/90-12/14/93	3	6	
SHEN0635	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	12	119	
SHEN0651	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11/19/90-12/14/93	3	6	
SHEN0678	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/24/75-03/24/75	0	1	
SHEN0719	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/07/75-04/07/75	0	1	
SHEN0720	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/07/75-04/07/75	0	1	
SHEN0723	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/07/75-04/07/75	0	1	
SHEN0755	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	12	125	
SHEN0756	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	20	137	T

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0762	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/10/93-09/10/93	0	1	
SHEN0774	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	9	105	
SHEN0775	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/24/89-04/02/92	3	25	
SHEN0777	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	13	124	
SHEN0783	No	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	12	101	
SHEN0001	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/25/92-08/26/96	4	17	
SHEN0004	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	21	186	T
SHEN0006	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/23/97-08/04/97	0	2	
SHEN0009	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/23/72-02/13/73	0	3	
SHEN0015	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-04/17/73	0	3	
SHEN0017	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/17/76-09/17/76	0	1	
SHEN0019	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/23/97-08/04/97	0	2	
SHEN0021	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/23/97-08/04/97	0	2	
SHEN0024	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/29/94-03/18/96	1	2	
SHEN0032	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/23/72-02/13/73	0	3	
SHEN0033	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-03/01/79	3	29	
SHEN0043	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/15/77-09/03/78	1	21	
SHEN0050	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/23/72-02/13/73	0	3	
SHEN0051	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/77-11/02/77	0	2	
SHEN0162	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	23	199	T
SHEN0164	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/93-08/20/96	3	37	
SHEN0196	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/23/72-02/13/73	0	3	
SHEN0202	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-02/13/73	0	2	
SHEN0204	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	17	168	
SHEN0224	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-02/13/73	0	2	
SHEN0225	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/77-11/02/77	0	2	
SHEN0226	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/98-06/24/98	0	1	
SHEN0233	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-02/13/73	0	2	
SHEN0234	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/77-11/02/77	0	2	
SHEN0252	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	17	168	
SHEN0256	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/22/93-08/13/96	3	39	
SHEN0282	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	01/07/92-08/26/96	4	16	
SHEN0287	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-03/01/79	3	28	
SHEN0297	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/26/90-07/29/96	5	51	
SHEN0301	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0305	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-09/19/72	0	2	
SHEN0306	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0307	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0316	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-03/01/79	3	29	
SHEN0317	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/31/76-08/31/76	0	1	
SHEN0324	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12/18/91-03/18/96	4	10	
SHEN0366	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12/18/91-03/18/96	4	10	
SHEN0372	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/19/90-06/17/96	5	22	
SHEN0373	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0382	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0386	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	8	78	
SHEN0389	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-09/19/72	0	2	
SHEN0394	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/04/76-02/04/76	0	1	
SHEN0450	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/29/91-09/05/96	5	46	
SHEN0452	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/23/75-10/23/75	0	1	
SHEN0471	Yes	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/23/75-10/23/75	0	1	
SHEN0499	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/25/98-06/25/98	0	1	
SHEN0542	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12/18/91-08/28/96	4	15	
SHEN0566	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/31/90-07/31/90	0	3	
SHEN0568	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/19/90-06/17/96	5	21	
SHEN0582	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0583	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-02/06/79	3	27	
SHEN0585	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/22/78-02/06/79	0	2	
SHEN0587	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-09/19/72	0	2	
SHEN0592	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0631	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/04/94-08/28/96	2	3	
SHEN0632	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-02/13/73	0	2	
SHEN0633	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0635	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	21	200	T
SHEN0651	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/19/90-06/17/96	5	20	
SHEN0678	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-03/24/75	0	1	
SHEN0719	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/07/75-04/07/75	0	1	
SHEN0720	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/07/75-04/07/75	0	1	
SHEN0723	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/07/75-04/07/75	0	1	
SHEN0746	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/20/72-02/13/73	0	2	
SHEN0755	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	21	205	T
SHEN0760	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/20/72-02/13/73	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0765	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/72-09/20/72	0	2	
SHEN0768	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/72-02/13/73	0	3	
SHEN0769	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/72-02/13/73	0	3	
SHEN0772	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/12/77-06/22/78	0	3	
SHEN0774	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	13	130	
SHEN0775	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	7	76	
SHEN0777	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	18	177	
SHEN0783	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	17	125	
SHEN0784	No	00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/25/74-11/10/77	3	3	
SHEN0003	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/28/86-04/11/86	0	2	
SHEN0014	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/28/86-04/11/86	0	2	
SHEN0070	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	04/01/86-04/15/86	0	2	
SHEN0126	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/29/97	2	28	
SHEN0129	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	01/18/96-06/05/97	1	40	
SHEN0174	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-05/02/95	0	1	
SHEN0175	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-05/02/95	0	1	
SHEN0183	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/28/86-04/17/86	0	2	
SHEN0185	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	08/19/92-07/29/97	4	15	
SHEN0189	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/29/97	2	7	
SHEN0210	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/28/86-04/17/86	0	2	
SHEN0211	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/29/97	2	9	
SHEN0215	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/31/86-04/15/86	0	2	
SHEN0240	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/31/86-04/15/86	0	2	
SHEN0333	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/28/97	2	28	
SHEN0335	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	09/04/96-07/25/97	0	41	
SHEN0336	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	01/18/96-01/20/96	0	6	
SHEN0462	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/31/86-04/11/86	0	2	
SHEN0557	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/28/97	2	10	
SHEN0558	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/31/86-04/11/86	0	2	
SHEN0620	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/28/97	2	27	
SHEN0621	Yes	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	01/18/96-07/24/97	1	72	
SHEN0742	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/27/86-04/10/86	0	2	
SHEN0743	No	00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/27/86-04/10/86	0	2	
SHEN0317	No	00686	CARBON, INORGANIC, IN BED MATERIAL (GM/KG AS C)	08/31/76-08/31/76	0	1	
SHEN0317	No	00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	08/31/76-08/31/76	0	1	
SHEN0009	No	00690	CARBON, TOTAL (MG/L AS C)	05/23/72-02/13/73	0	3	
SHEN0015	No	00690	CARBON, TOTAL (MG/L AS C)	05/23/72-04/17/73	0	4	
SHEN0032	No	00690	CARBON, TOTAL (MG/L AS C)	05/23/72-02/13/73	0	3	
SHEN0050	No	00690	CARBON, TOTAL (MG/L AS C)	05/23/72-02/13/73	0	3	
SHEN0196	No	00690	CARBON, TOTAL (MG/L AS C)	05/23/72-02/13/73	0	3	
SHEN0202	No	00690	CARBON, TOTAL (MG/L AS C)	09/19/72-02/13/73	0	2	
SHEN0224	No	00690	CARBON, TOTAL (MG/L AS C)	09/19/72-02/13/73	0	2	
SHEN0233	No	00690	CARBON, TOTAL (MG/L AS C)	09/19/72-02/13/73	0	2	
SHEN0301	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0305	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-09/19/72	0	2	
SHEN0306	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0307	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0373	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0382	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0389	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-09/19/72	0	2	
SHEN0582	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0587	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-09/19/72	0	2	
SHEN0592	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0632	No	00690	CARBON, TOTAL (MG/L AS C)	09/19/72-02/13/73	0	2	
SHEN0633	No	00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	0	3	
SHEN0746	No	00690	CARBON, TOTAL (MG/L AS C)	09/20/72-02/13/73	0	2	
SHEN0760	No	00690	CARBON, TOTAL (MG/L AS C)	05/24/72-02/13/73	0	3	
SHEN0765	No	00690	CARBON, TOTAL (MG/L AS C)	05/24/72-09/20/72	0	2	
SHEN0768	No	00690	CARBON, TOTAL (MG/L AS C)	05/24/72-02/13/73	0	3	
SHEN0769	No	00690	CARBON, TOTAL (MG/L AS C)	05/24/72-02/13/73	0	3	
SHEN0003	No	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/28/86-04/11/86	0	2	
SHEN0014	No	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/28/86-04/11/86	0	2	
SHEN0070	Yes	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	04/01/86-04/15/86	0	2	
SHEN0183	Yes	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/28/86-04/17/86	0	2	
SHEN0210	No	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/31/86-04/15/86	0	2	
SHEN0240	No	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/31/86-04/15/86	0	2	
SHEN0462	Yes	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/31/86-04/11/86	0	2	
SHEN0558	No	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/31/86-04/11/86	0	2	
SHEN0742	No	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/27/86-04/10/86	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0743	No	00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/27/86-04/10/86	0	2	
SHEN0231	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	09/27/72-12/27/73	1	5	
SHEN0251	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	11/19/69-03/14/73	3	35	
SHEN0786	No	00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	01/10/79-01/10/79	0	1	
SHEN0001	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/25/92-04/27/98	6	24	
SHEN0002	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-09/20/67	0	1	
SHEN0004	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	13	142	
SHEN0005	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/29/54-05/21/69	14	3	
SHEN0011	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-09/04/30	0	1	
SHEN0020	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/11/77-03/11/77	0	1	
SHEN0022	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/11/77-03/11/77	0	1	
SHEN0024	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/29/94-07/29/97	2	4	
SHEN0025	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/19/81-06/24/82	0	6	
SHEN0033	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-09/20/67	0	1	
SHEN0037	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/23/82	0	6	
SHEN0040	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/02/45-08/02/45	0	1	
SHEN0042	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/23/82	0	6	
SHEN0044	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/03/52-06/23/82	29	9	
SHEN0048	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/19/81-06/24/82	0	6	
SHEN0076	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	0	4	
SHEN0098	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/23/81-06/24/82	0	5	
SHEN0148	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/25/82	0	6	
SHEN0153	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	0	4	
SHEN0161	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-04/08/69	38	41	S
SHEN0162	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	31	142	T,S
SHEN0164	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	5	65	
SHEN0170	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/25/82	0	6	
SHEN0191	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/27/68-06/24/82	14	12	
SHEN0201	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-05/21/69	38	22	
SHEN0204	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	13	141	
SHEN0206	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/25/82	0	6	
SHEN0220	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	01/29/82-06/24/82	0	3	
SHEN0231	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	05/18/70-12/27/73	3	8	
SHEN0236	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/16/82-06/21/82	0	3	
SHEN0249	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/82-06/25/82	0	2	
SHEN0251	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/69-03/14/73	3	38	
SHEN0252	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	13	141	
SHEN0256	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	5	67	
SHEN0263	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/14/30-05/23/69	38	9	
SHEN0277	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/25/82	0	6	
SHEN0282	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	01/07/92-11/30/98	6	25	
SHEN0283	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/25/81-09/25/81	0	1	
SHEN0284	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/25/81-09/25/81	0	1	
SHEN0289	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/21/82	0	6	
SHEN0295	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/22/82	0	6	
SHEN0297	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	8	56	
SHEN0310	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/22/82	0	6	
SHEN0311	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/12/97-11/30/98	1	7	
SHEN0316	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-04/25/68	0	3	
SHEN0317	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	10/01/48-10/01/48	0	1	
SHEN0318	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/22/82	0	6	
SHEN0321	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/11/81-06/21/82	0	6	
SHEN0324	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12/18/91-07/29/97	5	12	
SHEN0329	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/11/81-06/21/82	0	6	
SHEN0366	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12/18/91-07/29/97	5	12	
SHEN0372	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	7	28	
SHEN0377	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/11/81-06/21/82	0	6	
SHEN0386	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	10	105	
SHEN0407	Yes	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/13/81-06/21/82	0	6	
SHEN0427	No	00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/13/81-06/21/82	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0436	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-06/21/82	0	6	
SHEN0437	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-06/21/82	0	6	
SHEN0444	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/13/81-06/21/82	0	6	
SHEN0445	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/14/81-06/21/82	0	6	
SHEN0450	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/29/91-12/07/98	7	73	
SHEN0457	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/21/81-06/24/82	0	6	
SHEN0476	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/13/81-06/21/82	0	6	
SHEN0481	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/13/81-06/21/82	0	6	
SHEN0491	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-06/21/82	0	6	
SHEN0498	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/21/81-06/24/82	0	6	
SHEN0514	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-06/22/82	0	6	
SHEN0541	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/10/81-06/24/82	0	6	
SHEN0542	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	12/18/91-07/21/97	5	16	
SHEN0566	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	07/31/90-07/31/90	0	3	
SHEN0567	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/10/81-06/24/82	0	6	
SHEN0568	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/19/90-04/22/98	7	27	
SHEN0569	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/10/81-06/24/82	0	6	
SHEN0591	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/11/81-06/24/82	0	6	
SHEN0599	Yes	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-06/22/82	0	6	
SHEN0607	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-06/22/82	0	6	
SHEN0631	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/04/94-07/21/97	2	4	
SHEN0635	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/13/85-12/07/98	13	140	
SHEN0651	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/19/90-04/22/98	7	25	
SHEN0659	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	01/20/56-01/20/56	0	1	
SHEN0676	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/12/81-06/23/82	0	6	
SHEN0694	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/18/81-06/21/82	0	6	
SHEN0712	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/27/80-08/27/80	0	1	
SHEN0721	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/12/81-06/23/82	0	6	
SHEN0724	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/12/81-06/23/82	0	6	
SHEN0725	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/12/81-06/23/82	0	6	
SHEN0730	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-06/23/82	0	6	
SHEN0733	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/20/81-06/23/82	0	6	
SHEN0738	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	03/26/68-10/01/68	0	6	
SHEN0739	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	08/19/81-06/22/82	0	6	
SHEN0747	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	05/04/72-04/12/74	1	17	
SHEN0748	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	10/10/52-05/21/69	16	2	
SHEN0755	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/16/70-12/02/98	28	221	T,S
SHEN0756	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/05/30-12/17/85	55	485	T,S
SHEN0774	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	09/19/67-08/02/88	20	116	
SHEN0775	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/09/88-12/01/98	10	103	
SHEN0777	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	11/12/73-12/01/98	25	206	T,S
SHEN0783	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	02/13/85-07/14/97	12	82	
SHEN0784	No	00900	HARDNESS, TOTAL (MG/L AS CACO3)	06/16/70-03/02/79	8	80	
SHEN0755	No	00901	HARDNESS, CARBONATE (MG/L AS CACO3)	09/09/70-10/12/70	0	2	
SHEN0784	No	00901	HARDNESS, CARBONATE (MG/L AS CACO3)	09/10/70-09/10/70	0	1	
SHEN0005	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/29/54-05/21/69	14	3	
SHEN0020	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/11/77-03/11/77	0	1	
SHEN0022	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/11/77-03/11/77	0	1	
SHEN0044	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/03/52-07/16/68	15	3	
SHEN0161	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/01/48-04/08/69	20	38	
SHEN0194	Yes	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/27/68-12/13/68	0	6	
SHEN0201	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/12/48-05/21/69	20	19	
SHEN0231	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	05/18/70-12/27/73	3	5	
SHEN0251	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	11/19/69-03/14/73	3	12	
SHEN0263	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/08/52-05/23/69	16	6	
SHEN0317	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/01/48-10/01/48	0	1	
SHEN0659	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	01/20/56-01/20/56	0	1	
SHEN0738	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	03/26/68-10/01/68	0	6	
SHEN0748	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/10/52-05/21/69	16	2	
SHEN0756	No	00902	HARDNESS, NON-CARBONATE (MG/L AS CACO3)	10/06/48-08/26/81	32	469	T,S
SHEN0003	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/28/86-04/11/86	0	2	
SHEN0005	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/29/54-05/21/69	14	3	
SHEN0011	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/04/30-09/04/30	0	1	
SHEN0014	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/28/86-04/11/86	0	2	
SHEN0020	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/11/77-03/11/77	0	1	
SHEN0022	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/11/77-03/11/77	0	1	
SHEN0025	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-06/24/82	0	6	
SHEN0027	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0037	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/23/82	0	6	
SHEN0038	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/13/93-09/13/93	0	1	
SHEN0039	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/24/87-04/24/87	0	1	
SHEN0040	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/02/45-08/02/45	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0042	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/23/82	0	6	
SHEN0044	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/03/52-06/23/82	29	9	
SHEN0045	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/28/87-04/28/87	0	1	
SHEN0046	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/28/87-04/28/87	0	1	
SHEN0048	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-06/24/82	0	6	
SHEN0054	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/16/87-07/30/97	9	41	
SHEN0058	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0059	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0074	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/24/87-04/24/87	0	1	
SHEN0076	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/21/81-06/23/82	0	4	
SHEN0078	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	4	
SHEN0098	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/21/81-06/23/82	0	4	
SHEN0099	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/29/87-04/29/87	0	1	
SHEN0100	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0105	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/29/87-04/29/87	0	1	
SHEN0107	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	5	
SHEN0116	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/21/81-06/23/82	0	4	
SHEN0117	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0124	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/23/81-06/24/82	0	5	
SHEN0125	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/11/92-01/19/95	2	100	
SHEN0133	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0135	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0138	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0148	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/25/82	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0149	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0153	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/21/81-06/23/82	0	4	
SHEN0154	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	2	7	
SHEN0161	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/04/30-04/08/69	38	41	S
SHEN0162	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/24/98-06/24/98	0	1	
SHEN0163	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/13/93-09/13/93	0	1	
SHEN0167	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0168	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0169	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0170	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/25/82	0	6	
SHEN0171	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	9	450	
SHEN0176	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	6	339	
SHEN0180	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0183	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/28/86-04/17/86	0	2	
SHEN0184	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0185	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	0	1	
SHEN0188	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/22/92-06/22/92	0	1	
SHEN0189	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	16	585	
SHEN0190	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0191	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/24/82	0	6	
SHEN0193	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	9	437	
SHEN0194	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/27/68-06/24/82	14	12	
SHEN0201	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/04/30-06/23/92	61	23	
SHEN0206	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/25/82	0	6	
SHEN0209	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0210	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/28/86-04/17/86	0	2	
SHEN0211	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	17	842	A
SHEN0215	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/86-04/15/86	0	2	
SHEN0217	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0218	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0220	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/29/82-06/24/82	0	3	
SHEN0226	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/24/98-06/24/98	0	1	
SHEN0231	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/18/70-12/27/73	3	8	
SHEN0236	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/82-06/24/82	0	3	
SHEN0237	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0238	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/82-06/21/82	0	3	
SHEN0240	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/86-04/15/86	0	2	
SHEN0242	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0244	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0245	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	1	3	
SHEN0249	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/10/82-06/25/82	0	2	
SHEN0251	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/18/70-03/14/73	2	6	
SHEN0258	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-08/19/93	1	4	
SHEN0260	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0261	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-08/19/93	1	4	
SHEN0263	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/14/30-05/23/69	38	9	
SHEN0265	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-11/19/94	2	5	
SHEN0273	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0274	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/14/87-07/30/97	9	41	
SHEN0277	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/23/81-06/22/82	0	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0278	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/25/82	0	6	
SHEN0283	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/25/81-09/25/81	0	1	
SHEN0284	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/25/81-09/25/81	0	1	
SHEN0289	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/21/82	0	6	
SHEN0295	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/22/82	0	6	
SHEN0298	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0300	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0308	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/02/87-05/02/87	0	1	
SHEN0309	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	05/02/87-05/02/87	0	1	
SHEN0310	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/22/82	0	6	
SHEN0317	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/01/48-10/01/48	0	1	
SHEN0318	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/22/82	0	6	
SHEN0320	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0321	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/11/81-06/21/82	0	6	
SHEN0322	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0323	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0327	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0328	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0329	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/17/81-06/23/82	0	6	
SHEN0332	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/25/97	4	223	
SHEN0336	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-01/20/96	3	199	
SHEN0339	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0340	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0341	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-10/05/94	2	3	
SHEN0345	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0346	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	7	
SHEN0351	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0354	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0365	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/11/81-06/21/82	0	6	
SHEN0367	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	6	
SHEN0369	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0374	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	5	8	
SHEN0377	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/11/81-06/21/82	0	6	
SHEN0379	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0391	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0392	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0396	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0397	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0407	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/13/81-06/21/82	0	6	
SHEN0408	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/24/88-07/30/97	9	39	
SHEN0410	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0411	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0420	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0424	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0426	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0427	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/13/81-06/21/82	0	6	
SHEN0428	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0432	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0433	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	0	1	
SHEN0436	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-06/21/82	0	6	
SHEN0437	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-06/21/82	0	6	
SHEN0439	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0440	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0444	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/13/81-06/21/82	0	6	
SHEN0445	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/14/81-06/21/82	0	6	
SHEN0446	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0448	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0451	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0454	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0455	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/89-04/25/89	0	1	
SHEN0456	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0457	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/21/81-06/24/82	0	6	
SHEN0458	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/86-04/11/86	0	2	
SHEN0463	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0468	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0469	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0476	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/13/81-06/21/82	0	6	
SHEN0478	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0481	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/13/81-06/21/82	0	6	
SHEN0483	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0491	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/21/82	0	6	
SHEN0493	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	0	2	
SHEN0498	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/21/81-06/24/82	0	6	
SHEN0499	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/25/98-06/25/98	0	1	
SHEN0503	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0504	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0506	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0510	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0511	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0512	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/87-07/30/97	9	41	
SHEN0514	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/22/82	0	6	
SHEN0516	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0520	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0521	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0522	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-04/23/94	1	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0528	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	4	
SHEN0541	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/10/81-06/24/82	0	6	
SHEN0543	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0557	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	10	513	
SHEN0558	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0560	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0562	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	0	1	
SHEN0567	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/10/81-06/24/82	0	6	
SHEN0591	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/11/81-06/24/82	0	6	
SHEN0594	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0595	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/29/87-07/30/97	9	40	
SHEN0597	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	2	
SHEN0598	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0599	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/22/82	0	6	
SHEN0600	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0603	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0607	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/22/82	0	6	
SHEN0608	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0615	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0616	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/87-04/26/95	7	33	
SHEN0618	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0619	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0636	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0652	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0654	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0659	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	01/20/56-01/20/56	0	1	
SHEN0660	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0662	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0664	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0676	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/81-06/23/82	0	6	
SHEN0677	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	6	
SHEN0694	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/18/81-06/21/82	0	6	
SHEN0695	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0709	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0710	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	0	1	
SHEN0721	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/81-06/23/82	0	6	
SHEN0724	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/81-06/23/82	0	6	
SHEN0725	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/81-06/23/82	0	6	
SHEN0727	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0728	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/25/87-04/25/87	0	1	
SHEN0730	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-06/23/82	0	6	
SHEN0733	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/20/81-06/23/82	0	6	
SHEN0735	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/26/87-04/26/87	0	1	
SHEN0738	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/26/68-10/01/68	0	6	
SHEN0739	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/19/81-06/22/82	0	6	
SHEN0742	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/27/86-04/10/86	0	2	
SHEN0743	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/27/86-04/10/86	0	2	
SHEN0748	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/10/52-05/21/69	16	2	
SHEN0756	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/05/30-06/17/86	55	510	T,S
SHEN0762	No	00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/10/93-09/10/93	0	1	
SHEN0003	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/28/86-04/11/86	0	2	
SHEN0005	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/29/54-05/21/69	14	3	
SHEN0011	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/04/30-09/04/30	0	1	
SHEN0014	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/28/86-04/11/86	0	2	
SHEN0018	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/17/77-01/17/77	0	1	
SHEN0020	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/11/77-03/11/77	0	1	
SHEN0022	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/11/77-03/11/77	0	1	
SHEN0025	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-06/24/82	0	6	
SHEN0027	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0036	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/10/77-01/10/77	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0037	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/23/82	0	6	
SHEN0038	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/13/93-09/13/93	0	1	
SHEN0039	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/24/87-04/24/87	0	1	
SHEN0040	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/02/45-08/02/45	0	1	
SHEN0042	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/23/82	0	6	
SHEN0044	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/03/52-06/23/82	29	9	
SHEN0045	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/28/87-04/28/87	0	1	
SHEN0046	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/28/87-04/28/87	0	1	
SHEN0048	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-06/24/82	0	6	
SHEN0054	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/16/87-07/30/97	9	41	
SHEN0058	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0059	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0074	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/24/87-04/24/87	0	1	
SHEN0076	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	0	4	
SHEN0078	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	4	
SHEN0098	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	0	4	
SHEN0099	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/29/87-04/29/87	0	1	
SHEN0100	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0105	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/29/87-04/29/87	0	1	
SHEN0107	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	5	
SHEN0116	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	0	4	
SHEN0117	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0124	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/23/81-06/24/82	0	5	
SHEN0125	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/11/92-01/19/95	2	100	
SHEN0133	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0135	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0137	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/14/77-01/14/77	0	1	
SHEN0138	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0143	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0148	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/25/82	0	6	
SHEN0149	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0153	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	0	4	
SHEN0154	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	2	7	
SHEN0161	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/04/30-04/08/69	38	41	S
SHEN0162	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/24/98-06/24/98	0	1	
SHEN0163	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/13/93-09/13/93	0	1	
SHEN0167	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0168	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0169	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0170	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/25/82	0	6	
SHEN0171	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	9	450	
SHEN0176	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	6	339	
SHEN0180	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0183	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/28/86-04/17/86	0	2	
SHEN0184	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0185	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	0	1	
SHEN0188	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/22/92-06/22/92	0	1	
SHEN0189	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	16	585	
SHEN0190	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0191	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/24/82	0	6	
SHEN0193	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	9	437	
SHEN0194	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/27/68-06/24/82	14	12	
SHEN0201	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/04/30-06/23/92	61	23	
SHEN0206	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/25/82	0	6	
SHEN0209	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0210	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/28/86-04/17/86	0	2	
SHEN0211	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	17	842	A
SHEN0215	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/86-04/15/86	0	2	
SHEN0217	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0218	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0220	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/29/82-06/24/82	0	3	
SHEN0226	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/24/98-06/24/98	0	1	
SHEN0231	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/18/70-12/27/73	3	8	
SHEN0236	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/82-06/24/82	0	3	
SHEN0237	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0238	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/82-06/21/82	0	3	
SHEN0240	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/86-04/15/86	0	2	
SHEN0241	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/17/77-01/17/77	0	1	
SHEN0242	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0244	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0245	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	1	3	
SHEN0249	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/10/82-06/25/82	0	2	
SHEN0251	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/18/70-03/14/73	2	6	
SHEN0258	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-08/19/93	1	4	
SHEN0260	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0261	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-08/19/93	1	4	
SHEN0263	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/30-05/23/69	38	9	
SHEN0265	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-08/19/93	1	4	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0268	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-11/19/94	2	5	
SHEN0273	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0274	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/14/87-07/30/97	9	41	
SHEN0277	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/25/82	0	6	
SHEN0281	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/17/77-01/17/77	0	1	
SHEN0283	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/25/81-09/25/81	0	1	
SHEN0284	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/25/81-09/25/81	0	1	
SHEN0289	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/25/81-09/25/81	0	1	
SHEN0291	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/12/77-01/12/77	0	1	
SHEN0294	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/21/82	0	6	
SHEN0295	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/22/82	0	6	
SHEN0298	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0300	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0302	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/12/77-01/12/77	0	1	
SHEN0303	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-01/18/77	0	1	
SHEN0308	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/02/87-05/02/87	0	1	
SHEN0309	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	05/02/87-05/02/87	0	1	
SHEN0310	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/22/82	0	6	
SHEN0317	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/01/48-10/01/48	0	1	
SHEN0318	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/22/82	0	6	
SHEN0320	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0321	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/11/81-06/21/82	0	6	
SHEN0322	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0323	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0325	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-01/18/77	0	1	
SHEN0327	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0328	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0329	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/23/82	0	6	
SHEN0332	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/25/97	4	223	
SHEN0336	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-01/20/96	3	199	
SHEN0339	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0340	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0341	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-10/05/94	2	3	
SHEN0345	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0346	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	7	
SHEN0351	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0354	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0365	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/11/81-06/21/82	0	6	
SHEN0367	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	6	
SHEN0369	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0374	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	5	8	
SHEN0377	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/11/81-06/21/82	0	6	
SHEN0379	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0391	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0392	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0393	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/20/77-01/20/77	0	1	
SHEN0396	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0397	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0403	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0407	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	0	6	
SHEN0408	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/24/88-07/30/97	9	39	
SHEN0410	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0411	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0423	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/20/77-01/20/77	0	1	
SHEN0424	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0425	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/77-04/22/77	0	1	
SHEN0426	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0427	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	0	6	
SHEN0428	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0432	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0433	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	0	1	
SHEN0436	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/21/82	0	6	
SHEN0437	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/21/82	0	6	
SHEN0439	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0440	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0444	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	0	6	
SHEN0445	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/14/81-06/21/82	0	6	
SHEN0446	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0448	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0451	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0454	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0455	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/89-04/25/89	0	1	
SHEN0456	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0457	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/21/81-06/24/82	0	6	
SHEN0458	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/86-04/11/86	0	2	
SHEN0463	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0468	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0469	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0476	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	0	6	
SHEN0478	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0480	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/20/77-01/20/77	0	1	
SHEN0481	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	0	6	
SHEN0483	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0491	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/21/82	0	6	
SHEN0493	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	0	2	
SHEN0498	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/21/81-06/24/82	0	6	
SHEN0499	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/25/98-06/25/98	0	1	
SHEN0501	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/77-04/22/77	0	1	
SHEN0503	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0504	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0506	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0510	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0511	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0512	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/87-07/30/97	9	41	
SHEN0514	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/22/82	0	6	
SHEN0516	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0520	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0521	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0522	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	4	
SHEN0541	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/10/81-06/24/82	0	6	
SHEN0543	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0557	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	10	513	
SHEN0558	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0560	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0562	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	0	1	
SHEN0567	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/10/81-06/24/82	0	6	
SHEN0591	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/11/81-06/24/82	0	6	
SHEN0594	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0595	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/29/87-07/30/97	9	40	
SHEN0597	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	2	
SHEN0598	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0599	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/22/82	0	6	
SHEN0600	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0603	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0607	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/22/82	0	6	
SHEN0608	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0615	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0616	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/87-04/26/95	7	33	
SHEN0618	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0619	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0627	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0636	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0652	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0654	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0659	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/20/56-01/20/56	0	1	
SHEN0660	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0662	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0664	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0676	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/81-06/23/82	0	6	
SHEN0677	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	6	
SHEN0694	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/21/82	0	6	
SHEN0695	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0709	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0710	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	0	1	
SHEN0721	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/81-06/23/82	0	6	
SHEN0724	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/81-06/23/82	0	6	
SHEN0725	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/81-06/23/82	0	6	
SHEN0727	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0728	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	0	1	
SHEN0730	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/23/82	0	6	
SHEN0733	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/23/82	0	6	
SHEN0735	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	0	1	
SHEN0738	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/26/68-10/01/68	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0739	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-06/22/82	0	6	
SHEN0742	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/27/86-04/10/86	0	2	
SHEN0743	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/27/86-04/10/86	0	2	
SHEN0748	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/10/52-05/21/69	16	2	
SHEN0756	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	55	511	T,S
SHEN0762	No	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/10/93-09/10/93	0	1	
SHEN0568	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	03/01/93-03/01/93	0	1	
SHEN0651	No	00927	MAGNESIUM, TOTAL (MG/L AS MG)	03/01/93-03/01/93	0	1	
SHEN0003	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/28/86-04/11/86	0	2	
SHEN0005	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/29/54-05/21/69	14	3	
SHEN0011	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/04/30-09/04/30	0	1	
SHEN0014	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/28/86-04/11/86	0	2	
SHEN0018	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/17/77-01/17/77	0	1	
SHEN0020	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/11/77-03/11/77	0	1	
SHEN0022	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/11/77-03/11/77	0	1	
SHEN0025	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-06/24/82	0	6	
SHEN0027	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0034	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/15/77-01/15/77	0	1	
SHEN0036	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/10/77-01/10/77	0	1	
SHEN0037	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/23/82	0	6	
SHEN0038	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/13/93-09/13/93	0	1	
SHEN0039	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/24/87-04/24/87	0	1	
SHEN0040	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/02/45-08/02/45	0	1	
SHEN0042	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/23/82	0	6	
SHEN0044	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/03/52-06/23/82	29	9	
SHEN0045	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/28/87-04/28/87	0	1	
SHEN0046	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/28/87-04/28/87	0	1	
SHEN0048	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-06/24/82	0	6	
SHEN0054	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/16/87-07/30/97	9	41	
SHEN0058	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0059	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0074	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/24/87-04/24/87	0	1	
SHEN0076	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/21/81-06/23/82	0	4	
SHEN0078	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	4	
SHEN0098	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/21/81-06/23/82	0	4	
SHEN0099	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/29/87-04/29/87	0	1	
SHEN0100	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0105	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/29/87-04/29/87	0	1	
SHEN0107	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0116	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/21/81-06/23/82	0	4	
SHEN0117	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0124	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/23/81-06/24/82	0	5	
SHEN0125	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/11/92-01/19/95	2	100	
SHEN0133	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0135	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0137	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/14/77-01/14/77	0	1	
SHEN0138	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0148	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/25/82	0	6	
SHEN0149	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0153	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/21/81-06/23/82	0	4	
SHEN0154	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	2	7	
SHEN0161	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/04/30-04/08/69	38	41	S
SHEN0163	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/13/93-09/13/93	0	1	
SHEN0167	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0168	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0169	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0170	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/25/82	0	6	
SHEN0171	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	9	450	
SHEN0176	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	6	339	
SHEN0180	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0183	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/28/86-04/17/86	0	2	
SHEN0184	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0185	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	0	1	
SHEN0188	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/22/92-06/22/92	0	1	
SHEN0189	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	16	585	
SHEN0190	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0191	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/24/82	0	6	
SHEN0193	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	9	437	
SHEN0194	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/27/68-06/24/82	14	12	
SHEN0201	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/04/30-06/23/92	61	21	
SHEN0206	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/25/82	0	6	
SHEN0209	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0210	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/28/86-04/17/86	0	2	
SHEN0211	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	17	842	A
SHEN0215	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/86-04/15/86	0	2	
SHEN0217	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0218	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0220	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/29/82-06/24/82	0	3	
SHEN0231	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/18/70-12/27/73	3	5	
SHEN0236	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/82-06/24/82	0	3	
SHEN0237	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0238	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/82-06/21/82	0	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0240	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/86-04/15/86	0	2	
SHEN0241	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/17/77-01/17/77	0	1	
SHEN0242	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0244	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0245	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	1	3	
SHEN0249	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/10/82-06/25/82	0	2	
SHEN0251	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/18/70-05/15/72	1	3	
SHEN0258	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-08/19/93	1	4	
SHEN0260	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0261	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-08/19/93	1	4	
SHEN0263	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/30-05/23/69	38	9	
SHEN0265	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-11/19/94	2	5	
SHEN0273	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0274	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/14/87-07/30/97	9	41	
SHEN0277	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/25/82	0	6	
SHEN0281	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/17/77-01/17/77	0	1	
SHEN0283	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/25/81-09/25/81	0	1	
SHEN0284	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/25/81-09/25/81	0	1	
SHEN0289	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/25/81-09/25/81	0	1	
SHEN0291	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/12/77-01/12/77	0	1	
SHEN0294	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/21/82	0	6	
SHEN0295	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/22/82	0	6	
SHEN0298	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0300	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0302	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/12/77-01/12/77	0	1	
SHEN0303	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-01/18/77	0	1	
SHEN0308	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/02/87-05/02/87	0	1	
SHEN0309	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	05/02/87-05/02/87	0	1	
SHEN0310	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/22/82	0	6	
SHEN0317	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/01/48-10/01/48	0	1	
SHEN0318	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/22/82	0	6	
SHEN0320	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0321	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/11/81-06/21/82	0	6	
SHEN0322	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0323	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0325	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-01/18/77	0	1	
SHEN0327	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0328	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0329	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/23/82	0	6	
SHEN0332	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/25/97	4	223	
SHEN0336	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-01/20/96	3	199	
SHEN0339	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0340	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0341	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-10/05/94	2	3	
SHEN0345	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0346	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	7	
SHEN0351	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0354	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0363	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0365	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/11/81-06/21/82	0	6	
SHEN0367	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	6	
SHEN0369	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0374	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	5	8	
SHEN0377	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/11/81-06/21/82	0	6	
SHEN0379	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0391	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0392	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0393	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/20/77-01/20/77	0	1	
SHEN0396	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0397	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0407	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	0	6	
SHEN0408	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/24/88-07/30/97	9	39	
SHEN0410	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0411	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0423	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/20/77-01/20/77	0	1	
SHEN0424	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0425	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/77-04/22/77	0	1	
SHEN0426	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0427	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	0	6	
SHEN0428	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0430	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/77-04/11/77	0	1	
SHEN0432	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0433	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	0	1	
SHEN0436	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/21/82	0	6	
SHEN0437	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/21/82	0	6	
SHEN0439	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0440	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0444	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	0	6	
SHEN0445	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/14/81-06/21/82	0	6	
SHEN0446	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0448	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0451	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0454	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0455	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/89-04/25/89	0	1	
SHEN0456	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0457	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/21/81-06/24/82	0	6	
SHEN0458	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/86-04/11/86	0	2	
SHEN0463	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0468	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0469	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0476	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	0	6	
SHEN0478	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0480	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/20/77-01/20/77	0	1	
SHEN0481	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	0	6	
SHEN0483	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0491	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/21/82	0	6	
SHEN0492	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/77-04/11/77	0	1	
SHEN0493	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	0	2	
SHEN0498	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/21/81-06/24/82	0	6	
SHEN0501	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/77-04/22/77	0	1	
SHEN0503	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0504	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0506	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0510	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0511	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0512	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/87-07/30/97	9	41	
SHEN0514	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/22/82	0	6	
SHEN0516	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0520	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0521	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0522	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	4	
SHEN0541	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/10/81-06/24/82	0	6	
SHEN0543	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0557	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	10	513	
SHEN0558	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0560	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0562	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	0	1	
SHEN0567	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/10/81-06/24/82	0	6	
SHEN0575	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/08/77-04/08/77	0	1	
SHEN0577	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/77-04/11/77	0	1	
SHEN0590	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/12/77-04/12/77	0	1	
SHEN0591	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/11/81-06/24/82	0	6	
SHEN0594	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0595	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/29/87-07/30/97	9	40	
SHEN0597	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0598	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0599	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/22/82	0	6	
SHEN0600	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0603	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0607	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/22/82	0	6	
SHEN0608	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0615	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0616	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/87-04/26/95	7	33	
SHEN0618	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0619	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0636	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0652	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0653	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/12/77-04/12/77	0	1	
SHEN0654	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0659	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	01/20/56-01/20/56	0	1	
SHEN0660	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0662	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0664	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0676	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/81-06/23/82	0	6	
SHEN0677	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	6	
SHEN0694	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/21/82	0	6	
SHEN0695	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0701	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0709	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0710	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	0	1	
SHEN0718	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/12/77-04/12/77	0	1	
SHEN0721	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/81-06/23/82	0	6	
SHEN0724	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/81-06/23/82	0	6	
SHEN0725	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/81-06/23/82	0	6	
SHEN0727	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0728	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/25/87-04/25/87	0	1	
SHEN0730	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/23/82	0	6	
SHEN0732	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/06/77-04/06/77	0	1	
SHEN0733	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/23/82	0	6	
SHEN0735	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	0	1	
SHEN0738	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/26/68-10/01/68	0	6	
SHEN0739	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-06/22/82	0	6	
SHEN0742	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/27/86-04/10/86	0	2	
SHEN0743	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	03/27/86-04/10/86	0	2	
SHEN0748	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	10/10/52-05/21/69	16	2	
SHEN0749	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	04/08/77-04/08/77	0	1	
SHEN0756	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/05/30-06/17/86	55	420	T,S
SHEN0762	No	00930	SODIUM, DISSOLVED (MG/L AS NA)	09/10/93-09/10/93	0	1	
SHEN0005	No	00931	SODIUM ADSORPTION RATIO	03/05/68-05/21/69	1	2	
SHEN0020	No	00931	SODIUM ADSORPTION RATIO	03/11/77-03/11/77	0	1	
SHEN0022	No	00931	SODIUM ADSORPTION RATIO	03/11/77-03/11/77	0	1	
SHEN0025	No	00931	SODIUM ADSORPTION RATIO	08/19/81-06/24/82	0	6	
SHEN0037	No	00931	SODIUM ADSORPTION RATIO	08/17/81-06/23/82	0	6	
SHEN0042	No	00931	SODIUM ADSORPTION RATIO	08/17/81-06/23/82	0	6	
SHEN0044	No	00931	SODIUM ADSORPTION RATIO	07/16/68-06/23/82	13	7	
SHEN0048	No	00931	SODIUM ADSORPTION RATIO	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00931	SODIUM ADSORPTION RATIO	08/19/81-06/24/82	0	6	
SHEN0076	Yes	00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	0	4	
SHEN0098	No	00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00931	SODIUM ADSORPTION RATIO	09/23/81-06/24/82	0	5	
SHEN0148	No	00931	SODIUM ADSORPTION RATIO	08/17/81-06/25/82	0	6	
SHEN0153	Yes	00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	0	4	
SHEN0161	No	00931	SODIUM ADSORPTION RATIO	04/08/69-04/08/69	0	1	
SHEN0170	No	00931	SODIUM ADSORPTION RATIO	08/17/81-06/25/82	0	6	
SHEN0191	Yes	00931	SODIUM ADSORPTION RATIO	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00931	SODIUM ADSORPTION RATIO	03/27/68-06/24/82	14	12	
SHEN0201	No	00931	SODIUM ADSORPTION RATIO	03/05/68-05/21/69	1	4	
SHEN0206	No	00931	SODIUM ADSORPTION RATIO	08/17/81-06/25/82	0	6	
SHEN0220	No	00931	SODIUM ADSORPTION RATIO	01/29/82-06/24/82	0	3	
SHEN0231	No	00931	SODIUM ADSORPTION RATIO	05/18/70-12/27/73	3	5	
SHEN0236	No	00931	SODIUM ADSORPTION RATIO	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00931	SODIUM ADSORPTION RATIO	03/16/82-06/21/82	0	3	
SHEN0249	No	00931	SODIUM ADSORPTION RATIO	06/10/82-06/25/82	0	2	
SHEN0251	No	00931	SODIUM ADSORPTION RATIO	05/18/70-05/15/72	1	3	
SHEN0263	No	00931	SODIUM ADSORPTION RATIO	03/05/68-05/23/69	1	3	
SHEN0277	No	00931	SODIUM ADSORPTION RATIO	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00931	SODIUM ADSORPTION RATIO	08/18/81-06/25/82	0	6	
SHEN0283	Yes	00931	SODIUM ADSORPTION RATIO	09/25/81-09/25/81	0	1	
SHEN0284	No	00931	SODIUM ADSORPTION RATIO	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00931	SODIUM ADSORPTION RATIO	09/25/81-09/25/81	0	1	
SHEN0289	No	00931	SODIUM ADSORPTION RATIO	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00931	SODIUM ADSORPTION RATIO	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00931	SODIUM ADSORPTION RATIO	08/18/81-06/21/82	0	6	
SHEN0295	No	00931	SODIUM ADSORPTION RATIO	08/17/81-06/22/82	0	6	
SHEN0310	No	00931	SODIUM ADSORPTION RATIO	08/17/81-06/22/82	0	6	
SHEN0318	No	00931	SODIUM ADSORPTION RATIO	08/17/81-06/22/82	0	6	
SHEN0321	No	00931	SODIUM ADSORPTION RATIO	08/11/81-06/21/82	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0329	Yes	00931	SODIUM ADSORPTION RATIO	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00931	SODIUM ADSORPTION RATIO	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00931	SODIUM ADSORPTION RATIO	08/11/81-06/21/82	0	6	
SHEN0377	Yes	00931	SODIUM ADSORPTION RATIO	08/11/81-06/21/82	0	6	
SHEN0407	Yes	00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	0	6	
SHEN0427	No	00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	0	6	
SHEN0436	No	00931	SODIUM ADSORPTION RATIO	08/20/81-06/21/82	0	6	
SHEN0437	No	00931	SODIUM ADSORPTION RATIO	08/20/81-06/21/82	0	6	
SHEN0444	No	00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	0	6	
SHEN0445	No	00931	SODIUM ADSORPTION RATIO	08/14/81-06/21/82	0	6	
SHEN0457	No	00931	SODIUM ADSORPTION RATIO	08/21/81-06/24/82	0	6	
SHEN0476	No	00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	0	6	
SHEN0481	No	00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	0	6	
SHEN0491	No	00931	SODIUM ADSORPTION RATIO	08/18/81-06/21/82	0	6	
SHEN0498	No	00931	SODIUM ADSORPTION RATIO	08/21/81-06/24/82	0	6	
SHEN0514	No	00931	SODIUM ADSORPTION RATIO	08/18/81-06/22/82	0	6	
SHEN0541	No	00931	SODIUM ADSORPTION RATIO	08/10/81-06/24/82	0	6	
SHEN0567	No	00931	SODIUM ADSORPTION RATIO	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00931	SODIUM ADSORPTION RATIO	08/10/81-06/24/82	0	6	
SHEN0591	No	00931	SODIUM ADSORPTION RATIO	08/11/81-06/24/82	0	6	
SHEN0599	Yes	00931	SODIUM ADSORPTION RATIO	08/18/81-06/22/82	0	6	
SHEN0607	No	00931	SODIUM ADSORPTION RATIO	08/18/81-06/22/82	0	6	
SHEN0676	No	00931	SODIUM ADSORPTION RATIO	08/12/81-06/23/82	0	6	
SHEN0694	No	00931	SODIUM ADSORPTION RATIO	08/18/81-06/21/82	0	6	
SHEN0721	No	00931	SODIUM ADSORPTION RATIO	08/12/81-06/23/82	0	6	
SHEN0724	No	00931	SODIUM ADSORPTION RATIO	08/12/81-06/23/82	0	6	
SHEN0725	No	00931	SODIUM ADSORPTION RATIO	08/12/81-06/23/82	0	6	
SHEN0730	No	00931	SODIUM ADSORPTION RATIO	08/20/81-06/23/82	0	6	
SHEN0733	No	00931	SODIUM ADSORPTION RATIO	08/20/81-06/23/82	0	6	
SHEN0738	No	00931	SODIUM ADSORPTION RATIO	03/26/68-10/01/68	0	6	
SHEN0739	No	00931	SODIUM ADSORPTION RATIO	08/19/81-06/22/82	0	6	
SHEN0748	No	00931	SODIUM ADSORPTION RATIO	10/10/52-05/21/69	16	2	
SHEN0756	No	00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	18	326	
SHEN0005	No	00932	SODIUM, PERCENT	03/05/68-05/21/69	1	2	
SHEN0020	No	00932	SODIUM, PERCENT	03/11/77-03/11/77	0	1	
SHEN0022	No	00932	SODIUM, PERCENT	03/11/77-03/11/77	0	1	
SHEN0025	No	00932	SODIUM, PERCENT	08/19/81-06/24/82	0	6	
SHEN0037	No	00932	SODIUM, PERCENT	08/17/81-06/23/82	0	6	
SHEN0042	No	00932	SODIUM, PERCENT	08/17/81-06/23/82	0	6	
SHEN0044	No	00932	SODIUM, PERCENT	07/16/68-06/23/82	13	7	
SHEN0048	No	00932	SODIUM, PERCENT	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00932	SODIUM, PERCENT	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00932	SODIUM, PERCENT	08/19/81-06/24/82	0	6	
SHEN0076	Yes	00932	SODIUM, PERCENT	09/21/81-06/23/82	0	4	
SHEN0098	No	00932	SODIUM, PERCENT	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00932	SODIUM, PERCENT	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00932	SODIUM, PERCENT	09/23/81-06/24/82	0	5	
SHEN0148	No	00932	SODIUM, PERCENT	08/17/81-06/25/82	0	6	
SHEN0153	Yes	00932	SODIUM, PERCENT	09/21/81-06/23/82	0	4	
SHEN0161	No	00932	SODIUM, PERCENT	04/08/69-04/08/69	0	1	
SHEN0170	No	00932	SODIUM, PERCENT	08/17/81-06/25/82	0	6	
SHEN0191	Yes	00932	SODIUM, PERCENT	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00932	SODIUM, PERCENT	03/27/68-06/24/82	14	12	
SHEN0201	No	00932	SODIUM, PERCENT	03/05/68-05/21/69	1	4	
SHEN0206	No	00932	SODIUM, PERCENT	08/17/81-06/25/82	0	6	
SHEN0220	No	00932	SODIUM, PERCENT	01/29/82-06/24/82	0	3	
SHEN0231	No	00932	SODIUM, PERCENT	05/18/70-12/27/73	3	5	
SHEN0236	No	00932	SODIUM, PERCENT	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00932	SODIUM, PERCENT	03/16/82-06/21/82	0	3	
SHEN0249	No	00932	SODIUM, PERCENT	06/10/82-06/25/82	0	2	
SHEN0251	No	00932	SODIUM, PERCENT	05/18/70-05/15/72	1	3	
SHEN0263	No	00932	SODIUM, PERCENT	03/05/68-05/23/69	1	3	
SHEN0277	No	00932	SODIUM, PERCENT	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00932	SODIUM, PERCENT	08/18/81-06/25/82	0	6	
SHEN0283	Yes	00932	SODIUM, PERCENT	09/25/81-09/25/81	0	1	
SHEN0284	No	00932	SODIUM, PERCENT	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00932	SODIUM, PERCENT	09/25/81-09/25/81	0	1	
SHEN0289	No	00932	SODIUM, PERCENT	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00932	SODIUM, PERCENT	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00932	SODIUM, PERCENT	08/18/81-06/21/82	0	6	
SHEN0295	No	00932	SODIUM, PERCENT	08/17/81-06/22/82	0	6	
SHEN0310	No	00932	SODIUM, PERCENT	08/17/81-06/22/82	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0318	No	00932	SODIUM, PERCENT	08/17/81-06/22/82	0	6	
SHEN0321	No	00932	SODIUM, PERCENT	08/11/81-06/21/82	0	6	
SHEN0329	Yes	00932	SODIUM, PERCENT	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00932	SODIUM, PERCENT	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00932	SODIUM, PERCENT	08/11/81-06/21/82	0	6	
SHEN0377	Yes	00932	SODIUM, PERCENT	08/11/81-06/21/82	0	6	
SHEN0407	Yes	00932	SODIUM, PERCENT	08/13/81-06/21/82	0	6	
SHEN0427	No	00932	SODIUM, PERCENT	08/13/81-06/21/82	0	6	
SHEN0436	No	00932	SODIUM, PERCENT	08/20/81-06/21/82	0	6	
SHEN0437	No	00932	SODIUM, PERCENT	08/20/81-06/21/82	0	6	
SHEN0444	No	00932	SODIUM, PERCENT	08/13/81-06/21/82	0	6	
SHEN0445	No	00932	SODIUM, PERCENT	08/14/81-06/21/82	0	6	
SHEN0457	No	00932	SODIUM, PERCENT	08/21/81-06/24/82	0	6	
SHEN0476	No	00932	SODIUM, PERCENT	08/13/81-06/21/82	0	6	
SHEN0481	No	00932	SODIUM, PERCENT	08/13/81-06/21/82	0	6	
SHEN0491	No	00932	SODIUM, PERCENT	08/18/81-06/21/82	0	6	
SHEN0498	No	00932	SODIUM, PERCENT	08/21/81-06/24/82	0	6	
SHEN0514	No	00932	SODIUM, PERCENT	08/18/81-06/22/82	0	6	
SHEN0541	No	00932	SODIUM, PERCENT	08/10/81-06/24/82	0	6	
SHEN0567	No	00932	SODIUM, PERCENT	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00932	SODIUM, PERCENT	08/10/81-06/24/82	0	6	
SHEN0591	No	00932	SODIUM, PERCENT	08/11/81-06/24/82	0	6	
SHEN0599	Yes	00932	SODIUM, PERCENT	08/18/81-06/22/82	0	6	
SHEN0607	No	00932	SODIUM, PERCENT	08/18/81-06/22/82	0	6	
SHEN0676	No	00932	SODIUM, PERCENT	08/12/81-06/23/82	0	6	
SHEN0694	No	00932	SODIUM, PERCENT	08/18/81-06/21/82	0	6	
SHEN0721	No	00932	SODIUM, PERCENT	08/12/81-06/23/82	0	6	
SHEN0724	No	00932	SODIUM, PERCENT	08/12/81-06/23/82	0	6	
SHEN0725	No	00932	SODIUM, PERCENT	08/12/81-06/23/82	0	6	
SHEN0730	No	00932	SODIUM, PERCENT	08/20/81-06/23/82	0	6	
SHEN0733	No	00932	SODIUM, PERCENT	08/20/81-06/23/82	0	6	
SHEN0738	No	00932	SODIUM, PERCENT	03/26/68-10/01/68	0	6	
SHEN0739	No	00932	SODIUM, PERCENT	08/19/81-06/22/82	0	6	
SHEN0748	No	00932	SODIUM, PERCENT	10/10/52-05/21/69	16	2	
SHEN0756	No	00932	SODIUM, PERCENT	10/30/67-12/17/85	18	326	
SHEN0756	No	00933	SODIUM, PLUS POTASSIUM (MG/L)	08/01/79-02/21/80	0	5	
SHEN0003	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/28/86-04/11/86	0	2	
SHEN0005	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/29/54-05/21/69	14	3	
SHEN0011	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/04/30-09/04/30	0	1	
SHEN0014	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/28/86-04/11/86	0	2	
SHEN0020	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/11/77-03/11/77	0	1	
SHEN0022	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/11/77-03/11/77	0	1	
SHEN0025	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-06/24/82	0	6	
SHEN0027	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0037	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/23/82	0	6	
SHEN0038	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/13/93-09/13/93	0	1	
SHEN0039	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/24/87-04/24/87	0	1	
SHEN0042	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/23/82	0	6	
SHEN0044	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/03/52-06/23/82	29	9	
SHEN0045	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/28/87-04/28/87	0	1	
SHEN0046	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/28/87-04/28/87	0	1	
SHEN0048	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-06/24/82	0	6	
SHEN0054	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/16/87-07/30/97	9	41	
SHEN0058	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0059	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0074	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/24/87-04/24/87	0	1	
SHEN0076	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	0	4	
SHEN0078	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0080	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	4	
SHEN0098	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	0	4	
SHEN0099	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/29/87-04/29/87	0	1	
SHEN0100	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0105	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/29/87-04/29/87	0	1	
SHEN0107	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	5	
SHEN0116	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	0	4	
SHEN0117	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0124	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/23/81-06/24/82	0	5	
SHEN0125	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/11/92-01/19/95	2	100	
SHEN0133	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0135	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0138	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0148	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/25/82	0	6	
SHEN0149	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0153	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	0	4	
SHEN0154	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	2	7	
SHEN0161	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/04/30-04/08/69	38	14	
SHEN0163	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/13/93-09/13/93	0	1	
SHEN0167	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0168	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0169	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0170	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/25/82	0	6	
SHEN0171	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	9	450	
SHEN0176	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	6	339	
SHEN0180	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0183	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/28/86-04/17/86	0	2	
SHEN0184	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0185	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	0	1	
SHEN0188	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/92-06/22/92	0	1	
SHEN0189	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	16	585	
SHEN0190	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0191	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/24/82	0	6	
SHEN0193	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	9	437	
SHEN0194	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/27/68-06/24/82	14	12	
SHEN0201	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/04/30-06/23/92	61	11	
SHEN0206	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/25/82	0	6	
SHEN0209	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0210	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/28/86-04/17/86	0	2	
SHEN0211	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	17	842	A
SHEN0215	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/86-04/15/86	0	2	
SHEN0217	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0218	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0220	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/29/82-06/24/82	0	3	
SHEN0231	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/18/70-12/27/73	3	5	
SHEN0236	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/82-06/24/82	0	3	
SHEN0237	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0238	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/82-06/21/82	0	3	
SHEN0240	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/86-04/15/86	0	2	
SHEN0242	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0244	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0245	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	1	3	
SHEN0249	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/10/82-06/25/82	0	2	
SHEN0251	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/18/70-05/15/72	1	3	
SHEN0258	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-08/19/93	1	4	
SHEN0260	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0261	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-08/19/93	1	4	
SHEN0263	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/30-05/23/69	38	8	
SHEN0265	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-11/19/94	2	5	
SHEN0273	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0274	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/14/87-07/30/97	9	41	
SHEN0277	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/25/82	0	6	
SHEN0283	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/25/81-09/25/81	0	1	
SHEN0284	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/25/81-09/25/81	0	1	
SHEN0289	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/21/82	0	6	
SHEN0295	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/22/82	0	6	
SHEN0298	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0300	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0308	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/02/87-05/02/87	0	1	
SHEN0309	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/02/87-05/02/87	0	1	
SHEN0310	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/22/82	0	6	
SHEN0317	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/01/48-10/01/48	0	1	
SHEN0318	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/22/82	0	6	
SHEN0320	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0321	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/11/81-06/21/82	0	6	
SHEN0322	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0323	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0327	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0328	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0329	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/23/82	0	6	
SHEN0332	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/25/97	4	223	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0336	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-01/20/96	3	199	
SHEN0339	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0340	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0341	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-10/05/94	2	3	
SHEN0345	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0346	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	7	
SHEN0351	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0354	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0365	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/11/81-06/21/82	0	6	
SHEN0367	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	6	
SHEN0369	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0374	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	5	8	
SHEN0377	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/11/81-06/21/82	0	6	
SHEN0379	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0391	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0392	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0396	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0397	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0407	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	0	6	
SHEN0408	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/24/88-07/30/97	9	39	
SHEN0410	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0411	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0424	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0426	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0427	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	0	6	
SHEN0428	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0432	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0433	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	0	1	
SHEN0436	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/21/82	0	6	
SHEN0437	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/21/82	0	6	
SHEN0439	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0440	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0444	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	0	6	
SHEN0445	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/14/81-06/21/82	0	6	
SHEN0446	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0448	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0451	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0454	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0455	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/89-04/25/89	0	1	
SHEN0456	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0457	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/21/81-06/24/82	0	6	
SHEN0458	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/86-04/11/86	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0463	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0468	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0469	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0476	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	0	6	
SHEN0478	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0481	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	0	6	
SHEN0483	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0491	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/21/82	0	6	
SHEN0493	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	0	2	
SHEN0498	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/21/81-06/24/82	0	6	
SHEN0503	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0504	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0506	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0510	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0511	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0512	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/87-07/30/97	9	41	
SHEN0514	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/22/82	0	6	
SHEN0516	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0520	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0521	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0522	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	4	
SHEN0541	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/10/81-06/24/82	0	6	
SHEN0543	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0557	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	10	513	
SHEN0558	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0560	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0562	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0565	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	0	1	
SHEN0567	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/10/81-06/24/82	0	6	
SHEN0569	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/10/81-06/24/82	0	6	
SHEN0591	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/11/81-06/24/82	0	6	
SHEN0594	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0595	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/29/87-07/30/97	9	40	
SHEN0597	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	2	
SHEN0598	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0599	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/22/82	0	6	
SHEN0600	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0603	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0607	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/22/82	0	6	
SHEN0608	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0615	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0616	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/87-04/26/95	7	33	
SHEN0618	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0619	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0636	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0652	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0654	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0659	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/20/56-01/20/56	0	1	
SHEN0660	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0662	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0664	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0676	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/81-06/23/82	0	6	
SHEN0677	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0691	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	6	
SHEN0694	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/21/82	0	6	
SHEN0695	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0709	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0710	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	0	1	
SHEN0721	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/81-06/23/82	0	6	
SHEN0724	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/81-06/23/82	0	6	
SHEN0725	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/81-06/23/82	0	6	
SHEN0727	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0728	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	0	1	
SHEN0730	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/23/82	0	6	
SHEN0733	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/23/82	0	6	
SHEN0735	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	0	1	
SHEN0738	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/26/68-10/01/68	0	6	
SHEN0739	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-06/22/82	0	6	
SHEN0742	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/27/86-04/10/86	0	2	
SHEN0743	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/27/86-04/10/86	0	2	
SHEN0748	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/10/52-05/21/69	16	2	
SHEN0756	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	55	410	T,S
SHEN0762	No	00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/10/93-09/10/93	0	1	
SHEN0001	No	00940	CHLORIDE, TOTAL IN WATER MG/L	02/25/92-04/27/98	6	25	
SHEN0004	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	10	104	
SHEN0005	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/29/54-05/21/69	14	3	
SHEN0011	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/04/30-09/04/30	0	1	
SHEN0017	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/28/71-09/28/71	0	1	
SHEN0020	No	00940	CHLORIDE, TOTAL IN WATER MG/L	03/11/77-03/11/77	0	1	
SHEN0022	No	00940	CHLORIDE, TOTAL IN WATER MG/L	03/11/77-03/11/77	0	1	
SHEN0024	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/29/94-07/29/97	2	4	
SHEN0025	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/19/81-06/24/82	0	6	
SHEN0037	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/23/82	0	6	
SHEN0038	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/13/93-09/13/93	0	1	
SHEN0040	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/02/45-08/02/45	0	1	
SHEN0042	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/23/82	0	6	
SHEN0044	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/03/52-06/23/82	29	9	
SHEN0048	No	00940	CHLORIDE, TOTAL IN WATER MG/L	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/19/81-06/24/82	0	6	
SHEN0076	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	0	4	
SHEN0098	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	09/23/81-06/24/82	0	5	
SHEN0148	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/25/82	0	6	
SHEN0153	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	0	4	
SHEN0161	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/04/30-04/08/69	38	41	S
SHEN0162	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	102	
SHEN0163	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/13/93-09/13/93	0	1	
SHEN0164	No	00940	CHLORIDE, TOTAL IN WATER MG/L	06/10/93-12/21/98	5	65	
SHEN0170	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/25/82	0	6	
SHEN0188	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	06/22/92-06/22/92	0	1	
SHEN0191	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	03/27/68-06/24/82	14	12	
SHEN0201	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/04/30-06/23/92	61	23	
SHEN0204	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	102	
SHEN0206	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/25/82	0	6	
SHEN0220	No	00940	CHLORIDE, TOTAL IN WATER MG/L	01/29/82-06/24/82	0	3	
SHEN0231	No	00940	CHLORIDE, TOTAL IN WATER MG/L	05/18/70-03/14/73	2	6	
SHEN0236	No	00940	CHLORIDE, TOTAL IN WATER MG/L	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	03/16/82-06/21/82	0	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0249	No	00940	CHLORIDE, TOTAL IN WATER MG/L	06/10/82-06/25/82	0	2	
SHEN0251	No	00940	CHLORIDE, TOTAL IN WATER MG/L	05/18/70-03/14/73	2	6	
SHEN0252	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	102	
SHEN0256	No	00940	CHLORIDE, TOTAL IN WATER MG/L	07/22/93-12/10/98	5	67	
SHEN0263	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/14/30-05/23/69	38	9	
SHEN0277	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/25/82	0	6	
SHEN0282	No	00940	CHLORIDE, TOTAL IN WATER MG/L	01/07/92-11/30/98	6	26	
SHEN0283	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	09/25/81-09/25/81	0	1	
SHEN0284	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	09/25/81-09/25/81	0	1	
SHEN0289	No	00940	CHLORIDE, TOTAL IN WATER MG/L	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/21/82	0	6	
SHEN0295	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/22/82	0	6	
SHEN0297	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	8	58	
SHEN0310	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/22/82	0	6	
SHEN0311	No	00940	CHLORIDE, TOTAL IN WATER MG/L	06/12/97-11/30/98	1	7	
SHEN0317	No	00940	CHLORIDE, TOTAL IN WATER MG/L	10/01/48-10/01/48	0	1	
SHEN0318	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/22/82	0	6	
SHEN0321	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/11/81-06/21/82	0	6	
SHEN0324	No	00940	CHLORIDE, TOTAL IN WATER MG/L	12/18/91-07/29/97	5	12	
SHEN0329	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/11/81-06/21/82	0	6	
SHEN0366	No	00940	CHLORIDE, TOTAL IN WATER MG/L	12/18/91-07/29/97	5	12	
SHEN0372	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/19/90-09/29/98	7	29	
SHEN0377	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/11/81-06/21/82	0	6	
SHEN0386	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	10	103	
SHEN0407	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	0	6	
SHEN0427	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	0	6	
SHEN0436	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/20/81-06/21/82	0	6	
SHEN0437	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/20/81-06/21/82	0	6	
SHEN0444	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	0	6	
SHEN0445	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/14/81-06/21/82	0	6	
SHEN0450	No	00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	7	73	
SHEN0452	No	00940	CHLORIDE, TOTAL IN WATER MG/L	10/23/75-10/23/75	0	1	
SHEN0457	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/21/81-06/24/82	0	6	
SHEN0471	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	10/23/75-10/23/75	0	1	
SHEN0476	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	0	6	
SHEN0481	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	0	6	
SHEN0491	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/21/82	0	6	
SHEN0498	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/21/81-06/24/82	0	6	
SHEN0514	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/22/82	0	6	
SHEN0541	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/10/81-06/24/82	0	6	
SHEN0542	No	00940	CHLORIDE, TOTAL IN WATER MG/L	12/18/91-07/21/97	5	16	
SHEN0566	No	00940	CHLORIDE, TOTAL IN WATER MG/L	07/31/90-07/31/90	0	3	
SHEN0567	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/10/81-06/24/82	0	6	
SHEN0568	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/19/90-09/29/98	7	28	
SHEN0569	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/10/81-06/24/82	0	6	
SHEN0591	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/11/81-06/24/82	0	6	
SHEN0599	Yes	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/22/82	0	6	
SHEN0607	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/22/82	0	6	
SHEN0631	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/04/94-07/21/97	2	4	
SHEN0635	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	10	101	
SHEN0651	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/19/90-04/22/98	7	25	
SHEN0659	No	00940	CHLORIDE, TOTAL IN WATER MG/L	01/20/56-01/20/56	0	1	
SHEN0676	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/12/81-06/23/82	0	6	
SHEN0678	No	00940	CHLORIDE, TOTAL IN WATER MG/L	03/24/75-03/24/75	0	1	
SHEN0694	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/21/82	0	6	
SHEN0719	No	00940	CHLORIDE, TOTAL IN WATER MG/L	04/07/75-04/07/75	0	1	
SHEN0721	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/12/81-06/23/82	0	6	
SHEN0723	No	00940	CHLORIDE, TOTAL IN WATER MG/L	04/07/75-04/07/75	0	1	
SHEN0724	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/12/81-06/23/82	0	6	
SHEN0725	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/12/81-06/23/82	0	6	
SHEN0730	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/20/81-06/23/82	0	6	
SHEN0733	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/20/81-06/23/82	0	6	
SHEN0738	No	00940	CHLORIDE, TOTAL IN WATER MG/L	03/26/68-10/01/68	0	6	
SHEN0739	No	00940	CHLORIDE, TOTAL IN WATER MG/L	08/19/81-06/22/82	0	6	
SHEN0748	No	00940	CHLORIDE, TOTAL IN WATER MG/L	10/10/52-05/21/69	16	2	
SHEN0755	No	00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	24	104	
SHEN0756	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	55	423	T,S

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0762	No	00940	CHLORIDE, TOTAL IN WATER MG/L	09/10/93-09/10/93	0	1	
SHEN0775	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	10	102	
SHEN0777	No	00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	9	100	
SHEN0783	No	00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-07/14/97	8	41	
SHEN0784	No	00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-10/14/75	1	3	
SHEN0003	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/28/86-04/11/86	0	2	
SHEN0014	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/28/86-04/11/86	0	2	
SHEN0027	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0039	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/24/87-04/24/87	0	1	
SHEN0045	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/28/87-04/28/87	0	1	
SHEN0046	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/28/87-04/28/87	0	1	
SHEN0054	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/16/87-07/30/97	9	41	
SHEN0058	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0059	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0074	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/24/87-04/24/87	0	1	
SHEN0078	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	4	
SHEN0099	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/29/87-04/29/87	0	1	
SHEN0100	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0105	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/29/87-04/29/87	0	1	
SHEN0107	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	5	
SHEN0117	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0125	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/11/92-01/19/95	2	100	
SHEN0133	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0135	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0138	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0149	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0150	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0154	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	2	7	
SHEN0167	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0168	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0169	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0171	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	9	450	
SHEN0176	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	6	339	
SHEN0180	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0183	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/28/86-04/17/86	0	2	
SHEN0184	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0185	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	0	1	
SHEN0189	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	16	585	
SHEN0190	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0193	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	9	437	
SHEN0209	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0210	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/28/86-04/17/86	0	2	
SHEN0211	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	17	842	A
SHEN0215	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/86-04/15/86	0	2	
SHEN0217	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0218	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0237	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0240	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/86-04/15/86	0	2	
SHEN0242	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0244	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0245	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	1	3	
SHEN0258	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-08/19/93	1	4	
SHEN0260	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0261	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-08/19/93	1	4	
SHEN0265	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-11/19/94	2	5	
SHEN0273	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0274	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/14/87-07/30/97	9	41	
SHEN0298	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0300	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0308	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/02/87-05/02/87	0	1	
SHEN0309	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	05/02/87-05/02/87	0	1	
SHEN0320	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0322	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0323	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0327	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0328	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0332	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/25/97	4	223	
SHEN0336	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-01/20/96	3	199	
SHEN0339	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0340	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0341	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-10/05/94	2	3	
SHEN0345	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0346	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	7	
SHEN0351	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0354	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0367	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	6	
SHEN0369	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0374	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	5	8	
SHEN0379	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0391	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0392	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0396	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0397	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0408	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/24/88-07/30/97	9	39	
SHEN0410	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0411	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0424	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0426	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0428	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0432	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0433	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	0	1	
SHEN0439	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0440	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0446	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0448	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0451	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0454	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0455	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/89-04/25/89	0	1	
SHEN0456	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0458	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/86-04/11/86	0	2	
SHEN0463	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0468	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0469	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0478	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0483	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0487	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0493	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	0	2	
SHEN0503	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0504	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0506	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0510	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0511	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0512	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/12/87-07/30/97	9	41	
SHEN0516	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0520	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0521	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0522	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	4	
SHEN0543	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0557	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	10	513	
SHEN0558	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0560	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0562	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	0	1	
SHEN0594	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0595	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/29/87-07/30/97	9	40	
SHEN0597	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	2	
SHEN0598	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0600	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0603	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0608	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0615	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0616	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/12/87-04/26/95	7	33	
SHEN0618	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0619	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0625	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0636	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0652	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0654	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0660	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0662	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0664	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	2	
SHEN0665	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0677	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	6	
SHEN0695	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0709	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0710	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	0	1	
SHEN0727	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0728	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	0	1	
SHEN0735	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	0	1	
SHEN0742	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/27/86-04/10/86	0	2	
SHEN0743	No	00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/27/86-04/10/86	0	2	
SHEN0001	No	00945	SULFATE, TOTAL (MG/L AS SO4)	02/25/92-04/27/98	6	25	
SHEN0004	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	10	104	
SHEN0005	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/29/54-05/21/69	14	3	
SHEN0009	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-04/16/73	0	2	
SHEN0011	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-09/04/30	0	1	
SHEN0015	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-04/17/73	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0020	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/11/77-03/11/77	0	1	
SHEN0022	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/11/77-03/11/77	0	1	
SHEN0024	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/29/94-07/29/97	2	4	
SHEN0025	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-06/24/82	0	6	
SHEN0032	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-05/23/72	0	1	
SHEN0037	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/23/82	0	6	
SHEN0038	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/13/93-09/13/93	0	1	
SHEN0040	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/02/45-08/02/45	0	1	
SHEN0042	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/23/82	0	6	
SHEN0044	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/03/52-06/23/82	29	9	
SHEN0048	No	00945	SULFATE, TOTAL (MG/L AS SO4)	01/27/82-06/24/82	0	4	
SHEN0050	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-05/23/72	0	1	
SHEN0052	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-06/24/82	0	6	
SHEN0076	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	0	4	
SHEN0098	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	0	4	
SHEN0116	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	0	4	
SHEN0124	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/23/81-06/24/82	0	5	
SHEN0148	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/25/82	0	6	
SHEN0153	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	0	4	
SHEN0161	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-04/08/69	38	41	S
SHEN0162	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	101	
SHEN0163	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/13/93-09/13/93	0	1	
SHEN0164	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/93-12/21/98	5	64	
SHEN0170	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/25/82	0	6	
SHEN0188	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/92-06/22/92	0	1	
SHEN0191	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/24/82	0	6	
SHEN0194	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	03/27/68-06/24/82	14	12	
SHEN0196	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-04/16/73	0	2	
SHEN0201	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-06/23/92	61	23	
SHEN0204	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	101	
SHEN0206	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/25/82	0	6	
SHEN0220	No	00945	SULFATE, TOTAL (MG/L AS SO4)	01/29/82-06/24/82	0	3	
SHEN0231	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/18/70-12/27/73	3	8	
SHEN0236	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	03/16/82-06/21/82	0	3	
SHEN0249	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/82-06/25/82	0	2	
SHEN0251	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/69-03/14/73	3	38	
SHEN0252	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	101	
SHEN0256	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/22/93-12/10/98	5	67	
SHEN0263	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/14/30-05/23/69	38	9	
SHEN0277	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/25/82	0	6	
SHEN0282	No	00945	SULFATE, TOTAL (MG/L AS SO4)	01/07/92-11/30/98	6	26	
SHEN0283	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/25/81-09/25/81	0	1	
SHEN0284	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/25/81-09/25/81	0	1	
SHEN0289	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/21/82	0	6	
SHEN0295	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/22/82	0	6	
SHEN0297	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	8	58	
SHEN0301	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-04/16/73	0	2	
SHEN0305	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	0	1	
SHEN0306	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-04/16/73	0	2	
SHEN0307	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	0	1	
SHEN0310	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/22/82	0	6	
SHEN0311	No	00945	SULFATE, TOTAL (MG/L AS SO4)	06/12/97-11/30/98	1	7	
SHEN0317	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/01/48-10/01/48	0	1	
SHEN0318	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/22/82	0	6	
SHEN0321	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/11/81-06/21/82	0	6	
SHEN0324	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/18/91-07/29/97	5	12	
SHEN0329	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/23/82	0	6	
SHEN0365	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/11/81-06/21/82	0	6	
SHEN0366	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/18/91-07/29/97	5	12	
SHEN0372	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/90-09/29/98	7	28	
SHEN0373	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	0	1	
SHEN0377	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/11/81-06/21/82	0	6	
SHEN0382	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	0	1	
SHEN0386	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	10	103	
SHEN0389	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0407	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	0	6	
SHEN0427	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	0	6	
SHEN0436	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/21/82	0	6	
SHEN0437	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/21/82	0	6	
SHEN0444	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	0	6	
SHEN0445	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/14/81-06/21/82	0	6	
SHEN0450	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	7	73	
SHEN0457	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/21/81-06/24/82	0	6	
SHEN0476	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	0	6	
SHEN0481	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	0	6	
SHEN0491	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/21/82	0	6	
SHEN0498	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/21/81-06/24/82	0	6	
SHEN0514	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/22/82	0	6	
SHEN0541	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/10/81-06/24/82	0	6	
SHEN0542	No	00945	SULFATE, TOTAL (MG/L AS SO4)	12/18/91-07/21/97	5	16	
SHEN0566	No	00945	SULFATE, TOTAL (MG/L AS SO4)	07/31/90-07/31/90	0	3	
SHEN0567	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/10/81-06/24/82	0	6	
SHEN0568	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/90-09/29/98	7	28	
SHEN0569	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/10/81-06/24/82	0	6	
SHEN0582	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-04/16/73	0	2	
SHEN0587	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	0	1	
SHEN0591	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/11/81-06/24/82	0	6	
SHEN0592	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-04/16/73	0	2	
SHEN0599	Yes	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/22/82	0	6	
SHEN0607	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/22/82	0	6	
SHEN0631	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/04/94-07/21/97	2	4	
SHEN0633	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	0	2	
SHEN0635	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	10	101	
SHEN0651	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/90-04/22/98	7	25	
SHEN0659	No	00945	SULFATE, TOTAL (MG/L AS SO4)	01/20/56-01/20/56	0	1	
SHEN0676	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/12/81-06/23/82	0	6	
SHEN0694	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/21/82	0	6	
SHEN0721	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/12/81-06/23/82	0	6	
SHEN0724	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/12/81-06/23/82	0	6	
SHEN0725	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/12/81-06/23/82	0	6	
SHEN0730	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/23/82	0	6	
SHEN0733	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/23/82	0	6	
SHEN0738	No	00945	SULFATE, TOTAL (MG/L AS SO4)	03/26/68-10/01/68	0	6	
SHEN0739	No	00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-06/22/82	0	6	
SHEN0746	No	00945	SULFATE, TOTAL (MG/L AS SO4)	04/18/73-04/18/73	0	1	
SHEN0748	No	00945	SULFATE, TOTAL (MG/L AS SO4)	10/10/52-05/21/69	16	2	
SHEN0755	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	16	144	
SHEN0756	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	55	512	T,S
SHEN0760	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	0	1	
SHEN0762	No	00945	SULFATE, TOTAL (MG/L AS SO4)	09/10/93-09/10/93	0	1	
SHEN0765	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	0	1	
SHEN0768	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-04/18/73	0	2	
SHEN0769	No	00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	0	1	
SHEN0774	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-06/09/88	5	42	
SHEN0775	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	10	102	
SHEN0777	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	16	144	
SHEN0783	No	00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-07/14/97	8	41	
SHEN0003	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/28/86-04/11/86	0	2	
SHEN0014	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/28/86-04/11/86	0	2	
SHEN0027	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0039	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/24/87-04/24/87	0	1	
SHEN0045	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/28/87-04/28/87	0	1	
SHEN0046	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/28/87-04/28/87	0	1	
SHEN0054	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/16/87-07/30/97	9	41	
SHEN0058	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0059	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0074	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/24/87-04/24/87	0	1	
SHEN0078	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	4	
SHEN0099	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/29/87-04/29/87	0	1	
SHEN0100	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0105	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/29/87-04/29/87	0	1	
SHEN0107	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	5	
SHEN0117	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0125	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/11/92-01/19/95	2	100	
SHEN0133	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0135	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0138	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0149	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0154	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	2	7	
SHEN0167	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0168	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0169	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0171	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	9	450	
SHEN0176	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	6	339	
SHEN0180	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0183	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/28/86-04/17/86	0	2	
SHEN0184	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0185	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	0	1	
SHEN0189	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	16	585	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0190	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0193	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	9	437	
SHEN0209	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0210	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/28/86-04/17/86	0	2	
SHEN0211	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	17	842	A
SHEN0215	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/86-04/15/86	0	2	
SHEN0217	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0218	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0237	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0240	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/86-04/15/86	0	2	
SHEN0242	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0244	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0245	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	1	3	
SHEN0258	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-08/19/93	1	4	
SHEN0260	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0261	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-08/19/93	1	4	
SHEN0265	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-11/19/94	2	5	
SHEN0273	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0274	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/14/87-07/30/97	9	41	
SHEN0298	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0300	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0308	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/02/87-05/02/87	0	1	
SHEN0309	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	05/02/87-05/02/87	0	1	
SHEN0320	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0322	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0323	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0327	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0328	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0332	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/25/97	4	223	
SHEN0336	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-01/20/96	3	199	
SHEN0339	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0340	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0341	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-10/05/94	2	3	
SHEN0345	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0346	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	7	
SHEN0351	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0354	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0367	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	6	
SHEN0369	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0374	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	5	8	
SHEN0379	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0391	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0392	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0396	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0397	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0404	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0408	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/24/88-07/30/97	9	39	
SHEN0410	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0411	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0415	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0424	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0426	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0428	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0432	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0433	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	0	1	
SHEN0439	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0440	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0446	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0448	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0451	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0454	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0455	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/89-04/25/89	0	1	
SHEN0456	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0458	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/86-04/11/86	0	2	
SHEN0463	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0468	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0469	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0478	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0483	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0493	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	0	2	
SHEN0503	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0504	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0506	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0510	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0511	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0512	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/12/87-07/30/97	9	41	
SHEN0516	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0520	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0521	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0522	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	4	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0530	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	4	
SHEN0543	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0557	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	10	513	
SHEN0558	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0560	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0562	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	0	1	
SHEN0594	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0595	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/29/87-07/30/97	9	40	
SHEN0597	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	2	
SHEN0598	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0600	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0603	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0608	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0615	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0616	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/12/87-04/26/95	7	33	
SHEN0618	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0619	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0636	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0652	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0654	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0660	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0662	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0664	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0665	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0677	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	6	
SHEN0695	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0709	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0710	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	0	1	
SHEN0727	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0728	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	0	1	
SHEN0735	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	0	1	
SHEN0742	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/27/86-04/10/86	0	2	
SHEN0743	No	00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/27/86-04/10/86	0	2	
SHEN0003	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/28/86-04/11/86	0	2	
SHEN0005	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/29/54-05/21/69	14	3	
SHEN0014	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/28/86-04/11/86	0	2	
SHEN0020	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/11/77-03/11/77	0	1	
SHEN0022	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/11/77-03/11/77	0	1	
SHEN0038	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/13/93-09/13/93	0	1	
SHEN0040	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/02/45-08/02/45	0	1	
SHEN0044	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/03/52-07/16/68	15	3	
SHEN0070	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/01/86-04/15/86	0	2	
SHEN0161	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/05/45-04/08/69	24	39	
SHEN0163	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/13/93-09/13/93	0	1	
SHEN0183	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/28/86-04/17/86	0	2	
SHEN0188	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/92-06/22/92	0	1	
SHEN0194	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/27/68-12/13/68	0	6	
SHEN0201	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/05/45-06/23/92	47	21	
SHEN0210	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/31/86-04/15/86	0	2	
SHEN0231	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/18/70-12/27/73	3	8	
SHEN0240	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/31/86-04/15/86	0	2	
SHEN0251	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/18/70-03/14/73	2	6	
SHEN0263	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/06/45-05/23/69	24	7	
SHEN0317	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/01/48-10/01/48	0	1	
SHEN0462	Yes	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/31/86-04/11/86	0	2	
SHEN0558	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/31/86-04/11/86	0	2	
SHEN0659	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/20/56-01/20/56	0	1	
SHEN0738	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/26/68-10/01/68	0	6	
SHEN0742	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/27/86-04/10/86	0	2	
SHEN0743	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/27/86-04/10/86	0	2	
SHEN0748	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/10/52-05/21/69	16	2	
SHEN0756	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	41	420	T,S

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0762	No	00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/10/93-09/10/93	0	1	
SHEN0001	No	00951	FLUORIDE, TOTAL (MG/L AS F)	02/25/92-02/18/93	0	4	
SHEN0004	No	00951	FLUORIDE, TOTAL (MG/L AS F)	01/17/89-04/19/93	4	32	
SHEN0162	No	00951	FLUORIDE, TOTAL (MG/L AS F)	01/17/89-04/12/93	4	30	
SHEN0204	No	00951	FLUORIDE, TOTAL (MG/L AS F)	01/17/89-04/12/93	4	30	
SHEN0252	No	00951	FLUORIDE, TOTAL (MG/L AS F)	01/17/89-04/12/93	4	30	
SHEN0282	No	00951	FLUORIDE, TOTAL (MG/L AS F)	01/07/92-04/05/93	1	5	
SHEN0297	No	00951	FLUORIDE, TOTAL (MG/L AS F)	09/26/90-12/29/92	2	24	
SHEN0324	No	00951	FLUORIDE, TOTAL (MG/L AS F)	12/18/91-04/15/93	1	7	
SHEN0366	No	00951	FLUORIDE, TOTAL (MG/L AS F)	12/18/91-04/15/93	1	6	
SHEN0372	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/19/90-03/01/93	2	9	
SHEN0386	No	00951	FLUORIDE, TOTAL (MG/L AS F)	01/24/89-01/11/93	3	30	
SHEN0450	No	00951	FLUORIDE, TOTAL (MG/L AS F)	07/29/91-04/15/93	1	8	
SHEN0542	No	00951	FLUORIDE, TOTAL (MG/L AS F)	12/18/91-04/15/93	1	7	
SHEN0566	No	00951	FLUORIDE, TOTAL (MG/L AS F)	07/31/90-07/31/90	0	3	
SHEN0568	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/19/90-03/01/93	2	9	
SHEN0635	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/09/88-01/11/93	4	30	
SHEN0651	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/19/90-03/01/93	2	9	
SHEN0755	No	00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/87-01/11/93	5	32	
SHEN0774	No	00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/87-06/09/88	0	2	
SHEN0775	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/09/88-04/14/93	4	32	
SHEN0777	No	00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/87-04/14/93	5	32	
SHEN0783	No	00951	FLUORIDE, TOTAL (MG/L AS F)	11/09/88-04/14/93	4	20	
SHEN0001	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/10/92-02/18/93	0	4	
SHEN0003	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/28/86-04/11/86	0	2	
SHEN0004	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/13/89-12/15/92	3	30	
SHEN0005	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/29/54-05/21/69	14	3	
SHEN0011	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/04/30-09/04/30	0	1	
SHEN0014	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/28/86-04/11/86	0	2	
SHEN0020	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/11/77-03/11/77	0	1	
SHEN0022	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/11/77-03/11/77	0	1	
SHEN0025	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-06/24/82	0	6	
SHEN0037	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/23/82	0	6	
SHEN0038	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/13/93-09/13/93	0	1	
SHEN0040	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/02/45-08/02/45	0	1	
SHEN0042	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/23/82	0	6	
SHEN0044	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/03/52-06/23/82	29	9	
SHEN0048	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	01/27/82-06/24/82	0	4	
SHEN0052	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/21/81-06/23/82	0	4	
SHEN0053	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-06/24/82	0	6	
SHEN0054	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/16/87-07/30/97	9	41	
SHEN0059	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/01/86-04/15/86	0	2	
SHEN0072	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0076	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/21/81-06/23/82	0	4	
SHEN0078	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/01/86-04/15/86	0	2	
SHEN0087	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	4	
SHEN0098	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/21/81-06/23/82	0	4	
SHEN0100	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0103	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0107	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	5	
SHEN0116	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/21/81-06/23/82	0	4	
SHEN0117	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0124	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/23/81-06/24/82	0	5	
SHEN0125	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/11/92-01/19/95	2	100	
SHEN0135	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0138	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0148	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/25/82	0	6	
SHEN0149	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0153	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/21/81-06/23/82	0	4	
SHEN0154	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	2	7	
SHEN0161	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/04/30-04/08/69	38	41	S
SHEN0162	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/13/89-02/08/93	3	31	
SHEN0163	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/13/93-09/13/93	0	1	
SHEN0169	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0170	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/25/82	0	6	
SHEN0171	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	9	449	
SHEN0176	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	6	337	
SHEN0180	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0183	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/28/86-04/17/86	0	2	
SHEN0185	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	17	789	A
SHEN0187	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	0	1	
SHEN0188	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/22/92-06/22/92	0	1	
SHEN0189	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	16	585	
SHEN0191	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/24/82	0	6	
SHEN0193	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	9	437	
SHEN0194	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/27/68-06/24/82	14	12	
SHEN0201	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/04/30-06/23/92	61	23	
SHEN0204	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/13/89-02/08/93	3	31	
SHEN0206	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/25/82	0	6	
SHEN0210	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/28/86-04/17/86	0	2	
SHEN0211	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	17	842	A
SHEN0215	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/86-04/15/86	0	2	
SHEN0220	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	01/29/82-06/24/82	0	3	
SHEN0236	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/82-06/24/82	0	3	
SHEN0238	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/82-06/21/82	0	3	
SHEN0240	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/86-04/15/86	0	2	
SHEN0245	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	1	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0248	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	1	3	
SHEN0249	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/10/82-06/25/82	0	2	
SHEN0252	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/13/89-02/08/93	3	31	
SHEN0258	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-08/19/93	1	4	
SHEN0261	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-08/19/93	1	4	
SHEN0263	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/14/30-05/23/69	38	9	
SHEN0265	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-11/19/94	2	5	
SHEN0274	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/14/87-07/30/97	9	41	
SHEN0277	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/23/81-06/22/82	0	5	
SHEN0278	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/25/82	0	6	
SHEN0282	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	01/07/92-11/12/92	0	4	
SHEN0283	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/25/81-09/25/81	0	1	
SHEN0284	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/22/82	0	6	
SHEN0286	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/25/81-09/25/81	0	1	
SHEN0289	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/10/82-06/22/82	0	2	
SHEN0290	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/25/81-09/25/81	0	1	
SHEN0294	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/21/82	0	6	
SHEN0295	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/22/82	0	6	
SHEN0297	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/16/90-12/29/92	2	29	
SHEN0310	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/22/82	0	6	
SHEN0317	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/01/48-10/01/48	0	1	
SHEN0318	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/22/82	0	6	
SHEN0321	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/11/81-06/21/82	0	6	
SHEN0324	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/18/91-01/27/93	1	6	
SHEN0327	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0329	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/22/82	0	6	
SHEN0330	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/17/81-06/23/82	0	6	
SHEN0332	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/25/97	4	223	
SHEN0336	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-01/20/96	3	199	
SHEN0341	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-10/05/94	2	3	
SHEN0346	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	7	
SHEN0354	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0362	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0363	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0365	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/11/81-06/21/82	0	6	
SHEN0366	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/18/91-11/05/92	0	5	
SHEN0367	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	6	
SHEN0372	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/19/90-12/03/92	2	8	
SHEN0374	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	5	8	
SHEN0377	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/11/81-06/21/82	0	6	
SHEN0386	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/15/89-01/11/93	3	29	
SHEN0397	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0398	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0399	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0400	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0402	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0403	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0404	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0407	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/13/81-06/21/82	0	6	
SHEN0408	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/24/88-07/30/97	9	39	
SHEN0411	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0412	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0413	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0414	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0415	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0417	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0419	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0420	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0422	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0424	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0426	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0427	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/13/81-06/21/82	0	6	
SHEN0433	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	0	1	
SHEN0436	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-06/21/82	0	6	
SHEN0437	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-06/21/82	0	6	
SHEN0440	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/31/90-07/30/97	6	29	
SHEN0442	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0444	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/13/81-06/21/82	0	6	
SHEN0445	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/14/81-06/21/82	0	6	
SHEN0446	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0450	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/29/91-01/27/93	1	7	
SHEN0451	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0453	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0456	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0457	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/21/81-06/24/82	0	6	
SHEN0458	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0459	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0461	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0462	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/86-04/11/86	0	2	
SHEN0463	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0464	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0465	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0466	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0467	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0469	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	6	
SHEN0470	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0472	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/87-07/30/97	9	42	
SHEN0475	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0476	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/13/81-06/21/82	0	6	
SHEN0478	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0479	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0481	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/13/81-06/21/82	0	6	
SHEN0483	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0484	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0485	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0486	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0487	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	2	5	
SHEN0488	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0491	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/21/82	0	6	
SHEN0493	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0494	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0495	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0496	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-03/19/92	0	1	
SHEN0497	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	0	2	
SHEN0498	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/21/81-06/24/82	0	6	
SHEN0510	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0511	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0512	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/87-07/30/97	9	41	
SHEN0514	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/22/82	0	6	
SHEN0516	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0522	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0538	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	4	
SHEN0541	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/10/81-06/24/82	0	6	
SHEN0542	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	12/18/91-01/27/93	1	6	
SHEN0543	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0557	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	10	513	
SHEN0558	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0562	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	0	1	
SHEN0567	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/10/81-06/24/82	0	6	
SHEN0568	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/19/90-12/03/92	2	8	
SHEN0569	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/10/81-06/24/82	0	6	
SHEN0591	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/11/81-06/24/82	0	6	
SHEN0594	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0595	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/29/87-07/30/97	9	40	
SHEN0597	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	2	
SHEN0599	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/22/82	0	6	
SHEN0600	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0603	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0607	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/22/82	0	6	
SHEN0608	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0615	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0616	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/87-04/26/95	7	33	
SHEN0619	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0634	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0635	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/15/89-01/11/93	3	28	
SHEN0636	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0651	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	11/19/90-12/03/92	2	8	
SHEN0652	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0654	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0659	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	01/20/56-01/20/56	0	1	
SHEN0660	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0664	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0665	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0676	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/81-06/23/82	0	6	
SHEN0677	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	6	
SHEN0694	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/18/81-06/21/82	0	6	
SHEN0695	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0710	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0713	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	0	1	
SHEN0721	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/81-06/23/82	0	6	
SHEN0724	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/81-06/23/82	0	6	
SHEN0725	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/81-06/23/82	0	6	
SHEN0730	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-06/23/82	0	6	
SHEN0733	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/20/81-06/23/82	0	6	
SHEN0738	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/26/68-10/01/68	0	6	
SHEN0739	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	08/19/81-06/22/82	0	6	
SHEN0742	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/27/86-04/10/86	0	2	
SHEN0743	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	03/27/86-04/10/86	0	2	
SHEN0748	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	10/10/52-05/21/69	16	2	
SHEN0755	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/05/89-01/11/93	3	30	
SHEN0756	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/05/30-06/17/86	55	421	T,S
SHEN0762	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	09/10/93-09/10/93	0	1	
SHEN0775	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/15/89-02/03/93	3	26	
SHEN0777	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/05/89-02/03/93	3	28	
SHEN0783	No	00955	SILICA, DISSOLVED (MG/L AS SI02)	06/15/89-02/03/93	3	17	
SHEN0006	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/23/97-08/04/97	0	2	
SHEN0019	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/23/97-08/04/97	0	2	
SHEN0021	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/23/97-08/04/97	0	2	
SHEN0162	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/24/98-06/24/98	0	1	
SHEN0226	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/24/98-06/24/98	0	1	
SHEN0231	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/18/70-12/27/73	3	8	
SHEN0251	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/18/70-03/14/73	2	6	
SHEN0297	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/20/97-05/20/97	0	1	
SHEN0499	No	01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/25/98-06/25/98	0	1	
SHEN0002	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/01/73	2	6	
SHEN0004	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/12/76-07/14/82	6	5	
SHEN0016	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/01/79-05/01/79	0	1	
SHEN0017	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	7	11	
SHEN0019	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/29/78-08/29/78	0	1	
SHEN0033	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	7	10	
SHEN0051	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	7	9	
SHEN0162	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-07/14/82	11	11	
SHEN0204	No	01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/82-07/14/82	0	1	
SHEN0225	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	7	8	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0234	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-02/01/77	5	9	
SHEN0235	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	7	10	
SHEN0287	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/28/78	7	10	
SHEN0297	No	01002	ARSENIC, TOTAL (UG/L AS AS)	06/20/91-07/21/94	3	3	
SHEN0316	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/14/71-03/01/79	7	17	
SHEN0317	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/31/76-08/31/76	0	1	
SHEN0372	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/11/77-09/20/94	17	5	
SHEN0381	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/14/71-08/29/78	7	9	
SHEN0500	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/11/77-04/12/79	2	5	
SHEN0568	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/11/77-09/20/94	17	7	
SHEN0573	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/25/77-11/02/78	1	2	
SHEN0579	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/25/71-11/02/78	7	7	
SHEN0583	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/14/71-08/09/78	7	11	
SHEN0585	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/07/73-08/09/78	5	5	
SHEN0586	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/18/71-08/24/73	2	7	
SHEN0588	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/07/73-08/07/73	0	1	
SHEN0630	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/25/77-11/02/78	1	2	
SHEN0635	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/14/71-08/09/78	7	11	
SHEN0651	No	01002	ARSENIC, TOTAL (UG/L AS AS)	03/01/93-03/01/93	0	1	
SHEN0747	No	01002	ARSENIC, TOTAL (UG/L AS AS)	05/04/72-08/07/73	1	2	
SHEN0750	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-08/09/78	7	12	
SHEN0755	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-08/09/78	7	12	
SHEN0772	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-08/09/78	7	11	
SHEN0774	No	01002	ARSENIC, TOTAL (UG/L AS AS)	08/09/71-05/29/85	13	25	
SHEN0777	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-05/29/85	14	28	
SHEN0784	No	01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-08/31/78	7	11	
SHEN0786	No	01002	ARSENIC, TOTAL (UG/L AS AS)	01/10/79-01/10/79	0	1	
SHEN0001	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0024	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0043	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/14/80-08/14/80	0	1	
SHEN0162	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0164	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0252	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/20/79-07/22/96	16	4	
SHEN0256	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0566	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/31/90-07/31/90	0	1	
SHEN0568	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/20/79-06/25/96	16	3	
SHEN0651	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0754	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/16/92-07/16/92	0	1	
SHEN0755	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/20/79-06/24/96	16	3	
SHEN0756	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/20/79-07/14/92	12	4	
SHEN0775	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/21/79-07/24/96	16	4	
SHEN0781	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/14/92-07/14/92	0	1	
SHEN0783	No	01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0754	No	01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	08/17/88-07/14/92	3	6	
SHEN0780	No	01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	08/18/88-08/18/88	0	3	
SHEN0781	No	01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	07/14/92-07/14/92	0	3	
SHEN0016	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/01/79-05/01/79	0	1	
SHEN0297	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	06/20/91-03/25/93	1	2	
SHEN0568	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/01/93-03/01/93	0	1	
SHEN0651	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/01/93-03/01/93	0	1	
SHEN0786	No	01012	BERYLLIUM, TOTAL (UG/L AS BE)	01/10/79-01/10/79	0	1	
SHEN0001	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/02/83-07/22/96	13	2	
SHEN0024	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0162	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/02/83-07/22/96	13	2	
SHEN0164	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/02/83-07/22/96	13	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0252	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/23/83-07/22/96	13	2	
SHEN0256	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0324	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0450	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0568	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/23/83-06/25/96	13	2	
SHEN0651	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0755	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/27/83-06/24/96	12	2	
SHEN0774	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/27/83-05/29/85	1	2	
SHEN0775	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/27/83-07/24/96	13	3	
SHEN0783	No	01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0231	No	01020	BORON, DISSOLVED (UG/L AS B)	05/18/70-03/14/73	2	6	
SHEN0251	No	01020	BORON, DISSOLVED (UG/L AS B)	05/18/70-03/14/73	2	6	
SHEN0006	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/23/97-08/04/97	0	2	
SHEN0019	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/23/97-08/04/97	0	2	
SHEN0021	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/23/97-08/04/97	0	2	
SHEN0162	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/24/98-06/24/98	0	1	
SHEN0226	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/24/98-06/24/98	0	1	
SHEN0231	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/18/70-12/27/73	3	8	
SHEN0251	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/18/70-03/14/73	2	6	
SHEN0297	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/20/97-05/20/97	0	1	
SHEN0499	No	01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/25/98-06/25/98	0	1	
SHEN0002	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-04/08/74	2	8	
SHEN0004	No	01027	CADMIUM, TOTAL (UG/L AS CD)	10/03/74-07/14/82	7	6	
SHEN0009	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	0	1	
SHEN0015	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	0	1	
SHEN0016	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/01/79-05/01/79	0	1	
SHEN0017	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	7	14	
SHEN0019	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/29/78-08/29/78	0	1	
SHEN0032	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	0	1	
SHEN0033	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	7	14	
SHEN0050	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	0	1	
SHEN0051	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	7	13	
SHEN0162	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-07/14/82	11	15	
SHEN0196	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	0	1	
SHEN0204	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/82-07/14/82	0	1	
SHEN0225	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	7	12	
SHEN0234	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-02/01/77	5	13	
SHEN0235	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	7	13	
SHEN0252	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/07/82-07/07/82	0	1	
SHEN0287	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/28/78	7	14	
SHEN0297	No	01027	CADMIUM, TOTAL (UG/L AS CD)	06/20/91-07/21/94	3	3	
SHEN0301	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0305	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0306	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0307	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0316	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/14/71-03/01/79	7	19	
SHEN0317	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/31/76-08/31/76	0	1	
SHEN0372	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/11/77-09/20/94	17	6	
SHEN0373	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0381	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/14/71-08/29/78	7	13	
SHEN0382	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0389	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0500	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/11/77-04/12/79	2	5	
SHEN0568	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/11/77-09/20/94	17	7	
SHEN0573	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/25/77-11/02/78	1	2	
SHEN0579	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/26/70-11/02/78	7	10	
SHEN0582	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0583	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/14/71-08/09/78	7	15	
SHEN0585	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/31/72-08/09/78	6	10	
SHEN0586	No	01027	CADMIUM, TOTAL (UG/L AS CD)	11/26/70-08/24/73	2	8	
SHEN0587	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0588	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/31/72-04/12/74	1	3	
SHEN0592	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	1	
SHEN0630	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/25/77-11/02/78	1	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0633	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	0	2	
SHEN0635	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/14/71-07/07/82	11	17	
SHEN0651	No	01027	CADMIUM, TOTAL (UG/L AS CD)	03/01/93-03/01/93	0	1	
SHEN0747	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/04/72-04/12/74	1	5	
SHEN0750	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-08/09/78	7	16	
SHEN0755	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-07/07/82	11	16	
SHEN0760	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/72-05/24/72	0	1	
SHEN0765	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/72-05/24/72	0	1	
SHEN0768	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/72-05/24/72	0	1	
SHEN0769	No	01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/72-05/24/72	0	1	
SHEN0772	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-08/09/78	7	15	
SHEN0774	No	01027	CADMIUM, TOTAL (UG/L AS CD)	08/09/71-05/29/85	13	30	
SHEN0777	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-05/29/85	14	32	
SHEN0783	No	01027	CADMIUM, TOTAL (UG/L AS CD)	07/07/82-07/07/82	0	1	
SHEN0784	No	01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-08/31/78	7	16	
SHEN0786	No	01027	CADMIUM, TOTAL (UG/L AS CD)	01/10/79-01/10/79	0	1	
SHEN0001	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0024	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0043	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/14/80-08/14/80	0	1	
SHEN0162	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0164	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0252	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/20/79-07/22/96	16	4	
SHEN0256	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0566	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/31/90-07/31/90	0	1	
SHEN0568	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/20/79-06/25/96	16	3	
SHEN0651	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0754	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/16/92-07/16/92	0	1	
SHEN0755	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/20/79-06/24/96	16	2	
SHEN0756	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/20/79-07/14/92	12	4	
SHEN0775	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/21/79-07/24/96	16	4	
SHEN0781	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/14/92-07/14/92	0	1	
SHEN0783	No	01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0001	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0024	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0043	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/14/80-08/14/80	0	1	
SHEN0162	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0164	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0252	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/20/79-07/22/96	16	4	
SHEN0256	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0566	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/31/90-07/31/90	0	1	
SHEN0568	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/20/79-06/25/96	16	3	
SHEN0651	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0754	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/16/92-07/16/92	0	1	
SHEN0755	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/20/79-06/24/96	16	3	
SHEN0756	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/20/79-07/14/92	12	4	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0775	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/21/79-07/24/96	16	4	
SHEN0781	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/14/92-07/14/92	0	1	
SHEN0783	No	01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0006	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/23/97-08/04/97	0	2	
SHEN0019	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/23/97-08/04/97	0	2	
SHEN0021	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/23/97-08/04/97	0	2	
SHEN0162	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/24/98-06/24/98	0	1	
SHEN0226	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/24/98-06/24/98	0	1	
SHEN0231	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	02/10/71-02/10/71	0	1	
SHEN0251	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/07/70-02/10/71	0	3	
SHEN0297	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/20/97-05/20/97	0	1	
SHEN0499	No	01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/25/98-06/25/98	0	1	
SHEN0002	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-04/08/74	4	15	
SHEN0004	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	10/03/74-07/14/82	7	8	
SHEN0009	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	0	2	
SHEN0015	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-04/17/73	0	3	
SHEN0016	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/01/79-05/01/79	0	1	
SHEN0017	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	8	23	
SHEN0019	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/29/78-08/29/78	0	1	
SHEN0033	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	8	23	
SHEN0051	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	8	22	
SHEN0162	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-07/14/82	12	24	
SHEN0196	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	0	2	
SHEN0204	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/82-07/14/82	0	1	
SHEN0225	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	8	21	
SHEN0231	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/18/70-12/27/73	3	7	
SHEN0234	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-02/01/77	6	22	
SHEN0235	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	8	22	
SHEN0251	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	11/19/69-03/14/73	3	37	
SHEN0252	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/07/82-07/07/82	0	1	
SHEN0287	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/28/78	8	22	
SHEN0297	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	06/20/91-07/21/94	3	3	
SHEN0301	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	0	2	
SHEN0306	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	0	2	
SHEN0316	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-03/01/79	8	30	
SHEN0317	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	08/31/76-08/31/76	0	1	
SHEN0372	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/11/77-09/20/94	17	6	
SHEN0381	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/29/78	8	23	
SHEN0500	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/11/77-04/12/79	2	5	
SHEN0568	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/11/77-09/20/94	17	7	
SHEN0573	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/25/77-11/02/78	1	2	
SHEN0579	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/13/70-11/02/78	8	17	
SHEN0582	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	0	2	
SHEN0583	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-08/09/78	9	26	
SHEN0585	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/31/72-08/09/78	6	15	
SHEN0586	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/13/70-05/21/74	4	15	
SHEN0588	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/31/72-04/12/74	1	6	
SHEN0592	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	0	2	
SHEN0630	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/25/77-11/02/78	1	2	
SHEN0635	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-07/07/82	13	28	
SHEN0651	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	03/01/93-03/01/93	0	1	
SHEN0746	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	02/13/73-02/13/73	0	1	
SHEN0747	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/04/72-04/12/74	1	7	
SHEN0750	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/09/78	8	23	
SHEN0755	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	11/16/70-07/07/82	11	22	
SHEN0768	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	02/13/73-02/13/73	0	1	
SHEN0772	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/09/78	8	22	
SHEN0774	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-05/29/85	16	38	
SHEN0777	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-05/29/85	15	40	
SHEN0783	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	07/07/82-07/07/82	0	1	
SHEN0784	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/31/78	8	23	
SHEN0786	No	01034	CHROMIUM, TOTAL (UG/L AS CR)	01/10/79-01/10/79	0	1	
SHEN0231	No	01035	COBALT, DISSOLVED (UG/L AS CO)	09/10/73-12/27/73	0	2	
SHEN0317	No	01037	COBALT, TOTAL (UG/L AS CO)	08/31/76-08/31/76	0	1	
SHEN0317	No	01038	COBALT IN BOTTOM DEPOSITS (MG/KG AS CO DRY WGT)	08/31/76-08/31/76	0	1	
SHEN0006	No	01040	COPPER, DISSOLVED (UG/L AS CU)	07/23/97-08/04/97	0	2	
SHEN0019	No	01040	COPPER, DISSOLVED (UG/L AS CU)	07/23/97-08/04/97	0	2	
SHEN0021	No	01040	COPPER, DISSOLVED (UG/L AS CU)	07/23/97-08/04/97	0	2	
SHEN0162	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/24/98-06/24/98	0	1	
SHEN0226	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/24/98-06/24/98	0	1	
SHEN0231	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/18/70-12/27/73	3	8	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0251	No	01040	COPPER, DISSOLVED (UG/L AS CU)	11/19/69-03/14/73	3	38	
SHEN0297	No	01040	COPPER, DISSOLVED (UG/L AS CU)	05/20/97-05/20/97	0	1	
SHEN0499	No	01040	COPPER, DISSOLVED (UG/L AS CU)	06/25/98-06/25/98	0	1	
SHEN0002	No	01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-04/08/74	4	15	
SHEN0004	No	01042	COPPER, TOTAL (UG/L AS CU)	10/03/74-07/14/82	7	8	
SHEN0009	No	01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	0	1	
SHEN0015	No	01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	0	1	
SHEN0016	No	01042	COPPER, TOTAL (UG/L AS CU)	05/01/79-05/01/79	0	1	
SHEN0017	No	01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	8	23	
SHEN0019	No	01042	COPPER, TOTAL (UG/L AS CU)	08/29/78-08/29/78	0	1	
SHEN0032	No	01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	0	1	
SHEN0033	No	01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	8	23	
SHEN0050	No	01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	0	1	
SHEN0051	No	01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	8	22	
SHEN0162	No	01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-07/14/82	12	24	
SHEN0196	No	01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	0	1	
SHEN0204	No	01042	COPPER, TOTAL (UG/L AS CU)	07/14/82-07/14/82	0	1	
SHEN0225	No	01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	8	21	
SHEN0234	No	01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-02/01/77	6	22	
SHEN0235	No	01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	8	22	
SHEN0252	No	01042	COPPER, TOTAL (UG/L AS CU)	07/07/82-07/07/82	0	1	
SHEN0287	No	01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/28/78	8	22	
SHEN0297	No	01042	COPPER, TOTAL (UG/L AS CU)	06/20/91-07/21/94	3	3	
SHEN0301	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0305	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0306	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0307	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0316	No	01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-03/01/79	8	29	
SHEN0317	No	01042	COPPER, TOTAL (UG/L AS CU)	08/31/76-08/31/76	0	1	
SHEN0372	No	01042	COPPER, TOTAL (UG/L AS CU)	04/11/77-09/20/94	17	6	
SHEN0373	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0381	No	01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/29/78	8	22	
SHEN0382	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0389	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0500	No	01042	COPPER, TOTAL (UG/L AS CU)	04/11/77-04/12/79	2	5	
SHEN0568	No	01042	COPPER, TOTAL (UG/L AS CU)	04/11/77-09/20/94	17	7	
SHEN0573	No	01042	COPPER, TOTAL (UG/L AS CU)	05/25/77-11/02/78	1	2	
SHEN0579	No	01042	COPPER, TOTAL (UG/L AS CU)	04/13/70-11/02/78	8	17	
SHEN0582	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0583	No	01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-08/09/78	9	26	
SHEN0585	No	01042	COPPER, TOTAL (UG/L AS CU)	07/31/72-08/09/78	6	15	
SHEN0586	No	01042	COPPER, TOTAL (UG/L AS CU)	04/13/70-05/21/74	4	15	
SHEN0587	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0588	No	01042	COPPER, TOTAL (UG/L AS CU)	07/31/72-04/12/74	1	6	
SHEN0592	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	1	
SHEN0630	No	01042	COPPER, TOTAL (UG/L AS CU)	05/25/77-11/02/78	1	2	
SHEN0633	No	01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	0	2	
SHEN0635	No	01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-07/07/82	13	27	
SHEN0651	No	01042	COPPER, TOTAL (UG/L AS CU)	03/01/93-03/01/93	0	1	
SHEN0747	No	01042	COPPER, TOTAL (UG/L AS CU)	05/04/72-04/12/74	1	7	
SHEN0750	No	01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/09/78	8	22	
SHEN0755	No	01042	COPPER, TOTAL (UG/L AS CU)	11/16/70-07/07/82	11	22	
SHEN0760	No	01042	COPPER, TOTAL (UG/L AS CU)	05/24/72-05/24/72	0	1	
SHEN0765	No	01042	COPPER, TOTAL (UG/L AS CU)	05/24/72-05/24/72	0	1	
SHEN0768	No	01042	COPPER, TOTAL (UG/L AS CU)	05/24/72-05/24/72	0	1	
SHEN0769	No	01042	COPPER, TOTAL (UG/L AS CU)	05/24/72-05/24/72	0	1	
SHEN0772	No	01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/09/78	8	22	
SHEN0774	No	01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-05/29/85	16	37	
SHEN0777	No	01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-05/29/85	15	40	
SHEN0783	No	01042	COPPER, TOTAL (UG/L AS CU)	07/07/82-07/07/82	0	1	
SHEN0784	No	01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/31/78	8	23	
SHEN0786	No	01042	COPPER, TOTAL (UG/L AS CU)	01/10/79-01/10/79	0	1	
SHEN0001	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0024	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0043	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/14/80-08/14/80	0	1	
SHEN0162	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0164	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0252	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/20/79-07/22/96	16	4	
SHEN0256	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/27/92-07/31/96	4	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0297	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0566	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/31/90-07/31/90	0	1	
SHEN0568	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/20/79-06/25/96	16	3	
SHEN0651	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0754	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/16/92-07/16/92	0	1	
SHEN0755	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/20/79-06/24/96	16	3	
SHEN0756	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/20/79-07/14/92	12	4	
SHEN0775	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/21/79-07/24/96	16	4	
SHEN0781	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/14/92-07/14/92	0	1	
SHEN0783	No	01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0002	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-04/18/71	0	2	
SHEN0004	No	01045	IRON, TOTAL (UG/L AS FE)	08/29/78-08/29/78	0	1	
SHEN0009	No	01045	IRON, TOTAL (UG/L AS FE)	05/23/72-04/16/73	0	3	
SHEN0015	No	01045	IRON, TOTAL (UG/L AS FE)	05/23/72-04/17/73	0	3	
SHEN0017	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	7	3	
SHEN0019	No	01045	IRON, TOTAL (UG/L AS FE)	08/29/78-08/29/78	0	1	
SHEN0032	No	01045	IRON, TOTAL (UG/L AS FE)	05/23/72-05/23/72	0	1	
SHEN0033	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	7	3	
SHEN0043	No	01045	IRON, TOTAL (UG/L AS FE)	04/10/80-08/17/89	9	9	
SHEN0050	No	01045	IRON, TOTAL (UG/L AS FE)	05/23/72-05/23/72	0	1	
SHEN0051	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	7	3	
SHEN0162	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	7	3	
SHEN0196	No	01045	IRON, TOTAL (UG/L AS FE)	05/23/72-04/16/73	0	3	
SHEN0225	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	7	3	
SHEN0234	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-04/18/71	0	2	
SHEN0235	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	7	3	
SHEN0252	No	01045	IRON, TOTAL (UG/L AS FE)	07/07/82-07/07/82	0	1	
SHEN0287	No	01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/28/78	7	3	
SHEN0297	No	01045	IRON, TOTAL (UG/L AS FE)	06/20/91-07/21/94	3	3	
SHEN0301	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-04/16/73	0	3	
SHEN0305	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	0	1	
SHEN0306	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-04/16/73	0	3	
SHEN0307	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	0	1	
SHEN0316	No	01045	IRON, TOTAL (UG/L AS FE)	06/28/70-03/01/79	8	7	
SHEN0317	No	01045	IRON, TOTAL (UG/L AS FE)	08/31/76-08/31/76	0	1	
SHEN0372	No	01045	IRON, TOTAL (UG/L AS FE)	04/12/79-09/20/94	15	2	
SHEN0373	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	0	1	
SHEN0381	No	01045	IRON, TOTAL (UG/L AS FE)	06/28/70-08/29/78	8	5	
SHEN0382	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	0	1	
SHEN0389	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	0	1	
SHEN0500	No	01045	IRON, TOTAL (UG/L AS FE)	04/12/79-04/12/79	0	1	
SHEN0568	No	01045	IRON, TOTAL (UG/L AS FE)	11/02/78-09/20/94	15	4	
SHEN0573	No	01045	IRON, TOTAL (UG/L AS FE)	11/02/78-11/02/78	0	1	
SHEN0579	No	01045	IRON, TOTAL (UG/L AS FE)	11/26/70-11/02/78	7	4	
SHEN0582	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-04/16/73	0	3	
SHEN0583	No	01045	IRON, TOTAL (UG/L AS FE)	06/28/70-12/05/71	1	4	
SHEN0586	No	01045	IRON, TOTAL (UG/L AS FE)	11/26/70-12/14/71	1	3	
SHEN0587	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	0	1	
SHEN0592	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-04/16/73	0	3	
SHEN0630	No	01045	IRON, TOTAL (UG/L AS FE)	11/02/78-11/02/78	0	1	
SHEN0633	No	01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	0	2	
SHEN0635	No	01045	IRON, TOTAL (UG/L AS FE)	06/28/70-07/07/82	12	5	
SHEN0651	No	01045	IRON, TOTAL (UG/L AS FE)	03/01/93-03/01/93	0	1	
SHEN0746	No	01045	IRON, TOTAL (UG/L AS FE)	02/13/73-04/18/73	0	2	
SHEN0750	No	01045	IRON, TOTAL (UG/L AS FE)	11/16/70-04/13/71	0	3	
SHEN0755	No	01045	IRON, TOTAL (UG/L AS FE)	11/16/70-07/07/82	11	4	
SHEN0756	No	01045	IRON, TOTAL (UG/L AS FE)	06/24/74-06/24/74	0	1	
SHEN0760	No	01045	IRON, TOTAL (UG/L AS FE)	05/24/72-05/24/72	0	1	
SHEN0765	No	01045	IRON, TOTAL (UG/L AS FE)	05/24/72-05/24/72	0	1	
SHEN0768	No	01045	IRON, TOTAL (UG/L AS FE)	05/24/72-04/18/73	0	3	
SHEN0769	No	01045	IRON, TOTAL (UG/L AS FE)	05/24/72-05/24/72	0	1	
SHEN0772	No	01045	IRON, TOTAL (UG/L AS FE)	11/16/70-04/13/71	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0774	No	01045	IRON, TOTAL (UG/L AS FE)	11/16/70-12/05/79	9	6	
SHEN0777	No	01045	IRON, TOTAL (UG/L AS FE)	11/16/70-01/16/80	9	11	
SHEN0783	No	01045	IRON, TOTAL (UG/L AS FE)	07/07/82-07/07/82	0	1	
SHEN0784	No	01045	IRON, TOTAL (UG/L AS FE)	11/16/70-08/31/78	7	3	
SHEN0005	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/05/68-05/21/69	1	2	
SHEN0006	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/23/97-08/04/97	0	2	
SHEN0019	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/23/97-08/04/97	0	2	
SHEN0020	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/11/77-03/11/77	0	1	
SHEN0021	No	01046	IRON, DISSOLVED (UG/L AS FE)	07/23/97-08/04/97	0	2	
SHEN0022	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/11/77-03/11/77	0	1	
SHEN0038	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/13/93-09/13/93	0	1	
SHEN0162	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/24/98-06/24/98	0	1	
SHEN0163	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/13/93-09/13/93	0	1	
SHEN0188	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	06/22/92-06/22/92	0	1	
SHEN0194	Yes	01046	IRON, DISSOLVED (UG/L AS FE)	03/27/68-12/13/68	0	6	
SHEN0201	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/05/68-06/23/92	24	4	
SHEN0226	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/24/98-06/24/98	0	1	
SHEN0231	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/18/70-12/27/73	3	8	
SHEN0251	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/18/70-03/14/73	2	6	
SHEN0263	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/05/68-05/23/69	1	3	
SHEN0297	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/20/97-05/20/97	0	1	
SHEN0499	No	01046	IRON, DISSOLVED (UG/L AS FE)	06/25/98-06/25/98	0	1	
SHEN0738	No	01046	IRON, DISSOLVED (UG/L AS FE)	03/26/68-10/01/68	0	6	
SHEN0748	No	01046	IRON, DISSOLVED (UG/L AS FE)	05/21/69-05/21/69	0	1	
SHEN0756	No	01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	18	348	
SHEN0762	No	01046	IRON, DISSOLVED (UG/L AS FE)	09/10/93-09/10/93	0	1	
SHEN0006	No	01049	LEAD, DISSOLVED (UG/L AS PB)	07/23/97-08/04/97	0	2	
SHEN0019	No	01049	LEAD, DISSOLVED (UG/L AS PB)	07/23/97-08/04/97	0	2	
SHEN0021	No	01049	LEAD, DISSOLVED (UG/L AS PB)	07/23/97-08/04/97	0	2	
SHEN0162	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/24/98-06/24/98	0	1	
SHEN0226	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/24/98-06/24/98	0	1	
SHEN0231	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/18/70-12/27/73	3	8	
SHEN0251	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/18/70-03/14/73	2	6	
SHEN0297	No	01049	LEAD, DISSOLVED (UG/L AS PB)	05/20/97-05/20/97	0	1	
SHEN0499	No	01049	LEAD, DISSOLVED (UG/L AS PB)	06/25/98-06/25/98	0	1	
SHEN0002	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-04/08/74	3	13	
SHEN0004	No	01051	LEAD, TOTAL (UG/L AS PB)	10/03/74-07/14/82	7	8	
SHEN0009	No	01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	0	1	
SHEN0015	No	01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	0	1	
SHEN0016	No	01051	LEAD, TOTAL (UG/L AS PB)	05/01/79-05/01/79	0	1	
SHEN0017	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	7	20	
SHEN0019	No	01051	LEAD, TOTAL (UG/L AS PB)	08/29/78-08/29/78	0	1	
SHEN0032	No	01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	0	1	
SHEN0033	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	7	20	
SHEN0050	No	01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	0	1	
SHEN0051	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	7	19	
SHEN0162	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-07/14/82	11	21	
SHEN0196	No	01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	0	1	
SHEN0204	No	01051	LEAD, TOTAL (UG/L AS PB)	07/14/82-07/14/82	0	1	
SHEN0225	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	7	18	
SHEN0234	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-02/01/77	6	19	
SHEN0235	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	7	20	
SHEN0252	No	01051	LEAD, TOTAL (UG/L AS PB)	07/07/82-07/07/82	0	1	
SHEN0287	No	01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/28/78	7	19	
SHEN0297	No	01051	LEAD, TOTAL (UG/L AS PB)	06/20/91-07/21/94	3	3	
SHEN0301	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0305	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0306	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0307	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0316	No	01051	LEAD, TOTAL (UG/L AS PB)	06/28/70-03/01/79	8	27	
SHEN0317	No	01051	LEAD, TOTAL (UG/L AS PB)	08/31/76-08/31/76	0	1	
SHEN0372	No	01051	LEAD, TOTAL (UG/L AS PB)	04/11/77-09/20/94	17	6	
SHEN0373	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0381	No	01051	LEAD, TOTAL (UG/L AS PB)	06/28/70-08/29/78	8	20	
SHEN0382	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0389	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0500	No	01051	LEAD, TOTAL (UG/L AS PB)	04/11/77-04/12/79	2	5	
SHEN0568	No	01051	LEAD, TOTAL (UG/L AS PB)	04/11/77-09/20/94	17	7	
SHEN0573	No	01051	LEAD, TOTAL (UG/L AS PB)	05/25/77-11/02/78	1	2	
SHEN0579	No	01051	LEAD, TOTAL (UG/L AS PB)	11/26/70-11/02/78	7	13	
SHEN0582	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0583	No	01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-08/09/78	9	24	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0585	No	01051	LEAD, TOTAL (UG/L AS PB)	07/31/72-08/09/78	6	14	
SHEN0586	No	01051	LEAD, TOTAL (UG/L AS PB)	11/26/70-05/21/74	3	14	
SHEN0587	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0588	No	01051	LEAD, TOTAL (UG/L AS PB)	07/31/72-04/12/74	1	5	
SHEN0592	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	1	
SHEN0630	No	01051	LEAD, TOTAL (UG/L AS PB)	05/25/77-11/02/78	1	2	
SHEN0633	No	01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	0	2	
SHEN0635	No	01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-07/07/82	13	26	
SHEN0651	No	01051	LEAD, TOTAL (UG/L AS PB)	03/01/93-03/01/93	0	1	
SHEN0747	No	01051	LEAD, TOTAL (UG/L AS PB)	05/04/72-04/12/74	1	7	
SHEN0750	No	01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-08/09/78	7	21	
SHEN0755	No	01051	LEAD, TOTAL (UG/L AS PB)	08/18/70-07/07/82	11	23	
SHEN0760	No	01051	LEAD, TOTAL (UG/L AS PB)	05/24/72-05/24/72	0	1	
SHEN0765	No	01051	LEAD, TOTAL (UG/L AS PB)	05/24/72-05/24/72	0	1	
SHEN0768	No	01051	LEAD, TOTAL (UG/L AS PB)	05/24/72-05/24/72	0	1	
SHEN0769	No	01051	LEAD, TOTAL (UG/L AS PB)	05/24/72-05/24/72	0	1	
SHEN0772	No	01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-08/09/78	7	19	
SHEN0774	No	01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-05/29/85	16	36	
SHEN0777	No	01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-05/29/85	14	38	
SHEN0783	No	01051	LEAD, TOTAL (UG/L AS PB)	07/07/82-07/07/82	0	1	
SHEN0784	No	01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-08/31/78	7	20	
SHEN0786	No	01051	LEAD, TOTAL (UG/L AS PB)	01/10/79-01/10/79	0	1	
SHEN0001	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0024	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0043	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/14/80-08/14/80	0	1	
SHEN0162	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0164	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0252	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/20/79-07/22/96	16	4	
SHEN0256	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0566	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/31/90-07/31/90	0	1	
SHEN0568	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/20/79-06/25/96	16	3	
SHEN0651	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0754	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/16/92-07/16/92	0	1	
SHEN0755	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/20/79-06/24/96	16	3	
SHEN0756	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/20/79-07/14/92	12	4	
SHEN0775	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/21/79-07/24/96	16	4	
SHEN0781	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/14/92-07/14/92	0	1	
SHEN0783	No	01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0001	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/31/96-07/31/96	0	1	
SHEN0004	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0024	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0162	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0164	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0252	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0256	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/18/96-06/18/96	0	1	
SHEN0282	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/31/96-07/31/96	0	1	
SHEN0297	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0366	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0386	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0450	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0542	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0568	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0651	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	03/15/95-07/21/97	2	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0755	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	06/24/96-06/24/96	0	1	
SHEN0756	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0775	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0783	No	01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/25/96-07/25/96	0	1	
SHEN0002	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	1	2	
SHEN0009	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	0	1	
SHEN0015	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	0	1	
SHEN0017	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	1	2	
SHEN0032	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	0	1	
SHEN0033	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	1	2	
SHEN0043	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/10/80-08/17/89	9	9	
SHEN0050	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	0	1	
SHEN0051	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	1	2	
SHEN0161	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/69-04/08/69	0	1	
SHEN0162	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	1	2	
SHEN0196	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	0	1	
SHEN0201	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/69-04/08/69	0	1	
SHEN0225	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	1	2	
SHEN0231	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/27/72-12/27/73	1	5	
SHEN0234	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	1	2	
SHEN0235	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	1	2	
SHEN0251	No	01055	MANGANESE, TOTAL (UG/L AS MN)	09/27/72-03/14/73	0	3	
SHEN0252	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/07/82-07/07/82	0	1	
SHEN0287	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-04/07/70	0	1	
SHEN0297	No	01055	MANGANESE, TOTAL (UG/L AS MN)	06/20/91-07/21/94	3	2	
SHEN0301	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0305	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0306	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0307	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0316	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-03/01/79	8	5	
SHEN0317	No	01055	MANGANESE, TOTAL (UG/L AS MN)	08/31/76-08/31/76	0	1	
SHEN0372	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/12/79-09/20/94	15	2	
SHEN0373	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0381	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-12/05/71	1	3	
SHEN0382	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0389	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0500	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/12/79-04/12/79	0	1	
SHEN0568	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/02/78-09/20/94	15	4	
SHEN0573	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/02/78-11/02/78	0	1	
SHEN0579	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/13/70-11/02/78	8	3	
SHEN0582	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0583	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-12/05/71	1	3	
SHEN0586	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/13/70-04/25/71	1	2	
SHEN0587	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0592	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	1	
SHEN0630	No	01055	MANGANESE, TOTAL (UG/L AS MN)	11/02/78-11/02/78	0	1	
SHEN0633	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	0	2	
SHEN0635	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-07/07/82	12	4	
SHEN0651	No	01055	MANGANESE, TOTAL (UG/L AS MN)	03/01/93-03/01/93	0	1	
SHEN0750	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-04/13/71	1	2	
SHEN0755	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/13/71-07/07/82	11	2	
SHEN0760	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/72-05/24/72	0	1	
SHEN0765	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/72-05/24/72	0	1	
SHEN0768	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/72-05/24/72	0	1	
SHEN0769	No	01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/72-05/24/72	0	1	
SHEN0772	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-04/13/71	1	2	
SHEN0774	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/07/70-01/22/80	9	7	
SHEN0777	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-01/16/80	9	9	
SHEN0783	No	01055	MANGANESE, TOTAL (UG/L AS MN)	07/07/82-07/07/82	0	1	
SHEN0784	No	01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-04/13/71	1	2	
SHEN0003	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/28/86-04/11/86	0	2	
SHEN0006	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/23/97-08/04/97	0	2	
SHEN0014	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/28/86-04/11/86	0	2	
SHEN0019	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/23/97-08/04/97	0	2	
SHEN0021	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/23/97-08/04/97	0	2	
SHEN0023	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/10/77-01/10/77	0	1	
SHEN0034	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/15/77-01/15/77	0	1	
SHEN0036	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/10/77-01/10/77	0	1	
SHEN0038	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/13/93-09/13/93	0	1	
SHEN0070	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/01/86-04/15/86	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0162	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/24/98-06/24/98	0	1	
SHEN0163	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/13/93-09/13/93	0	1	
SHEN0183	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/28/86-04/17/86	0	2	
SHEN0188	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/22/92-06/22/92	0	1	
SHEN0201	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/23/92-06/23/92	0	1	
SHEN0210	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/31/86-04/15/86	0	2	
SHEN0226	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/24/98-06/24/98	0	1	
SHEN0231	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/18/70-05/15/72	1	3	
SHEN0239	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/17/77-01/17/77	0	1	
SHEN0240	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/31/86-04/15/86	0	2	
SHEN0241	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/17/77-01/17/77	0	1	
SHEN0251	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/18/70-05/15/72	1	3	
SHEN0281	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/17/77-01/17/77	0	1	
SHEN0291	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/12/77-01/12/77	0	1	
SHEN0297	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/20/97-05/20/97	0	1	
SHEN0302	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/12/77-01/12/77	0	1	
SHEN0303	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/18/77-01/18/77	0	1	
SHEN0304	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/12/77-01/12/77	0	1	
SHEN0325	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/18/77-01/18/77	0	1	
SHEN0387	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/20/77-01/20/77	0	1	
SHEN0423	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/20/77-01/20/77	0	1	
SHEN0425	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/77-04/22/77	0	1	
SHEN0430	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/11/77-04/11/77	0	1	
SHEN0462	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/31/86-04/11/86	0	2	
SHEN0492	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/11/77-04/11/77	0	1	
SHEN0499	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/25/98-06/25/98	0	1	
SHEN0558	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/31/86-04/11/86	0	2	
SHEN0575	Yes	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/77-04/08/77	0	1	
SHEN0577	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/11/77-04/11/77	0	1	
SHEN0590	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/12/77-04/12/77	0	1	
SHEN0653	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/12/77-04/12/77	0	1	
SHEN0718	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/12/77-04/12/77	0	1	
SHEN0732	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/06/77-04/06/77	0	1	
SHEN0742	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/27/86-04/10/86	0	2	
SHEN0743	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/27/86-04/10/86	0	2	
SHEN0749	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/77-04/08/77	0	1	
SHEN0762	No	01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/10/93-09/10/93	0	1	
SHEN0006	No	01057	THALLIUM, DISSOLVED (UG/L AS TL)	07/23/97-08/04/97	0	2	
SHEN0019	No	01057	THALLIUM, DISSOLVED (UG/L AS TL)	07/23/97-08/04/97	0	2	
SHEN0021	No	01057	THALLIUM, DISSOLVED (UG/L AS TL)	07/23/97-08/04/97	0	2	
SHEN0162	No	01057	THALLIUM, DISSOLVED (UG/L AS TL)	06/24/98-06/24/98	0	1	
SHEN0226	No	01057	THALLIUM, DISSOLVED (UG/L AS TL)	06/24/98-06/24/98	0	1	
SHEN0499	No	01057	THALLIUM, DISSOLVED (UG/L AS TL)	06/25/98-06/25/98	0	1	
SHEN0016	No	01059	THALLIUM, TOTAL (UG/L AS TL)	05/01/79-05/01/79	0	1	
SHEN0297	No	01059	THALLIUM, TOTAL (UG/L AS TL)	06/20/91-03/25/93	1	2	
SHEN0568	No	01059	THALLIUM, TOTAL (UG/L AS TL)	03/01/93-03/01/93	0	1	
SHEN0651	No	01059	THALLIUM, TOTAL (UG/L AS TL)	03/01/93-03/01/93	0	1	
SHEN0786	No	01059	THALLIUM, TOTAL (UG/L AS TL)	01/10/79-01/10/79	0	1	
SHEN0002	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-04/08/74	1	5	
SHEN0004	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	10/03/74-08/29/78	3	6	
SHEN0006	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	07/23/97-08/04/97	0	2	
SHEN0017	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	5	13	
SHEN0019	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	08/29/78-08/04/97	18	3	
SHEN0021	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	07/23/97-08/04/97	0	2	
SHEN0033	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	5	13	
SHEN0051	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	5	12	
SHEN0162	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-06/24/98	25	14	
SHEN0225	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	5	12	
SHEN0226	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/24/98-06/24/98	0	1	
SHEN0234	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-02/01/77	4	12	
SHEN0235	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	5	12	
SHEN0251	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	11/19/69-06/19/72	2	32	
SHEN0287	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/28/78	5	13	
SHEN0297	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/20/97-05/20/97	0	1	
SHEN0316	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-03/01/79	6	17	
SHEN0372	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/11/77-04/12/79	2	5	
SHEN0381	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-08/29/78	5	11	
SHEN0499	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	06/25/98-06/25/98	0	1	
SHEN0500	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/11/77-04/12/79	2	5	
SHEN0568	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/11/77-04/12/79	2	5	
SHEN0573	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/25/77-11/02/78	1	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0579	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/02/78	5	4	
SHEN0583	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-08/09/78	5	10	
SHEN0585	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-08/09/78	5	11	
SHEN0586	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-08/24/73	0	3	
SHEN0588	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-04/12/74	1	4	
SHEN0630	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/25/77-11/02/78	1	2	
SHEN0635	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-08/09/78	5	11	
SHEN0747	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	08/07/73-04/12/74	0	3	
SHEN0750	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/16/73-08/09/78	5	10	
SHEN0755	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/16/73-08/09/78	5	10	
SHEN0772	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/16/73-08/09/78	5	10	
SHEN0774	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	04/16/74-08/09/78	4	7	
SHEN0777	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/17/73-01/04/79	5	17	
SHEN0784	No	01065	NICKEL, DISSOLVED (UG/L AS NI)	05/17/73-08/31/78	5	11	
SHEN0004	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/82-07/14/82	0	1	
SHEN0016	No	01067	NICKEL, TOTAL (UG/L AS NI)	05/01/79-05/01/79	0	1	
SHEN0162	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/82-07/14/82	0	1	
SHEN0204	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/14/82-07/14/82	0	1	
SHEN0252	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/07/82-07/07/82	0	1	
SHEN0297	No	01067	NICKEL, TOTAL (UG/L AS NI)	06/20/91-07/21/94	3	3	
SHEN0372	No	01067	NICKEL, TOTAL (UG/L AS NI)	09/20/94-09/20/94	0	1	
SHEN0568	No	01067	NICKEL, TOTAL (UG/L AS NI)	03/01/93-09/20/94	1	2	
SHEN0635	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/07/82-07/07/82	0	1	
SHEN0651	No	01067	NICKEL, TOTAL (UG/L AS NI)	03/01/93-03/01/93	0	1	
SHEN0755	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/07/82-07/07/82	0	1	
SHEN0774	No	01067	NICKEL, TOTAL (UG/L AS NI)	08/20/79-05/29/85	5	17	
SHEN0777	No	01067	NICKEL, TOTAL (UG/L AS NI)	08/21/79-05/29/85	5	11	
SHEN0783	No	01067	NICKEL, TOTAL (UG/L AS NI)	07/07/82-07/07/82	0	1	
SHEN0786	No	01067	NICKEL, TOTAL (UG/L AS NI)	01/10/79-01/10/79	0	1	
SHEN0001	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0024	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0043	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/14/80-08/14/80	0	1	
SHEN0162	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0164	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0252	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-07/22/96	16	4	
SHEN0256	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0566	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/31/90-07/31/90	0	1	
SHEN0568	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-06/25/96	16	3	
SHEN0651	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0754	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/16/92-07/16/92	0	1	
SHEN0755	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-06/24/96	16	3	
SHEN0756	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-07/14/92	12	4	
SHEN0775	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/21/79-07/24/96	16	4	
SHEN0781	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/14/92-07/14/92	0	1	
SHEN0783	No	01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0754	No	01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	08/17/88-07/14/92	3	6	
SHEN0780	No	01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	08/18/88-08/18/88	0	3	
SHEN0781	No	01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	07/14/92-07/14/92	0	3	
SHEN0754	No	01073	THALLIUM, TISSUE, WET WEIGHT, MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	01073	THALLIUM, TISSUE, WET WEIGHT, MG/KG	07/14/92-07/14/92	0	3	
SHEN0781	No	01073	THALLIUM, TISSUE, WET WEIGHT, MG/KG	07/14/92-07/14/92	0	3	
SHEN0006	No	01075	SILVER, DISSOLVED (UG/L AS AG)	07/23/97-08/04/97	0	2	
SHEN0019	No	01075	SILVER, DISSOLVED (UG/L AS AG)	07/23/97-08/04/97	0	2	
SHEN0021	No	01075	SILVER, DISSOLVED (UG/L AS AG)	07/23/97-08/04/97	0	2	
SHEN0162	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/24/98-06/24/98	0	1	
SHEN0226	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/24/98-06/24/98	0	1	
SHEN0297	No	01075	SILVER, DISSOLVED (UG/L AS AG)	05/20/97-05/20/97	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0499	No	01075	SILVER, DISSOLVED (UG/L AS AG)	06/25/98-06/25/98	0	1	
SHEN0016	No	01077	SILVER, TOTAL (UG/L AS AG)	05/01/79-05/01/79	0	1	
SHEN0317	No	01077	SILVER, TOTAL (UG/L AS AG)	08/31/76-08/31/76	0	1	
SHEN0786	No	01077	SILVER, TOTAL (UG/L AS AG)	01/10/79-01/10/79	0	1	
SHEN0001	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/01/91-07/22/96	5	2	
SHEN0024	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0162	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/02/91-07/22/96	5	2	
SHEN0164	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/02/91-07/22/96	5	2	
SHEN0252	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/02/91-07/22/96	5	2	
SHEN0256	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	06/16/97-06/16/97	0	1	
SHEN0324	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0568	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0651	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0755	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	06/24/96-06/24/96	0	1	
SHEN0775	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0783	No	01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/25/96-07/25/96	0	1	
SHEN0018	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/17/77-01/17/77	0	1	
SHEN0023	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/10/77-01/10/77	0	1	
SHEN0034	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/15/77-01/15/77	0	1	
SHEN0036	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/10/77-01/10/77	0	1	
SHEN0137	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/14/77-01/14/77	0	1	
SHEN0158	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/13/77-01/13/77	0	1	
SHEN0239	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/17/77-01/17/77	0	1	
SHEN0241	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/17/77-01/17/77	0	1	
SHEN0281	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/17/77-01/17/77	0	1	
SHEN0291	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/12/77-01/12/77	0	1	
SHEN0302	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/12/77-01/12/77	0	1	
SHEN0303	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/18/77-01/18/77	0	1	
SHEN0304	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/12/77-01/12/77	0	1	
SHEN0325	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/18/77-01/18/77	0	1	
SHEN0387	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/20/77-01/20/77	0	1	
SHEN0393	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/20/77-01/20/77	0	1	
SHEN0423	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/20/77-01/20/77	0	1	
SHEN0425	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/22/77-04/22/77	0	1	
SHEN0430	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/11/77-04/11/77	0	1	
SHEN0480	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	01/20/77-01/20/77	0	1	
SHEN0492	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/11/77-04/11/77	0	1	
SHEN0501	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/22/77-04/22/77	0	1	
SHEN0575	Yes	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/08/77-04/08/77	0	1	
SHEN0577	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/11/77-04/11/77	0	1	
SHEN0590	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/12/77-04/12/77	0	1	
SHEN0653	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/12/77-04/12/77	0	1	
SHEN0718	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/12/77-04/12/77	0	1	
SHEN0732	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/06/77-04/06/77	0	1	
SHEN0749	No	01085	VANADIUM, DISSOLVED (UG/L AS V)	04/08/77-04/08/77	0	1	
SHEN0006	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/23/97-08/04/97	0	2	
SHEN0019	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/23/97-08/04/97	0	2	
SHEN0021	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	07/23/97-08/04/97	0	2	
SHEN0162	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/24/98-06/24/98	0	1	
SHEN0226	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/24/98-06/24/98	0	1	
SHEN0231	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/18/70-03/14/73	2	6	
SHEN0251	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/18/70-03/14/73	2	6	
SHEN0297	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	05/20/97-05/20/97	0	1	
SHEN0499	No	01090	ZINC, DISSOLVED (UG/L AS ZN)	06/25/98-06/25/98	0	1	
SHEN0002	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-04/08/74	6	16	
SHEN0004	No	01092	ZINC, TOTAL (UG/L AS ZN)	10/03/74-07/14/82	7	8	
SHEN0009	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	0	1	
SHEN0015	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	0	1	
SHEN0016	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/01/79-05/01/79	0	1	
SHEN0017	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-08/29/78	8	23	
SHEN0019	No	01092	ZINC, TOTAL (UG/L AS ZN)	08/29/78-08/29/78	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0032	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	0	1	
SHEN0033	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-08/29/78	10	24	
SHEN0050	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	0	1	
SHEN0051	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-08/29/78	8	22	
SHEN0162	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-07/14/82	14	25	
SHEN0196	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	0	1	
SHEN0204	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/14/82-07/14/82	0	1	
SHEN0225	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-08/29/78	8	21	
SHEN0234	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-02/01/77	6	22	
SHEN0235	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-08/29/78	8	22	
SHEN0252	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/07/82-07/07/82	0	1	
SHEN0287	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-08/28/78	8	22	
SHEN0297	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/20/91-07/21/94	3	3	
SHEN0301	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0305	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0306	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0307	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0316	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-03/01/79	11	33	
SHEN0317	No	01092	ZINC, TOTAL (UG/L AS ZN)	08/31/76-08/31/76	0	1	
SHEN0372	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/11/77-09/20/94	17	6	
SHEN0373	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0381	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-08/29/78	8	23	
SHEN0382	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0389	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0500	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/11/77-04/12/79	2	5	
SHEN0568	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/11/77-09/20/94	17	7	
SHEN0573	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/25/77-11/02/78	1	2	
SHEN0579	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/13/70-11/02/78	8	17	
SHEN0582	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0583	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/15/69-08/09/78	9	25	
SHEN0585	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/31/72-08/09/78	6	14	
SHEN0586	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/13/70-05/21/74	4	15	
SHEN0587	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0588	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/31/72-04/12/74	1	6	
SHEN0592	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	1	
SHEN0630	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/25/77-11/02/78	1	2	
SHEN0633	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	0	2	
SHEN0635	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/15/69-07/07/82	13	27	
SHEN0651	No	01092	ZINC, TOTAL (UG/L AS ZN)	03/01/93-03/01/93	0	1	
SHEN0747	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/04/72-04/12/74	1	15	
SHEN0750	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-08/09/78	8	22	
SHEN0755	No	01092	ZINC, TOTAL (UG/L AS ZN)	06/16/70-07/07/82	12	75	
SHEN0760	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/24/72-05/24/72	0	1	
SHEN0765	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/24/72-05/24/72	0	1	
SHEN0768	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/24/72-05/24/72	0	1	
SHEN0769	No	01092	ZINC, TOTAL (UG/L AS ZN)	05/24/72-05/24/72	0	1	
SHEN0772	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-08/09/78	8	22	
SHEN0774	No	01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	17	72	
SHEN0777	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-05/29/85	15	66	
SHEN0783	No	01092	ZINC, TOTAL (UG/L AS ZN)	07/07/82-07/07/82	0	1	
SHEN0784	No	01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	8	76	
SHEN0786	No	01092	ZINC, TOTAL (UG/L AS ZN)	01/10/79-01/10/79	0	1	
SHEN0001	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0024	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0043	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/14/80-08/14/80	0	1	
SHEN0162	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0164	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0252	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/20/79-07/22/96	16	4	
SHEN0256	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0566	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/31/90-07/31/90	0	1	
SHEN0568	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/05/96-08/05/96	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0635	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/20/79-06/25/96	16	3	
SHEN0651	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0754	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/16/92-07/16/92	0	1	
SHEN0755	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/20/79-06/24/96	16	3	
SHEN0756	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/20/79-07/14/92	12	4	
SHEN0775	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/21/79-07/24/96	16	4	
SHEN0781	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/14/92-07/14/92	0	1	
SHEN0783	No	01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0006	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	07/23/97-08/04/97	0	2	
SHEN0019	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	07/23/97-08/04/97	0	2	
SHEN0021	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	07/23/97-08/04/97	0	2	
SHEN0162	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	06/24/98-06/24/98	0	1	
SHEN0226	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	06/24/98-06/24/98	0	1	
SHEN0297	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	05/20/97-05/20/97	0	1	
SHEN0499	No	01095	ANTIMONY, DISSOLVED (UG/L AS SB)	06/25/98-06/25/98	0	1	
SHEN0016	No	01097	ANTIMONY, TOTAL (UG/L AS SB)	05/01/79-05/01/79	0	1	
SHEN0786	No	01097	ANTIMONY, TOTAL (UG/L AS SB)	01/10/79-01/10/79	0	1	
SHEN0001	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/31/96-07/31/96	0	1	
SHEN0004	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0024	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0162	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0164	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0252	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0256	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	06/18/96-06/18/96	0	1	
SHEN0282	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/31/96-07/31/96	0	1	
SHEN0297	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	06/16/97-06/16/97	0	1	
SHEN0324	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0366	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0386	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0450	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0542	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0568	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0651	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0755	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	06/24/96-06/24/96	0	1	
SHEN0775	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0783	No	01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/25/96-07/25/96	0	1	
SHEN0003	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/28/86-04/11/86	0	2	
SHEN0014	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/28/86-04/11/86	0	2	
SHEN0070	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	04/01/86-04/15/86	0	2	
SHEN0183	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/28/86-04/17/86	0	2	
SHEN0210	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/31/86-04/15/86	0	2	
SHEN0231	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	05/18/70-12/27/73	3	8	
SHEN0240	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/31/86-04/15/86	0	2	
SHEN0251	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	05/18/70-03/14/73	2	6	
SHEN0317	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	08/31/76-08/31/76	0	1	
SHEN0462	Yes	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/31/86-04/11/86	0	2	
SHEN0558	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/31/86-04/11/86	0	2	
SHEN0742	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/27/86-04/10/86	0	2	
SHEN0743	No	01105	ALUMINUM, TOTAL (UG/L AS AL)	03/27/86-04/10/86	0	2	
SHEN0006	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/23/97-08/04/97	0	2	
SHEN0018	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/17/77-01/17/77	0	1	
SHEN0019	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/23/97-08/04/97	0	2	
SHEN0021	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/23/97-08/04/97	0	2	
SHEN0023	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/10/77-01/10/77	0	1	
SHEN0034	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/15/77-01/15/77	0	1	
SHEN0036	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/10/77-01/10/77	0	1	
SHEN0137	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/14/77-01/14/77	0	1	
SHEN0162	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/24/98-06/24/98	0	1	
SHEN0226	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/24/98-06/24/98	0	1	
SHEN0239	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/17/77-01/17/77	0	1	
SHEN0241	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/17/77-01/17/77	0	1	
SHEN0281	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/17/77-01/17/77	0	1	
SHEN0291	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/12/77-01/12/77	0	1	
SHEN0297	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/20/97-05/20/97	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0302	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/12/77-01/12/77	0	1	
SHEN0303	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/18/77-01/18/77	0	1	
SHEN0304	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/12/77-01/12/77	0	1	
SHEN0325	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/18/77-01/18/77	0	1	
SHEN0387	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/20/77-01/20/77	0	1	
SHEN0393	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/20/77-01/20/77	0	1	
SHEN0423	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/20/77-01/20/77	0	1	
SHEN0425	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/22/77-04/22/77	0	1	
SHEN0430	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/11/77-04/11/77	0	1	
SHEN0480	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/20/77-01/20/77	0	1	
SHEN0492	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/11/77-04/11/77	0	1	
SHEN0499	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/25/98-06/25/98	0	1	
SHEN0501	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/22/77-04/22/77	0	1	
SHEN0575	Yes	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/08/77-04/08/77	0	1	
SHEN0577	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/11/77-04/11/77	0	1	
SHEN0590	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/12/77-04/12/77	0	1	
SHEN0653	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/12/77-04/12/77	0	1	
SHEN0718	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/12/77-04/12/77	0	1	
SHEN0732	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/06/77-04/06/77	0	1	
SHEN0749	No	01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/08/77-04/08/77	0	1	
SHEN0001	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/31/96-07/31/96	0	1	
SHEN0004	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0024	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0162	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0164	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0252	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0256	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/18/96-06/18/96	0	1	
SHEN0282	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/31/96-07/31/96	0	1	
SHEN0297	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/16/97-06/16/97	0	1	
SHEN0324	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0366	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0386	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0450	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0542	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0568	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0651	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0755	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	06/24/96-06/24/96	0	1	
SHEN0775	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0783	No	01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/25/96-07/25/96	0	1	
SHEN0006	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/23/97-08/04/97	0	2	
SHEN0019	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/23/97-08/04/97	0	2	
SHEN0021	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/23/97-08/04/97	0	2	
SHEN0162	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/24/98-06/24/98	0	1	
SHEN0226	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/24/98-06/24/98	0	1	
SHEN0297	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/20/97-05/20/97	0	1	
SHEN0499	No	01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/25/98-06/25/98	0	1	
SHEN0016	No	01147	SELENIUM, TOTAL (UG/L AS SE)	05/01/79-05/01/79	0	1	
SHEN0297	No	01147	SELENIUM, TOTAL (UG/L AS SE)	06/20/91-07/21/94	3	3	
SHEN0317	No	01147	SELENIUM, TOTAL (UG/L AS SE)	08/31/76-08/31/76	0	1	
SHEN0372	No	01147	SELENIUM, TOTAL (UG/L AS SE)	09/20/94-09/20/94	0	1	
SHEN0568	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/01/93-09/20/94	1	2	
SHEN0651	No	01147	SELENIUM, TOTAL (UG/L AS SE)	03/01/93-03/01/93	0	1	
SHEN0786	No	01147	SELENIUM, TOTAL (UG/L AS SE)	01/10/79-01/10/79	0	1	
SHEN0001	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/02/83-07/22/96	13	2	
SHEN0024	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0162	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/02/83-07/22/96	13	2	
SHEN0164	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/02/83-07/22/96	13	2	
SHEN0252	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/23/83-07/22/96	13	2	
SHEN0256	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/22/96-06/18/96	2	2	
SHEN0282	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0324	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0386	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0450	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/20/92-08/05/96	4	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0568	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/23/83-06/25/96	13	2	
SHEN0651	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0755	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/27/83-06/24/96	12	2	
SHEN0774	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/27/83-05/29/85	1	2	
SHEN0775	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/27/83-07/24/96	13	3	
SHEN0783	No	01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0754	No	01149	SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	01149	SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	07/14/92-07/14/92	0	3	
SHEN0781	No	01149	SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	07/14/92-07/14/92	0	3	
SHEN0001	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/31/96-07/31/96	0	1	
SHEN0004	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0024	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0162	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0164	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0252	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0256	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/18/96-06/18/96	0	1	
SHEN0282	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/31/96-07/31/96	0	1	
SHEN0297	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/16/97-06/16/97	0	1	
SHEN0317	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0366	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0386	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0450	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0542	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0568	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/25/96-06/25/96	0	1	
SHEN0651	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0755	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	06/24/96-06/24/96	0	1	
SHEN0756	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0775	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0783	No	01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/25/96-07/25/96	0	1	
SHEN0001	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/30/91-04/27/98	6	29	
SHEN0004	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	04/30/79-12/15/98	19	203	
SHEN0006	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/23/97-08/04/97	0	2	
SHEN0019	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/23/97-08/04/97	0	2	
SHEN0021	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/23/97-08/04/97	0	2	
SHEN0024	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	11/29/94-07/29/97	2	5	
SHEN0162	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	04/30/79-12/21/98	19	202	
SHEN0164	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/10/93-12/21/98	5	67	
SHEN0204	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	04/30/79-12/21/98	19	199	
SHEN0226	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/24/98-06/24/98	0	1	
SHEN0252	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	05/07/79-12/21/98	19	201	
SHEN0256	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/22/93-12/10/98	5	69	
SHEN0282	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	01/07/92-11/30/98	6	29	
SHEN0297	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	09/26/90-11/05/98	8	57	
SHEN0311	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/12/97-11/30/98	1	7	
SHEN0324	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/18/91-07/29/97	5	13	
SHEN0366	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/18/91-07/29/97	5	13	
SHEN0372	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	11/19/90-09/29/98	7	30	
SHEN0386	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	02/08/88-12/07/98	10	107	
SHEN0450	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	07/29/91-12/07/98	7	72	
SHEN0499	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	06/25/98-06/25/98	0	1	
SHEN0542	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	12/18/91-07/21/97	5	16	
SHEN0568	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	11/19/90-09/29/98	7	29	
SHEN0631	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	08/04/94-07/21/97	2	5	
SHEN0635	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	05/07/79-12/07/98	19	199	
SHEN0651	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	11/19/90-04/22/98	7	26	
SHEN0755	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	05/07/79-12/02/98	19	200	
SHEN0774	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	02/06/79-08/02/88	9	110	
SHEN0775	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	11/09/88-12/01/98	10	102	
SHEN0777	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	02/01/79-12/01/98	19	218	
SHEN0783	No	01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE	05/09/79-07/14/97	18	138	
SHEN0038	No	04024	PROPACHLOR,DISSOLVED,WATER,TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	04024	PROPACHLOR,DISSOLVED,WATER,TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	04024	PROPACHLOR,DISSOLVED,WATER,TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	04024	PROPACHLOR,DISSOLVED,WATER,TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0038	No	04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	04040	DEETHYL ATRAZINE, DISSOLVED, WATER, TOT REC UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	04040	DEETHYL ATRAZINE, DISSOLVED, WATER, TOT REC UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	04040	DEETHYL ATRAZINE, DISSOLVED, WATER, TOT REC UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	04040	DEETHYL ATRAZINE, DISSOLVED, WATER, TOT REC UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	04041	CYANAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	04041	CYANAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	04041	CYANAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	04041	CYANAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	0	1	
SHEN0055	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/29/96	2	8	
SHEN0126	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	08/18/94-08/18/94	0	1	
SHEN0128	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	1	6	
SHEN0129	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	03/19/96-03/19/96	0	3	
SHEN0185	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	08/19/92-09/17/92	0	5	
SHEN0275	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	1	6	
SHEN0334	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	1	6	
SHEN0408	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	1	6	
SHEN0440	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	1	6	
SHEN0472	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	1	6	
SHEN0512	No	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	1	6	
SHEN0595	No	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	1	6	
SHEN0616	No	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	1	6	
SHEN0665	Yes	04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	1	6	
SHEN0055	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-07/30/97	3	15	
SHEN0126	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	10/21/93-07/29/97	3	114	
SHEN0128	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	1	6	
SHEN0129	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/23/94-06/05/97	3	64	
SHEN0130	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/23/94-01/19/95	0	13	
SHEN0185	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	08/19/92-07/29/97	4	11	
SHEN0189	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	04/30/96-07/29/97	1	6	
SHEN0211	No	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	04/30/96-07/29/97	1	6	
SHEN0275	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-07/30/97	3	15	
SHEN0333	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	3	98	
SHEN0334	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	1	6	
SHEN0335	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	07/19/93-06/04/97	3	67	
SHEN0336	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-01/20/96	2	37	
SHEN0408	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-07/30/97	3	15	
SHEN0440	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-07/30/97	3	15	
SHEN0472	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-07/30/97	3	15	
SHEN0512	No	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-07/30/97	3	15	
SHEN0557	No	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	04/30/96-07/28/97	1	8	
SHEN0595	No	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-07/30/97	3	15	
SHEN0616	No	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	1	6	
SHEN0620	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	3	75	
SHEN0621	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-06/27/97	3	108	
SHEN0622	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/26/93-05/16/95	1	42	
SHEN0665	Yes	04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-07/30/97	3	15	
SHEN0204	No	05053	INVALID PARAMETER	06/14/79-06/14/79	0	1	
SHEN0783	No	05301	INVALID PARAMETER	05/09/79-05/09/79	0	1	
SHEN0018	No	22703	URANIUM, NATURAL, DISSOLVED	01/17/77-01/17/77	0	1	
SHEN0023	No	22703	URANIUM, NATURAL, DISSOLVED	01/10/77-01/10/77	0	1	
SHEN0034	No	22703	URANIUM, NATURAL, DISSOLVED	01/15/77-01/15/77	0	1	
SHEN0036	No	22703	URANIUM, NATURAL, DISSOLVED	01/10/77-01/10/77	0	1	
SHEN0137	No	22703	URANIUM, NATURAL, DISSOLVED	01/14/77-01/14/77	0	1	
SHEN0158	No	22703	URANIUM, NATURAL, DISSOLVED	01/13/77-01/13/77	0	1	
SHEN0239	No	22703	URANIUM, NATURAL, DISSOLVED	01/17/77-01/17/77	0	1	
SHEN0241	No	22703	URANIUM, NATURAL, DISSOLVED	01/17/77-01/17/77	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0281	Yes	22703	URANIUM, NATURAL, DISSOLVED	01/17/77-01/17/77	0	1	
SHEN0291	No	22703	URANIUM, NATURAL, DISSOLVED	01/12/77-01/12/77	0	1	
SHEN0302	No	22703	URANIUM, NATURAL, DISSOLVED	01/12/77-01/12/77	0	1	
SHEN0303	No	22703	URANIUM, NATURAL, DISSOLVED	01/18/77-01/18/77	0	1	
SHEN0304	No	22703	URANIUM, NATURAL, DISSOLVED	01/12/77-01/12/77	0	1	
SHEN0325	Yes	22703	URANIUM, NATURAL, DISSOLVED	01/18/77-01/18/77	0	1	
SHEN0387	No	22703	URANIUM, NATURAL, DISSOLVED	01/20/77-01/20/77	0	1	
SHEN0393	No	22703	URANIUM, NATURAL, DISSOLVED	01/20/77-01/20/77	0	1	
SHEN0423	No	22703	URANIUM, NATURAL, DISSOLVED	01/20/77-01/20/77	0	1	
SHEN0425	No	22703	URANIUM, NATURAL, DISSOLVED	04/22/77-04/22/77	0	1	
SHEN0430	No	22703	URANIUM, NATURAL, DISSOLVED	04/11/77-04/11/77	0	1	
SHEN0480	No	22703	URANIUM, NATURAL, DISSOLVED	01/20/77-01/20/77	0	1	
SHEN0492	No	22703	URANIUM, NATURAL, DISSOLVED	04/11/77-04/11/77	0	1	
SHEN0501	No	22703	URANIUM, NATURAL, DISSOLVED	04/22/77-04/22/77	0	1	
SHEN0575	Yes	22703	URANIUM, NATURAL, DISSOLVED	04/08/77-04/08/77	0	1	
SHEN0577	No	22703	URANIUM, NATURAL, DISSOLVED	04/11/77-04/11/77	0	1	
SHEN0590	No	22703	URANIUM, NATURAL, DISSOLVED	04/12/77-04/12/77	0	1	
SHEN0653	No	22703	URANIUM, NATURAL, DISSOLVED	04/12/77-04/12/77	0	1	
SHEN0718	No	22703	URANIUM, NATURAL, DISSOLVED	04/12/77-04/12/77	0	1	
SHEN0732	No	22703	URANIUM, NATURAL, DISSOLVED	04/06/77-04/06/77	0	1	
SHEN0749	No	22703	URANIUM, NATURAL, DISSOLVED	04/08/77-04/08/77	0	1	
SHEN0613	No	30207	GAGE HEIGHT, ABOVE DATUM METERS	07/28/98-07/28/98	0	1	
SHEN0201	No	30282	METHIOCARB, WATER, WHOLE, RECOVERABLE, UG/L	06/23/92-06/23/92	0	1	
SHEN0201	No	30296	PROPOXUR, WATER, WHOLE, RECOVERABLE, UG/L	06/23/92-06/23/92	0	1	
SHEN0002	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	09/20/67-09/08/70	2	7	
SHEN0007	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	3	
SHEN0009	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/16/73	0	2	
SHEN0015	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/17/73	0	2	
SHEN0017	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	07/07/68-09/08/70	2	13	
SHEN0030	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	5	
SHEN0032	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/16/73	0	2	
SHEN0033	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	09/20/67-09/08/70	2	14	
SHEN0051	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	04/08/70-09/08/70	0	6	
SHEN0159	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	5	
SHEN0162	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	09/20/67-09/08/70	2	7	
SHEN0198	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	3	
SHEN0213	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	3	
SHEN0222	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	5	
SHEN0225	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	04/08/70-09/08/70	0	6	
SHEN0228	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	5	
SHEN0234	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	04/08/70-09/08/70	0	6	
SHEN0235	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	07/07/68-09/08/70	2	13	
SHEN0253	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	5	
SHEN0287	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	07/16/68-09/08/70	2	13	
SHEN0292	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	5	
SHEN0301	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/16/73	0	2	
SHEN0306	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/16/73	0	2	
SHEN0307	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/16/73	0	2	
SHEN0314	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	5	
SHEN0316	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	09/20/67-09/08/70	2	15	
SHEN0373	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/16/73	0	2	
SHEN0381	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	08/15/68-10/14/70	2	12	
SHEN0382	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/16/73	0	2	
SHEN0383	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/21/67-06/22/67	0	5	
SHEN0579	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/04/68-11/13/73	5	14	
SHEN0582	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/16/73	0	2	
SHEN0583	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	07/16/68-10/14/70	2	14	
SHEN0586	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	07/01/68-11/13/73	5	14	
SHEN0592	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	04/16/73-04/16/73	0	1	
SHEN0635	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	07/16/68-10/14/70	2	13	
SHEN0746	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/18/73	0	2	
SHEN0750	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	07/16/68-10/12/70	2	14	
SHEN0752	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/14/67-06/15/67	0	5	
SHEN0755	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/16/70-10/12/70	0	5	
SHEN0760	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/18/73	0	2	
SHEN0768	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/18/73	0	2	
SHEN0769	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	02/13/73-04/18/73	0	2	
SHEN0770	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/14/67-06/15/67	0	5	
SHEN0772	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	08/15/68-10/12/70	2	12	
SHEN0774	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	09/19/67-10/12/70	3	17	
SHEN0777	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	04/07/70-10/12/70	0	7	
SHEN0778	No	31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	06/14/67-06/15/67	0	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0782	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/14/67-06/15/67	0	4	
SHEN0784	No	31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/07/70-11/10/77	7	8	
SHEN0008	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0031	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0160	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0199	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0200	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0223	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0229	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0254	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0293	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0315	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0384	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0574	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	0	2	
SHEN0593	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/18/69-08/18/69	0	1	
SHEN0753	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/18/69	0	2	
SHEN0771	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/18/69	0	2	
SHEN0779	No	31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/19/69	0	2	
SHEN0008	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0031	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	0	1	
SHEN0160	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	0	1	
SHEN0199	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0200	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0223	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0229	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0254	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0293	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	0	1	
SHEN0315	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0384	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0574	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	0	2	
SHEN0753	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/18/69	0	2	
SHEN0771	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/18/69	0	2	
SHEN0779	No	31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/19/69	0	2	
SHEN0007	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	3	
SHEN0030	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	5	
SHEN0159	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	5	
SHEN0198	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	3	
SHEN0213	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	3	
SHEN0222	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	5	
SHEN0228	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	5	
SHEN0252	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/20/82-04/20/82	0	1	
SHEN0253	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	5	
SHEN0256	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	4	48	
SHEN0292	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	5	
SHEN0314	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	5	
SHEN0383	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	0	5	
SHEN0752	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	0	5	
SHEN0770	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	0	5	
SHEN0778	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	0	5	
SHEN0782	No	31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	0	4	
SHEN0001	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/25/92-04/27/98	6	23	
SHEN0002	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-06/11/74	3	40	
SHEN0004	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/17/74-12/15/98	24	224	T
SHEN0009	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	0	2	
SHEN0015	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-02/13/73	0	1	
SHEN0017	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	8	82	
SHEN0019	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	06/28/78-03/01/79	0	7	
SHEN0024	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/29/94-07/29/97	2	4	
SHEN0032	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	0	2	
SHEN0033	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	8	83	
SHEN0043	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	06/12/80-08/17/89	9	5	
SHEN0051	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	8	82	
SHEN0162	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-12/21/98	28	266	T,A,S
SHEN0164	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	06/10/93-12/21/98	5	62	
SHEN0204	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/30/79-12/21/98	19	184	
SHEN0225	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	8	83	
SHEN0231	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/69-02/19/74	4	45	
SHEN0234	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-11/02/77	6	74	
SHEN0235	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	8	83	
SHEN0251	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/69-05/14/73	3	42	
SHEN0252	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/24/79-12/21/98	19	187	
SHEN0256	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/22/93-02/23/95	1	19	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0282	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/07/92-11/30/98	6	26	
SHEN0287	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	8	82	
SHEN0297	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/22/74-11/05/98	24	56	
SHEN0301	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	0	2	
SHEN0306	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	0	2	
SHEN0307	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	0	2	
SHEN0311	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	06/12/97-11/30/98	1	7	
SHEN0316	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	8	80	
SHEN0317	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/31/76-08/31/76	0	1	
SHEN0324	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/29/97	5	12	
SHEN0366	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/29/97	5	12	
SHEN0372	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/22/74-09/29/98	23	53	
SHEN0373	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	0	2	
SHEN0381	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	8	81	
SHEN0382	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	0	2	
SHEN0386	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/02/88-12/07/98	10	96	
SHEN0394	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/04/76-02/04/76	0	1	
SHEN0450	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/29/91-12/07/98	7	73	
SHEN0452	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/23/75-10/23/75	0	1	
SHEN0471	Yes	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/23/75-10/23/75	0	1	
SHEN0500	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/26/76-06/06/79	3	18	
SHEN0542	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/21/97	5	16	
SHEN0566	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/24/80-07/24/80	0	1	
SHEN0568	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/17/74-09/29/98	24	66	
SHEN0573	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/18/76-05/15/79	2	16	
SHEN0579	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/26/70-05/15/79	8	68	
SHEN0582	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	0	2	
SHEN0583	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/70-12/14/78	8	82	
SHEN0585	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/31/72-12/14/78	6	62	
SHEN0586	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/26/70-08/24/74	3	42	
SHEN0588	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/06/72-04/12/74	1	16	
SHEN0592	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/16/73-04/16/73	0	1	
SHEN0630	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/17/74-05/15/79	4	26	
SHEN0631	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/04/94-07/21/97	2	4	
SHEN0635	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/70-12/07/98	28	266	T,A,S
SHEN0651	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	06/13/91-04/22/98	6	23	
SHEN0678	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	03/24/75-03/24/75	0	1	
SHEN0719	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/07/75-04/07/75	0	1	
SHEN0720	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/07/75-04/07/75	0	1	
SHEN0723	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/07/75-04/07/75	0	1	
SHEN0746	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	0	2	
SHEN0747	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/04/72-04/12/74	1	16	
SHEN0750	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/14/78	8	73	
SHEN0755	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/02/98	28	272	T,A,S
SHEN0760	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	0	2	
SHEN0768	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	0	2	
SHEN0769	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	0	2	
SHEN0772	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/14/78	8	74	
SHEN0774	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-08/02/88	17	179	
SHEN0775	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/24/89-12/01/98	9	91	
SHEN0777	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	28	279	T,A,S
SHEN0783	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/09/79-07/14/97	18	133	
SHEN0784	No	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-03/02/79	8	77	
SHEN0201	No	31625	FECAL COLIFORM, MF,M-FC, 0.7 UM	06/23/92-06/23/92	0	1	
SHEN0188	Yes	31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	06/22/92-06/22/92	0	1	
SHEN0201	No	31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	06/23/92-06/23/92	0	1	
SHEN0317	No	31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/31/76-08/31/76	0	1	
SHEN0786	No	32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	32104	BROMOFORM,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	32106	CHLOROFORM,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0008	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0031	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0043	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	04/10/80-08/17/89	9	9	
SHEN0160	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0199	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0200	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0223	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0229	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0254	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0293	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0315	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0384	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0566	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/31/90-07/31/90	0	1	
SHEN0574	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	0	2	
SHEN0593	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	08/18/69-08/18/69	0	1	
SHEN0753	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/29/69-08/18/69	0	2	
SHEN0771	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/29/69-08/18/69	0	2	
SHEN0779	No	32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/29/69-08/19/69	0	2	
SHEN0566	No	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/31/90-07/31/90	0	1	
SHEN0566	No	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	07/31/90-07/31/90	0	1	
SHEN0566	No	32219	PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	07/31/90-07/31/90	0	1	
SHEN0777	No	32234	CHLOROPHYLL, TOTAL (A+B+C) (MG/L)	05/18/78-05/18/78	0	1	
SHEN0004	No	32240	TANNIN AND LIGNIN (MG/L)	05/19/92-04/19/93	0	3	
SHEN0162	No	32240	TANNIN AND LIGNIN (MG/L)	12/01/92-12/01/92	0	1	
SHEN0204	No	32240	TANNIN AND LIGNIN (MG/L)	06/04/92-12/01/92	0	2	
SHEN0252	No	32240	TANNIN AND LIGNIN (MG/L)	12/01/92-12/01/92	0	1	
SHEN0282	No	32240	TANNIN AND LIGNIN (MG/L)	07/27/92-11/12/92	0	2	
SHEN0297	No	32240	TANNIN AND LIGNIN (MG/L)	05/14/92-09/29/92	0	2	
SHEN0386	No	32240	TANNIN AND LIGNIN (MG/L)	10/19/92-11/17/92	0	2	
SHEN0635	No	32240	TANNIN AND LIGNIN (MG/L)	10/19/92-11/17/92	0	2	
SHEN0755	No	32240	TANNIN AND LIGNIN (MG/L)	10/19/92-11/17/92	0	2	
SHEN0775	No	32240	TANNIN AND LIGNIN (MG/L)	08/04/92-11/16/92	0	2	
SHEN0777	No	32240	TANNIN AND LIGNIN (MG/L)	08/04/92-08/04/92	0	1	
SHEN0783	No	32240	TANNIN AND LIGNIN (MG/L)	08/04/92-08/04/92	0	1	
SHEN0009	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	0	3	
SHEN0015	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-02/13/73	0	2	
SHEN0162	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/16/82-01/18/83	0	2	
SHEN0196	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	0	3	
SHEN0204	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/16/82-01/18/83	0	2	
SHEN0224	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-02/13/73	0	2	
SHEN0231	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/27/72-12/27/73	1	5	
SHEN0233	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-02/13/73	0	2	
SHEN0251	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/27/72-03/14/73	0	3	
SHEN0252	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/07/82-01/19/83	0	2	
SHEN0301	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	0	3	
SHEN0306	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	0	3	
SHEN0582	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	0	3	
SHEN0592	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	0	3	
SHEN0635	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/07/82-01/19/83	0	2	
SHEN0746	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	02/13/73-04/18/73	0	2	
SHEN0755	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	05/09/74-01/19/83	8	3	
SHEN0768	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	02/13/73-04/18/73	0	2	
SHEN0783	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/07/82-12/07/82	0	1	
SHEN0784	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	05/09/74-05/09/74	0	1	
SHEN0786	No	32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0786	No	34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	01/10/79-01/10/79	0	1	
SHEN0786	No	34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	01/10/79-01/10/79	0	1	
SHEN0786	No	34200	ACENAPHTHYLENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34205	ACENAPHTHENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34210	ACROLEIN TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34215	ACRYLONITRILE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34220	ANTHRACENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34230	BENZO(B)FLUORANTHENE, WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34242	BENZO(K)FLUORANTHENE, TOTAL, WATER UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34247	BENZO-A-PYRENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0754	No	34252	BERYLLIUM WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34252	BERYLLIUM WET WGT TISM/G/KG	07/14/92-07/14/92	0	3	
SHEN0781	No	34252	BERYLLIUM WET WGT TISM/G/KG	07/14/92-07/14/92	0	3	
SHEN0038	No	34253	A-BHC-ALPHA DISSUG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	34253	A-BHC-ALPHA DISSUG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	34253	A-BHC-ALPHA DISSUG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	34253	A-BHC-ALPHA DISSUG/L	09/10/93-09/10/93	0	1	
SHEN0754	No	34258	B-BHC-BETA WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34258	B-BHC-BETA WET WGT TISM/G/KG	08/16/88-07/14/92	3	6	
SHEN0775	No	34258	B-BHC-BETA WET WGT TISM/G/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34258	B-BHC-BETA WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34258	B-BHC-BETA WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34258	B-BHC-BETA WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0016	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	07/29/93-07/29/93	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0372	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0754	No	34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	08/16/88-07/14/92	3	6	
SHEN0775	No	34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0786	No	34268	BIS (CHLOROMETHYL) ETHER TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34273	BIS (2-CHLOROETHYL) ETHER TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34278	BIS (2-CHLOROETHOXY) METHANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34283	BIS (2-CHLOROISOPROPYL) ETHER TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34301	CHLOROBENZENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34311	CHLOROETHANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34320	CHRYSENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34336	DIETHYL PHTHALATE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34341	DIMETHYL PHTHALATE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34346	1,2-DIPHENYLHYDRAZINE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0016	No	34351	ENDOSULFAN SULFATE TOTWUG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	34351	ENDOSULFAN SULFATE TOTWUG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	34351	ENDOSULFAN SULFATE TOTWUG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	34351	ENDOSULFAN SULFATE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	34351	ENDOSULFAN SULFATE TOTWUG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	34351	ENDOSULFAN SULFATE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	34351	ENDOSULFAN SULFATE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	34351	ENDOSULFAN SULFATE TOTWUG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	34351	ENDOSULFAN SULFATE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0016	No	34356	ENDOSULFAN, BETA TOTWUG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	34356	ENDOSULFAN, BETA TOTWUG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	34356	ENDOSULFAN, BETA TOTWUG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	34356	ENDOSULFAN, BETA TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	34356	ENDOSULFAN, BETA TOTWUG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	34356	ENDOSULFAN, BETA TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	34356	ENDOSULFAN, BETA TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	34356	ENDOSULFAN, BETA TOTWUG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	34356	ENDOSULFAN, BETA TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0754	No	34360	ENDOSULFAN, BETA WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34360	ENDOSULFAN, BETA WET WGT TISM/G/KG	08/16/88-07/14/92	3	6	
SHEN0777	No	34360	ENDOSULFAN, BETA WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34360	ENDOSULFAN, BETA WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34360	ENDOSULFAN, BETA WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0016	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	34361	ENDOSULFAN, ALPHA TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0754	No	34365	ENDOSULFAN, ALPHA WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34365	ENDOSULFAN, ALPHA WET WGT TISM/G/KG	08/16/88-07/14/92	3	6	
SHEN0777	No	34365	ENDOSULFAN, ALPHA WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34365	ENDOSULFAN, ALPHA WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34365	ENDOSULFAN, ALPHA WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0016	No	34366	ENDRIN ALDEHYDE TOTWUG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	34366	ENDRIN ALDEHYDE TOTWUG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	34366	ENDRIN ALDEHYDE TOTWUG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	34366	ENDRIN ALDEHYDE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	34366	ENDRIN ALDEHYDE TOTWUG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	34366	ENDRIN ALDEHYDE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	34366	ENDRIN ALDEHYDE TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	34366	ENDRIN ALDEHYDE TOTWUG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	34366	ENDRIN ALDEHYDE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34371	ETHYLBENZENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34376	FLUORANTHENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34381	FLUORENE TOTWUG/L	01/10/79-01/10/79	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0786	No	34386	HEXACHLOROXYCLOPENTADIENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34396	HEXACHLOROETHANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34403	INDENO (1,2,3-CD) PYRENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34408	ISOPHORONE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34413	METHYL BROMIDE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34418	METHYL CHLORIDE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34423	METHYLENE CHLORIDE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34428	N-NITROSODI-N-PROPYLAMINE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34433	N-NITROSODIPHENYLAMINE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34438	N-NITROSODIMETHYLAMINE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34447	NITROBENZENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34452	PARACHLOROMETA CRESOL TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34461	PHENANTHRENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34469	PYRENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34475	TETRACHLOROETHYLENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0001	No	34480	THALLIUM DRY WGTBOTMG/KG	06/10/92-06/10/92	0	1	
SHEN0004	No	34480	THALLIUM DRY WGTBOTMG/KG	06/02/83-06/02/83	0	1	
SHEN0162	No	34480	THALLIUM DRY WGTBOTMG/KG	06/02/83-06/02/83	0	1	
SHEN0204	No	34480	THALLIUM DRY WGTBOTMG/KG	06/02/83-06/02/83	0	1	
SHEN0252	No	34480	THALLIUM DRY WGTBOTMG/KG	06/23/83-06/23/83	0	1	
SHEN0256	No	34480	THALLIUM DRY WGTBOTMG/KG	07/22/93-06/18/96	2	2	
SHEN0282	No	34480	THALLIUM DRY WGTBOTMG/KG	07/27/92-07/27/92	0	1	
SHEN0297	No	34480	THALLIUM DRY WGTBOTMG/KG	10/21/91-06/16/97	5	2	
SHEN0324	No	34480	THALLIUM DRY WGTBOTMG/KG	07/20/92-07/20/92	0	1	
SHEN0366	No	34480	THALLIUM DRY WGTBOTMG/KG	07/20/92-07/20/92	0	1	
SHEN0386	No	34480	THALLIUM DRY WGTBOTMG/KG	06/25/96-06/25/96	0	1	
SHEN0450	No	34480	THALLIUM DRY WGTBOTMG/KG	07/20/92-06/25/96	3	2	
SHEN0542	No	34480	THALLIUM DRY WGTBOTMG/KG	07/20/92-07/20/92	0	1	
SHEN0568	No	34480	THALLIUM DRY WGTBOTMG/KG	03/15/95-03/15/95	0	1	
SHEN0635	No	34480	THALLIUM DRY WGTBOTMG/KG	06/23/83-06/25/96	13	2	
SHEN0651	No	34480	THALLIUM DRY WGTBOTMG/KG	03/15/95-07/21/97	2	2	
SHEN0755	No	34480	THALLIUM DRY WGTBOTMG/KG	06/27/83-06/24/96	12	2	
SHEN0774	No	34480	THALLIUM DRY WGTBOTMG/KG	06/27/83-05/29/85	1	2	
SHEN0777	No	34480	THALLIUM DRY WGTBOTMG/KG	06/27/83-05/29/85	1	2	
SHEN0783	No	34480	THALLIUM DRY WGTBOTMG/KG	06/23/83-06/23/83	0	1	
SHEN0786	No	34488	TRICHLOROFLUOROMETHANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34496	1,1-DICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34501	1,1-DICHLOROETHYLENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34506	1,1,1-TRICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34511	1,1,2-TRICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34516	1,1,2,2-TETRACHLOROETHANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34521	BENZO(GH)PERYLENE1,12-BENZOPERYLENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34536	1,2-DICHLOROBENZENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34541	1,2-DICHLOROPROPANE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34556	1,2,5,6-DIBENZANTHRACENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34561	1,3-DICHLOROPROPENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34566	1,3-DICHLOROBENZENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34571	1,4-DICHLOROBENZENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34576	2-CHLOROETHYL VINYL ETHER TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34581	2-CHLORONAPHTHALENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34586	2-CHLOROPHENOL TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34591	2-NITROPHENOL TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34596	DI-N-OCTYL PHTHALATE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34601	2,4-DICHLOROPHENOL TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34606	2,4-DIMETHYLPHENOL TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34611	2,4-DINITROTOLUENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34616	2,4-DINITROPHENOL TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34621	2,4,6-TRICHLOROPHENOL TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34626	2,6-DINITROTOLUENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34631	3,3'-DICHLOROBENZIDINE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34636	4-BROMOPHENYL PHENYL ETHER TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34646	4-NITROPHENOL TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0038	No	34653	P,P'-DDE DISSUG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	34653	P,P'-DDE DISSUG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	34653	P,P'-DDE DISSUG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	34653	P,P'-DDE DISSUG/L	09/10/93-09/10/93	0	1	
SHEN0786	No	34657	DNOC (4,6-DINITRO-ORTHO-CRESOL) TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0754	No	34664	PCB - 1221 WET WGTISM/KG	07/16/92-07/16/92	0	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0774	No	34664	PCB - 1221 WET WGT TISM/G/KG	06/06/90-07/14/92	2	5	
SHEN0780	No	34664	PCB - 1221 WET WGT TISM/G/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	34664	PCB - 1221 WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	34664	PCB - 1221 WET WGT TISM/G/KG	06/06/90-06/06/90	0	3	
SHEN0754	No	34667	PCB - 1232 WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34667	PCB - 1232 WET WGT TISM/G/KG	06/06/90-07/14/92	2	5	
SHEN0780	No	34667	PCB - 1232 WET WGT TISM/G/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	34667	PCB - 1232 WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	34667	PCB - 1232 WET WGT TISM/G/KG	06/06/90-06/06/90	0	3	
SHEN0754	No	34669	PCB - 1248 WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34669	PCB - 1248 WET WGT TISM/G/KG	06/06/90-07/14/92	2	5	
SHEN0780	No	34669	PCB - 1248 WET WGT TISM/G/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	34669	PCB - 1248 WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	34669	PCB - 1248 WET WGT TISM/G/KG	06/06/90-06/06/90	0	3	
SHEN0754	No	34670	PCB - 1260 WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34670	PCB - 1260 WET WGT TISM/G/KG	08/16/88-07/14/92	3	9	
SHEN0775	No	34670	PCB - 1260 WET WGT TISM/G/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34670	PCB - 1260 WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34670	PCB - 1260 WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34670	PCB - 1260 WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	34670	PCB - 1260 WET WGT TISM/G/KG	06/06/90-06/06/90	0	3	
SHEN0016	No	34671	PCB - 1016 TOTWUG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	34671	PCB - 1016 TOTWUG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	34671	PCB - 1016 TOTWUG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	34671	PCB - 1016 TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	34671	PCB - 1016 TOTWUG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	34671	PCB - 1016 TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	34671	PCB - 1016 TOTWUG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	34671	PCB - 1016 TOTWUG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	34671	PCB - 1016 TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0754	No	34674	PCB - 1016 WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34674	PCB - 1016 WET WGT TISM/G/KG	06/06/90-07/14/92	2	5	
SHEN0780	No	34674	PCB - 1016 WET WGT TISM/G/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	34674	PCB - 1016 WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	34674	PCB - 1016 WET WGT TISM/G/KG	06/06/90-06/06/90	0	3	
SHEN0786	No	34675	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD) TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0754	No	34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/26/79-07/14/92	12	16	
SHEN0775	No	34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/26/79-09/12/90	11	12	
SHEN0781	No	34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT T,MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT T,MG/KG	07/26/79-07/14/92	12	16	
SHEN0775	No	34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT T,MG/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT T,MG/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT T,MG/KG	07/26/79-09/12/90	11	12	
SHEN0781	No	34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT T,MG/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	34685	ENDRIN WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34685	ENDRIN WET WGT TISM/G/KG	07/26/79-07/14/92	12	16	
SHEN0775	No	34685	ENDRIN WET WGT TISM/G/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34685	ENDRIN WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34685	ENDRIN WET WGT TISM/G/KG	07/26/79-09/12/90	11	12	
SHEN0781	No	34685	ENDRIN WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	34686	HEPTACHLOR EPOXIDE WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34686	HEPTACHLOR EPOXIDE WET WGT TISM/G/KG	08/16/88-07/14/92	3	5	
SHEN0777	No	34686	HEPTACHLOR EPOXIDE WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34686	HEPTACHLOR EPOXIDE WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34686	HEPTACHLOR EPOXIDE WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	34687	HEPTACHLOR WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34687	HEPTACHLOR WET WGT TISM/G/KG	08/16/88-07/14/92	3	6	
SHEN0777	No	34687	HEPTACHLOR WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34687	HEPTACHLOR WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34687	HEPTACHLOR WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	34688	HEXACHLORO BENZENE WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34688	HEXACHLORO BENZENE WET WGT TISM/G/KG	07/26/79-07/14/92	12	16	
SHEN0775	No	34688	HEXACHLORO BENZENE WET WGT TISM/G/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34688	HEXACHLORO BENZENE WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34688	HEXACHLORO BENZENE WET WGT TISM/G/KG	07/26/79-09/12/90	11	12	
SHEN0781	No	34688	HEXACHLORO BENZENE WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	34689	PCB - 1242 WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34689	PCB - 1242 WET WGT TISM/G/KG	06/06/90-07/14/92	2	5	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0780	No	34689	PCB - 1242 WET WGT TISM/G/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	34689	PCB - 1242 WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	34689	PCB - 1242 WET WGT TISM/G/KG	06/06/90-06/06/90	0	3	
SHEN0754	No	34690	PCB - 1254 WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34690	PCB - 1254 WET WGT TISM/G/KG	08/16/88-07/14/92	3	9	
SHEN0775	No	34690	PCB - 1254 WET WGT TISM/G/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34690	PCB - 1254 WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34690	PCB - 1254 WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34690	PCB - 1254 WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	34690	PCB - 1254 WET WGT TISM/G/KG	06/06/90-06/06/90	0	3	
SHEN0754	No	34691	TOXAPHENE WET WGT TISM/G/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	34691	TOXAPHENE WET WGT TISM/G/KG	08/16/88-07/14/92	3	6	
SHEN0775	No	34691	TOXAPHENE WET WGT TISM/G/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	34691	TOXAPHENE WET WGT TISM/G/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	34691	TOXAPHENE WET WGT TISM/G/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	34691	TOXAPHENE WET WGT TISM/G/KG	07/14/92-07/14/92	0	2	
SHEN0786	No	34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	34696	NAPHTHALENE TOTWUG/L	01/10/79-01/10/79	0	1	
SHEN0161	No	34790	SURFACTANTS, AS CTAS, WATER MG/L	08/18/92-08/18/92	0	1	
SHEN0201	No	34790	SURFACTANTS, AS CTAS, WATER MG/L	08/18/92-08/18/92	0	1	
SHEN0767	No	34790	SURFACTANTS, AS CTAS, WATER MG/L	08/19/92-08/19/92	0	1	
SHEN0161	No	34795	ANTIMONY,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34795	ANTIMONY,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34795	ANTIMONY,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34800	ARSENIC,SED,BOT,WET SIEVE,	08/18/92-08/18/92	0	1	
SHEN0201	No	34800	ARSENIC,SED,BOT,WET SIEVE,	08/18/92-08/18/92	0	1	
SHEN0767	No	34800	ARSENIC,SED,BOT,WET SIEVE,	08/19/92-08/19/92	0	1	
SHEN0161	No	34810	BERYLLIUM,SED,BOT,WET SIEVE,	08/18/92-08/18/92	0	1	
SHEN0201	No	34810	BERYLLIUM,SED,BOT,WET SIEVE,	08/18/92-08/18/92	0	1	
SHEN0767	No	34810	BERYLLIUM,SED,BOT,WET SIEVE,	08/19/92-08/19/92	0	1	
SHEN0161	No	34816	BISMUTH,SED,BOT,WET SIEVE,	08/18/92-08/18/92	0	1	
SHEN0201	No	34816	BISMUTH,SED,BOT,WET SIEVE,	08/18/92-08/18/92	0	1	
SHEN0767	No	34816	BISMUTH,SED,BOT,WET SIEVE,	08/19/92-08/19/92	0	1	
SHEN0161	No	34825	CADMIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34825	CADMIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34825	CADMIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34830	CALCIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34830	CALCIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34830	CALCIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34835	CERIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34835	CERIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34835	CERIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34840	CHROMIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34840	CHROMIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34840	CHROMIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34845	COBALT,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34845	COBALT,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34845	COBALT,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34850	COPPER,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34850	COPPER,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34850	COPPER,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34855	EUROPIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34855	EUROPIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34855	EUROPIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34860	GALLIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34860	GALLIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34860	GALLIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34870	GOLD,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34870	GOLD,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34870	GOLD,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34875	HOLMIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34875	HOLMIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34875	HOLMIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34880	IRON,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34880	IRON,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34880	IRON,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34885	LANTHANUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34885	LANTHANUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34885	LANTHANUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34890	LEAD,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34890	LEAD,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34890	LEAD,SED,BOT,	08/19/92-08/19/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0161	No	34895	LITHIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34895	LITHIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34895	LITHIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34900	MAGNESIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34900	MAGNESIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34900	MAGNESIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34905	MANGANESE,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34905	MANGANESE,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34905	MANGANESE,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34910	MERCURY,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34910	MERCURY,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34910	MERCURY,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34915	MOLYBDENUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34915	MOLYBDENUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34915	MOLYBDENUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34920	NEODYMIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34920	NEODYMIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34920	NEODYMIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34925	NICKEL,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34925	NICKEL,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34925	NICKEL,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34930	NIObIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34930	NIObIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34930	NIObIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34935	PHOSPHORUS,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34935	PHOSPHORUS,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34935	PHOSPHORUS,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34940	POTASSIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34940	POTASSIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34940	POTASSIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34945	SCANDIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34945	SCANDIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34945	SCANDIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34950	SELENIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34950	SELENIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34950	SELENIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34955	SILVER,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34955	SILVER,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34955	SILVER,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34960	SODIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34960	SODIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34960	SODIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34965	STRONTIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34965	STRONTIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34965	STRONTIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34970	SULFUR,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34970	SULFUR,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34970	SULFUR,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34975	TANTALUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34975	TANTALUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34975	TANTALUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34980	THORIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34980	THORIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34980	THORIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	34985	TIN,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	34985	TIN,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	34985	TIN,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	35000	URANIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	35000	URANIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	35000	URANIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	35005	VANADIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	35005	VANADIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	35005	VANADIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	35010	YTTRIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	35010	YTTRIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	35010	YTTRIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	35015	YTTERBIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	35015	YTTERBIUM,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	35015	YTTERBIUM,SED,BOT,	08/19/92-08/19/92	0	1	
SHEN0161	No	35020	ZINC,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0201	No	35020	ZINC,SED,BOT,	08/18/92-08/18/92	0	1	
SHEN0767	No	35020	ZINC,SED,BOT,	08/19/92-08/19/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0777	No	38442	DICAMBA (BANVEL) WATER,DISSUG/L	05/29/85-05/29/85	0	1	
SHEN0372	No	38451	DICHLORPROP WATER,SUSPUG/L	09/30/93-09/30/93	0	1	
SHEN0568	No	38451	DICHLORPROP WATER,SUSPUG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	38451	DICHLORPROP WATER,SUSPUG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	38451	DICHLORPROP WATER,SUSPUG/L	05/29/85-05/29/85	0	1	
SHEN0754	No	38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	07/14/92-07/14/92	0	2	
SHEN0780	No	38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	07/14/92-07/14/92	0	2	
SHEN0297	No	38745	2,4-DB WATER, TOTUG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	38745	2,4-DB WATER, TOTUG/L	09/30/93-09/30/93	0	1	
SHEN0568	No	38745	2,4-DB WATER, TOTUG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	38745	2,4-DB WATER, TOTUG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	38745	2,4-DB WATER, TOTUG/L	05/29/85-05/29/85	0	1	
SHEN0038	No	38933	CHLORPYRIFOS,DISSOLVED UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	38933	CHLORPYRIFOS,DISSOLVED UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	38933	CHLORPYRIFOS,DISSOLVED UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	38933	CHLORPYRIFOS,DISSOLVED UG/L	09/10/93-09/10/93	0	1	
SHEN0004	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/15/79-07/10/80	0	2	
SHEN0043	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	0	2	
SHEN0162	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/15/79-07/10/80	0	2	
SHEN0204	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/15/79-07/10/80	0	2	
SHEN0252	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/20/79-07/08/80	0	2	
SHEN0297	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0635	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/20/79-07/08/80	0	2	
SHEN0651	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0755	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/20/79-07/08/80	0	2	
SHEN0774	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/20/79-07/08/80	0	2	
SHEN0777	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/21/79-05/29/85	5	3	
SHEN0783	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	07/21/80-07/21/80	0	1	
SHEN0786	No	39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	0	1	
SHEN0372	No	39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0568	No	39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0201	No	39051	METHOMYL IN WHOLE WATER (UG/L)	06/23/92-06/23/92	0	1	
SHEN0201	No	39052	PROPHAM IN WHOLE WATER (UG/L)	06/23/92-06/23/92	0	1	
SHEN0774	No	39060	PCP (PENTACHLOROPHENOL) IN TISSUE WET WGT UG/G	07/26/79-08/14/85	6	10	
SHEN0780	No	39060	PCP (PENTACHLOROPHENOL) IN TISSUE WET WGT UG/G	07/26/79-08/14/85	6	9	
SHEN0001	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/26/92-07/31/96	3	2	
SHEN0004	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/01/91-07/22/96	5	2	
SHEN0024	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/07/96-08/07/96	0	1	
SHEN0043	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/17/89-08/17/89	0	2	
SHEN0162	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/02/91-07/22/96	5	2	
SHEN0164	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/22/96-07/22/96	0	1	
SHEN0204	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/02/91-07/22/96	5	2	
SHEN0252	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/02/91-07/22/96	5	2	
SHEN0256	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/22/93-06/18/96	2	2	
SHEN0282	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/27/92-07/31/96	4	2	
SHEN0297	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	10/21/91-10/21/91	0	1	
SHEN0324	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/20/92-08/07/96	4	2	
SHEN0366	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/20/92-08/07/96	4	2	
SHEN0386	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/16/91-06/25/96	4	2	
SHEN0450	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/20/92-06/25/96	3	2	
SHEN0542	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/20/92-08/05/96	4	2	
SHEN0566	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/31/90-07/31/90	0	1	
SHEN0568	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	03/15/95-03/15/95	0	1	
SHEN0631	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/05/96-08/05/96	0	1	
SHEN0635	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/25/96-06/25/96	0	1	
SHEN0651	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/18/92-07/21/97	4	3	
SHEN0754	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/16/92-07/16/92	0	1	
SHEN0755	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/24/96-06/24/96	0	1	
SHEN0774	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/14/92-07/14/92	0	1	
SHEN0775	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/23/91-07/24/96	5	2	
SHEN0777	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/23/91-07/24/96	5	2	
SHEN0780	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/14/92-07/14/92	0	1	
SHEN0783	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/23/91-07/25/96	5	2	
SHEN0785	No	39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/06/90-06/06/90	0	1	
SHEN0004	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0162	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	0	2	
SHEN0635	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	07/21/80-07/21/80	0	1	
SHEN0774	No	39063	CHLORDANE-CIS ISOMER,TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	10	
SHEN0780	No	39063	CHLORDANE-CIS ISOMER,TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	9	
SHEN0004	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	0	2	
SHEN0635	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	07/21/80-07/21/80	0	1	
SHEN0774	No	39066	CHLORDANE-TRANS ISOMER, TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	10	
SHEN0780	No	39066	CHLORDANE-TRANS ISOMER, TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	9	
SHEN0004	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	0	2	
SHEN0635	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	07/21/80-07/21/80	0	1	
SHEN0754	No	39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	07/16/92-07/16/92	0	3	
SHEN0774	No	39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	07/26/79-07/14/92	12	16	
SHEN0775	No	39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	08/17/88-08/17/88	0	1	
SHEN0777	No	39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	08/18/88-08/18/88	0	1	
SHEN0780	No	39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	07/26/79-09/12/90	11	12	
SHEN0781	No	39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	07/14/92-07/14/92	0	2	
SHEN0004	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	0	2	
SHEN0635	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	07/21/80-07/21/80	0	1	
SHEN0754	No	39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	07/16/92-07/16/92	0	3	
SHEN0774	No	39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	07/26/79-07/14/92	12	16	
SHEN0775	No	39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	08/17/88-08/17/88	0	1	
SHEN0777	No	39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	08/18/88-08/18/88	0	1	
SHEN0780	No	39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	07/26/79-09/12/90	11	12	
SHEN0781	No	39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	07/14/92-07/14/92	0	2	
SHEN0754	No	39074	BHC-ALPHA ISOMER, TISSUE UG/G WET WGT	07/16/92-07/16/92	0	3	
SHEN0774	No	39074	BHC-ALPHA ISOMER, TISSUE UG/G WET WGT	07/26/79-07/14/92	12	16	
SHEN0775	No	39074	BHC-ALPHA ISOMER, TISSUE UG/G WET WGT	08/17/88-08/17/88	0	1	
SHEN0777	No	39074	BHC-ALPHA ISOMER, TISSUE UG/G WET WGT	08/18/88-08/18/88	0	1	
SHEN0780	No	39074	BHC-ALPHA ISOMER, TISSUE UG/G WET WGT	07/26/79-09/12/90	11	12	
SHEN0781	No	39074	BHC-ALPHA ISOMER, TISSUE UG/G WET WGT	07/14/92-07/14/92	0	2	
SHEN0774	No	39075	BHC- GAMMA ISOMER, TISSUE WET WGT (UG/G)	07/26/79-07/28/83	4	7	
SHEN0780	No	39075	BHC- GAMMA ISOMER, TISSUE WET WGT (UG/G)	07/26/79-07/28/83	4	6	
SHEN0038	No	39086	ALKALINITY, WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	09/13/93-09/13/93	0	1	
SHEN0161	No	39086	ALKALINITY, WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	06/06/94-06/06/94	0	1	
SHEN0163	No	39086	ALKALINITY, WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	39086	ALKALINITY, WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	06/06/94-06/06/94	0	1	
SHEN0756	No	39086	ALKALINITY, WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	06/08/94-06/08/94	0	1	
SHEN0762	No	39086	ALKALINITY, WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	09/10/93-09/10/93	0	1	
SHEN0786	No	39100	BIS(2-ETHYLHEXYL) PHTHALATE,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	39110	DI-N-BUTYL PHTHALATE,WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0786	No	39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	01/10/79-01/10/79	0	1	
SHEN0786	No	39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	01/10/79-01/10/79	0	1	
SHEN0317	No	39250	NAPHTHALENES, POLYCHLORINATED (UG/L)	08/31/76-08/31/76	0	1	
SHEN0754	No	39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	07/16/92-07/16/92	0	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0774	No	39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	07/26/79-07/14/92	12	16	
SHEN0775	No	39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	08/17/88-08/17/88	0	1	
SHEN0777	No	39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	08/18/88-08/18/88	0	1	
SHEN0780	No	39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	08/14/85-09/12/90	5	7	
SHEN0781	No	39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	07/14/92-07/14/92	0	2	
SHEN0004	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0016	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0043	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0162	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0297	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0372	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0566	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0635	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0651	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0755	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	5	3	
SHEN0783	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0786	No	39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0774	No	39302	P P DDT IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	10	
SHEN0780	No	39302	P P DDT IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	9	
SHEN0004	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0635	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0774	No	39309	O P DDT IN AQUATIC ORGANISMS WET WEIGHT BASIS(UG/G)	07/26/79-08/14/85	6	10	
SHEN0777	No	39309	O P DDT IN AQUATIC ORGANISMS WET WEIGHT BASIS(UG/G)	07/26/79-08/14/85	6	3	
SHEN0780	No	39309	O P DDT IN AQUATIC ORGANISMS WET WEIGHT BASIS(UG/G)	07/26/79-08/14/85	6	9	
SHEN0004	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0016	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0043	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0162	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0297	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0372	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0566	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0635	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0651	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0755	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	5	3	
SHEN0783	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0786	No	39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0774	No	39312	P P DDD IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	10	
SHEN0780	No	39312	P P DDD IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	9	
SHEN0004	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0635	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0004	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0016	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0043	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0162	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0297	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0372	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0566	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0635	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0651	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0755	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	5	3	
SHEN0783	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0786	No	39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0774	No	39322	P,P'-DDE IN TISSUE WET WGT MG/KG	07/26/79-08/14/85	6	10	
SHEN0780	No	39322	P,P'-DDE IN TISSUE WET WGT MG/KG	07/26/79-08/14/85	6	9	
SHEN0774	No	39325	O,P DDD IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	10	
SHEN0780	No	39325	O,P DDD IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	6	9	
SHEN0004	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0635	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0774	No	39329	O,P DDE IN TISSUE, WET WGT(UG/G)	07/26/79-08/14/85	6	10	
SHEN0780	No	39329	O,P DDE IN TISSUE, WET WGT(UG/G)	07/26/79-08/14/85	6	9	
SHEN0004	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/14/82	2	3	
SHEN0016	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0043	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0162	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/14/82	2	3	
SHEN0204	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/14/82	2	3	
SHEN0251	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0252	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/07/82	2	3	
SHEN0297	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0566	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0635	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/07/82	2	3	
SHEN0651	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0755	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/07/82	2	3	
SHEN0774	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/06/82	2	3	
SHEN0777	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	5	4	
SHEN0783	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/07/82	1	2	
SHEN0786	No	39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0001	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	3	2	
SHEN0004	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/02/83-07/22/96	13	2	
SHEN0024	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	0	1	
SHEN0162	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/02/83-07/22/96	13	3	
SHEN0164	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	0	1	
SHEN0204	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/02/83-07/22/96	13	3	
SHEN0252	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/23/83-07/22/96	13	3	
SHEN0256	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/93-06/18/96	2	2	
SHEN0282	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	4	2	
SHEN0317	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	4	2	
SHEN0324	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0366	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0386	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	4	2	
SHEN0450	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-06/25/96	3	2	
SHEN0542	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	4	2	
SHEN0568	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/15/95-03/15/95	0	1	
SHEN0631	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	0	1	
SHEN0635	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/23/83-06/25/96	13	2	
SHEN0651	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/92-07/21/97	4	3	
SHEN0755	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/27/83-06/24/96	12	2	
SHEN0756	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	0	1	
SHEN0774	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/27/83-06/27/83	0	1	
SHEN0775	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0777	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/27/83-07/24/96	13	3	
SHEN0783	No	39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/23/83-07/25/96	13	3	
SHEN0016	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	05/01/79-05/01/79	0	1	
SHEN0043	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/17/89-08/17/89	0	2	
SHEN0297	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	07/29/93-07/29/93	0	1	
SHEN0372	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0566	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	07/31/90-07/31/90	0	1	
SHEN0568	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	0	1	
SHEN0651	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	0	1	
SHEN0777	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	05/29/85-05/29/85	0	1	
SHEN0786	No	39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	01/10/79-01/10/79	0	1	
SHEN0016	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	05/01/79-05/01/79	0	1	
SHEN0043	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/17/89-08/17/89	0	2	
SHEN0297	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	07/29/93-07/29/93	0	1	
SHEN0372	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	0	1	
SHEN0566	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	07/31/90-07/31/90	0	1	
SHEN0568	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	0	1	
SHEN0651	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	0	1	
SHEN0777	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	05/29/85-05/29/85	0	1	
SHEN0786	No	39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	01/10/79-01/10/79	0	1	
SHEN0016	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	08/17/89-08/17/89	0	2	
SHEN0251	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	10/25/72-06/19/73	0	3	
SHEN0297	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	07/29/93-07/29/93	0	1	
SHEN0317	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	08/31/76-08/31/76	0	1	
SHEN0372	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0038	No	39341	GAMMA-BHC(LINDANE),DISSOLVED,UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	39341	GAMMA-BHC(LINDANE),DISSOLVED,UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	39341	GAMMA-BHC(LINDANE),DISSOLVED,UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	39341	GAMMA-BHC(LINDANE),DISSOLVED,UG/L	09/10/93-09/10/93	0	1	
SHEN0317	No	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	05/16/72-08/31/76	4	2	
SHEN0756	No	39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	05/16/72-05/16/72	0	1	
SHEN0004	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/15/79-07/10/80	0	2	
SHEN0016	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	05/01/79-05/01/79	0	1	
SHEN0162	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/15/79-07/10/80	0	2	
SHEN0204	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/15/79-07/10/80	0	2	
SHEN0251	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	10/25/72-06/19/73	0	3	
SHEN0252	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/20/79-07/08/80	0	2	
SHEN0317	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/31/76-08/31/76	0	1	
SHEN0372	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	09/30/93-09/30/93	0	1	
SHEN0568	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	09/30/93-09/30/93	0	1	
SHEN0635	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/20/79-07/08/80	0	2	
SHEN0651	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	09/30/93-09/30/93	0	1	
SHEN0755	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/20/79-07/08/80	0	2	
SHEN0774	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/20/79-07/08/80	0	2	
SHEN0777	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/21/79-07/21/80	0	2	
SHEN0783	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	07/21/80-07/21/80	0	1	
SHEN0786	No	39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	01/10/79-01/10/79	0	1	
SHEN0001	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/26/92-07/31/96	3	2	
SHEN0004	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/01/91-07/22/96	5	2	
SHEN0024	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/07/96-08/07/96	0	1	
SHEN0043	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/17/89-08/17/89	0	2	
SHEN0162	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/02/91-07/22/96	5	2	
SHEN0164	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/22/96-07/22/96	0	1	
SHEN0204	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/02/91-07/22/96	5	2	
SHEN0252	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/02/91-07/22/96	5	2	
SHEN0256	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/22/93-06/18/96	2	2	
SHEN0282	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/27/92-07/31/96	4	2	
SHEN0297	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	10/21/91-10/21/91	0	1	
SHEN0317	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	05/16/72-08/31/76	4	2	
SHEN0324	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/20/92-08/07/96	4	2	
SHEN0366	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/20/92-08/07/96	4	2	
SHEN0386	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/16/91-06/25/96	4	2	
SHEN0450	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/20/92-06/25/96	3	2	
SHEN0542	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/20/92-08/05/96	4	2	
SHEN0566	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/31/90-07/31/90	0	1	
SHEN0568	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	03/15/95-03/15/95	0	1	
SHEN0631	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/05/96-08/05/96	0	1	
SHEN0635	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/25/96-06/25/96	0	1	
SHEN0651	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/18/92-07/21/97	4	3	
SHEN0754	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/16/92-07/16/92	0	1	
SHEN0755	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/24/96-06/24/96	0	1	
SHEN0756	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	05/16/72-05/16/72	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0774	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/14/92-07/14/92	0	1	
SHEN0775	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/23/91-07/24/96	5	2	
SHEN0777	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/23/91-07/24/96	5	2	
SHEN0780	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/14/92-07/14/92	0	1	
SHEN0783	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/23/91-07/25/96	5	2	
SHEN0785	No	39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	06/06/90-06/06/90	0	1	
SHEN0774	No	39358	DDT TOTAL IN AQUATIC ORGANISMS WT WGT (UG/G)	07/26/79-07/28/83	4	7	
SHEN0780	No	39358	DDT TOTAL IN AQUATIC ORGANISMS WT WGT (UG/G)	07/26/79-07/28/83	4	6	
SHEN0251	No	39360	DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39360	DDD IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0001	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	3	2	
SHEN0004	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	5	2	
SHEN0024	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	0	1	
SHEN0043	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	0	2	
SHEN0162	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0164	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	0	1	
SHEN0204	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0252	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0256	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/93-06/18/96	2	2	
SHEN0282	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	4	2	
SHEN0297	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/21/91-10/21/91	0	1	
SHEN0317	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	4	2	
SHEN0324	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0366	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0386	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	4	2	
SHEN0450	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-06/25/96	3	2	
SHEN0542	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	4	2	
SHEN0566	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	0	1	
SHEN0568	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/15/95-03/15/95	0	1	
SHEN0631	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	0	1	
SHEN0635	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/96-06/25/96	0	1	
SHEN0651	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/92-07/21/97	4	3	
SHEN0754	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	0	1	
SHEN0755	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/24/96-06/24/96	0	1	
SHEN0756	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	0	1	
SHEN0774	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0775	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0777	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0780	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	0	1	
SHEN0781	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0783	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	5	2	
SHEN0785	No	39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	0	1	
SHEN0251	No	39365	DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39365	DDE IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0001	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	3	2	
SHEN0004	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	5	2	
SHEN0024	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	0	1	
SHEN0043	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	0	2	
SHEN0162	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0164	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	0	1	
SHEN0204	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0252	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0256	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/93-06/18/96	2	2	
SHEN0282	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	4	2	
SHEN0297	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/21/91-10/21/91	0	1	
SHEN0317	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	4	2	
SHEN0324	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0366	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0386	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	4	2	
SHEN0450	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-06/25/96	3	2	
SHEN0542	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	4	2	
SHEN0566	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	0	1	
SHEN0568	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/15/95-03/15/95	0	1	
SHEN0631	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	0	1	
SHEN0635	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/96-06/25/96	0	1	
SHEN0651	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/92-07/21/97	4	3	
SHEN0754	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	0	1	
SHEN0755	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/24/96-06/24/96	0	1	
SHEN0756	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	0	1	
SHEN0774	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0775	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0777	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0780	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	0	1	
SHEN0781	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0783	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	5	2	
SHEN0785	No	39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	0	1	
SHEN0015	No	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	04/17/73-04/17/73	0	1	
SHEN0224	No	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	09/19/72-02/13/73	0	2	
SHEN0233	No	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	09/19/72-02/13/73	0	2	
SHEN0251	No	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0768	No	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	09/20/72-02/13/73	0	2	
SHEN0001	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	3	2	
SHEN0004	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	5	2	
SHEN0024	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	0	1	
SHEN0043	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	0	2	
SHEN0162	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0164	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	0	1	
SHEN0204	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0252	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0256	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/93-06/18/96	2	2	
SHEN0282	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	4	2	
SHEN0297	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/21/91-10/21/91	0	1	
SHEN0317	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	4	2	
SHEN0324	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0366	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0386	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	4	2	
SHEN0450	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-06/25/96	3	2	
SHEN0542	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	4	2	
SHEN0566	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	0	1	
SHEN0568	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/15/95-03/15/95	0	1	
SHEN0631	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	0	1	
SHEN0635	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/96-06/25/96	0	1	
SHEN0651	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/92-07/21/97	4	3	
SHEN0754	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	0	1	
SHEN0755	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/24/96-06/24/96	0	1	
SHEN0756	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	0	1	
SHEN0774	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0775	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0777	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0780	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	0	1	
SHEN0781	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0783	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	5	2	
SHEN0785	No	39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	0	1	
SHEN0004	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0016	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0043	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0162	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0251	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0252	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0297	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0566	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0635	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0651	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0750	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/02/71-05/02/71	0	1	
SHEN0755	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	5	3	
SHEN0783	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0786	No	39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0038	No	39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	0	1	
SHEN0163	No	39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	0	1	
SHEN0201	No	39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0762	No	39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/10/93-09/10/93	0	1	
SHEN0001	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/26/92-07/31/96	3	2	
SHEN0004	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/01/91-07/22/96	5	2	
SHEN0024	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/07/96-08/07/96	0	1	
SHEN0043	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/17/89-08/17/89	0	2	
SHEN0162	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	5	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0164	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/22/96-07/22/96	0	1	
SHEN0204	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	5	2	
SHEN0252	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	5	2	
SHEN0256	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/22/93-06/18/96	2	2	
SHEN0282	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-07/31/96	4	2	
SHEN0297	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	10/21/91-10/21/91	0	1	
SHEN0317	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	05/16/72-08/31/76	4	2	
SHEN0324	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/07/96	4	2	
SHEN0366	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/07/96	4	2	
SHEN0386	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/16/91-06/25/96	4	2	
SHEN0450	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-06/25/96	3	2	
SHEN0542	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/05/96	4	2	
SHEN0566	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/31/90-07/31/90	0	1	
SHEN0568	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/15/95-03/15/95	0	1	
SHEN0631	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/05/96-08/05/96	0	1	
SHEN0635	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/25/96-06/25/96	0	1	
SHEN0651	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/18/92-07/21/97	4	3	
SHEN0754	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/16/92-07/16/92	0	1	
SHEN0755	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/24/96-06/24/96	0	1	
SHEN0756	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	05/16/72-05/16/72	0	1	
SHEN0774	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/14/92-07/14/92	0	1	
SHEN0775	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/24/96	5	2	
SHEN0777	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/24/96	5	2	
SHEN0780	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/12/90-09/12/90	0	1	
SHEN0781	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/14/92-07/14/92	0	1	
SHEN0783	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/25/96	5	2	
SHEN0785	No	39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/06/90-06/06/90	0	1	
SHEN0004	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0016	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0017	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	06/16/71-06/16/71	0	1	
SHEN0043	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0162	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0251	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0252	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0297	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0566	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0583	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	05/04/71-05/04/71	0	1	
SHEN0635	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0651	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0755	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	5	3	
SHEN0783	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0786	No	39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0001	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	3	2	
SHEN0004	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	5	2	
SHEN0024	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	0	1	
SHEN0043	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	0	2	
SHEN0162	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0164	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	0	1	
SHEN0204	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0252	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0256	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/93-06/18/96	2	2	
SHEN0282	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	4	2	
SHEN0297	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/21/91-10/21/91	0	1	
SHEN0317	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	4	2	
SHEN0324	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0366	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0386	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	4	2	
SHEN0450	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-06/25/96	3	2	
SHEN0542	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	4	2	
SHEN0566	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	0	1	
SHEN0568	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	03/15/95-03/15/95	0	1	
SHEN0631	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	0	1	
SHEN0635	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/25/96-06/25/96	0	1	
SHEN0651	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/18/92-07/21/97	4	3	
SHEN0754	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	0	1	
SHEN0755	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/24/96-06/24/96	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0756	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	0	1	
SHEN0774	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0775	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0777	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0780	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	0	1	
SHEN0781	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0783	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	5	2	
SHEN0785	No	39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	0	1	
SHEN0251	No	39398	ETHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39398	ETHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0317	No	39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0016	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0043	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0251	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0297	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0566	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0651	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0777	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	0	1	
SHEN0786	No	39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0001	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/26/92-07/31/96	3	2	
SHEN0004	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/01/91-07/22/96	5	2	
SHEN0024	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/07/96-08/07/96	0	1	
SHEN0043	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/17/89-08/17/89	0	2	
SHEN0162	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	5	2	
SHEN0164	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/22/96-07/22/96	0	1	
SHEN0204	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	5	2	
SHEN0252	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	5	2	
SHEN0256	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/22/93-06/18/96	2	2	
SHEN0282	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-07/31/96	4	2	
SHEN0297	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	10/21/91-10/21/91	0	1	
SHEN0317	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/31/76-08/31/76	0	1	
SHEN0324	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/07/96	4	2	
SHEN0366	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/07/96	4	2	
SHEN0386	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/16/91-06/25/96	4	2	
SHEN0450	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-06/25/96	3	2	
SHEN0542	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/05/96	4	2	
SHEN0566	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/31/90-07/31/90	0	1	
SHEN0568	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	03/15/95-03/15/95	0	1	
SHEN0631	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/05/96-08/05/96	0	1	
SHEN0635	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/25/96-06/25/96	0	1	
SHEN0651	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/18/92-07/21/97	4	3	
SHEN0754	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/16/92-07/16/92	0	1	
SHEN0755	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/24/96-06/24/96	0	1	
SHEN0774	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/14/92-07/14/92	0	1	
SHEN0775	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/24/96	5	2	
SHEN0777	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/24/96	5	2	
SHEN0780	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/12/90-09/12/90	0	1	
SHEN0781	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/14/92-07/14/92	0	1	
SHEN0783	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/25/96	5	2	
SHEN0785	No	39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/06/90-06/06/90	0	1	
SHEN0754	No	39404	DIELDRIN IN TISSUE WET WGT (UG/G)	07/16/92-07/16/92	0	3	
SHEN0774	No	39404	DIELDRIN IN TISSUE WET WGT (UG/G)	07/26/79-07/14/92	12	16	
SHEN0775	No	39404	DIELDRIN IN TISSUE WET WGT (UG/G)	08/17/88-08/17/88	0	1	
SHEN0777	No	39404	DIELDRIN IN TISSUE WET WGT (UG/G)	08/18/88-08/18/88	0	1	
SHEN0780	No	39404	DIELDRIN IN TISSUE WET WGT (UG/G)	08/14/85-09/12/90	5	7	
SHEN0781	No	39404	DIELDRIN IN TISSUE WET WGT (UG/G)	07/14/92-07/14/92	0	2	
SHEN0774	No	39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	07/26/79-07/28/83	4	7	
SHEN0777	No	39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	07/28/83-07/28/83	0	1	
SHEN0780	No	39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	07/26/79-07/28/83	4	6	
SHEN0016	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0043	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0251	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0297	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0566	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0651	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0777	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0786	No	39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0001	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	3	2	
SHEN0004	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	5	2	
SHEN0024	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	0	1	
SHEN0043	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	0	2	
SHEN0162	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0164	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	0	1	
SHEN0204	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0252	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	5	2	
SHEN0256	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/22/93-06/18/96	2	2	
SHEN0282	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	4	2	
SHEN0297	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	10/21/91-10/21/91	0	1	
SHEN0317	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	4	2	
SHEN0324	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0366	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	4	2	
SHEN0386	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	4	2	
SHEN0450	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/20/92-06/25/96	3	2	
SHEN0542	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	4	2	
SHEN0566	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	0	1	
SHEN0568	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	03/15/95-03/15/95	0	1	
SHEN0631	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	0	1	
SHEN0635	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	06/25/96-06/25/96	0	1	
SHEN0651	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/18/92-07/21/97	4	3	
SHEN0754	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	0	1	
SHEN0755	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	06/24/96-06/24/96	0	1	
SHEN0756	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	0	1	
SHEN0774	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0775	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0777	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	5	2	
SHEN0780	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	0	1	
SHEN0781	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	0	1	
SHEN0783	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	5	2	
SHEN0785	No	39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	0	1	
SHEN0038	No	39415	METOLACHLOR, WATER, DISSOLVED UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	39415	METOLACHLOR, WATER, DISSOLVED UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	39415	METOLACHLOR, WATER, DISSOLVED UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	39415	METOLACHLOR, WATER, DISSOLVED UG/L	09/10/93-09/10/93	0	1	
SHEN0016	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	0	1	
SHEN0043	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	0	2	
SHEN0251	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0297	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0316	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	04/18/71-04/18/71	0	1	
SHEN0317	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0566	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	0	1	
SHEN0568	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0651	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0777	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	0	1	
SHEN0786	No	39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0317	No	39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	08/31/76-08/31/76	0	1	
SHEN0004	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0317	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0635	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0016	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	0	1	
SHEN0016	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	07/29/93-07/29/93	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0372	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	0	1	
SHEN0016	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	0	1	
SHEN0016	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	0	1	
SHEN0016	No	39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	0	1	
SHEN0372	No	39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0568	No	39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0786	No	39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	0	1	
SHEN0016	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	0	1	
SHEN0043	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	0	2	
SHEN0297	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0566	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	0	1	
SHEN0568	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	0	1	
SHEN0786	No	39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	0	1	
SHEN0754	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/26/79-07/14/92	12	19	
SHEN0775	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/26/79-09/12/90	11	12	
SHEN0781	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	39515	PCBS (MG/KG) FISH TISSUE MG/KG	06/06/90-06/06/90	0	3	
SHEN0004	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0204	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0251	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0252	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0297	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0568	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0583	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	06/06/71-06/06/71	0	1	
SHEN0635	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0651	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0755	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0317	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	05/16/72-08/31/76	4	2	
SHEN0756	No	39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	05/16/72-05/16/72	0	1	
SHEN0001	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/26/92-07/31/96	3	2	
SHEN0004	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/01/91-07/22/96	5	2	
SHEN0024	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/07/96-08/07/96	0	1	
SHEN0043	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/17/89-08/17/89	0	2	
SHEN0162	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/02/91-07/22/96	5	2	
SHEN0164	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/22/96-07/22/96	0	1	
SHEN0204	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/02/91-07/22/96	5	2	
SHEN0252	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/02/91-07/22/96	5	2	
SHEN0256	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/22/93-06/18/96	2	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0282	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/27/92-07/31/96	4	2	
SHEN0297	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	10/21/91-10/21/91	0	1	
SHEN0324	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/20/92-08/07/96	4	2	
SHEN0366	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/20/92-08/07/96	4	2	
SHEN0386	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/16/91-06/25/96	4	2	
SHEN0450	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/20/92-06/25/96	3	2	
SHEN0542	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/20/92-08/05/96	4	2	
SHEN0566	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/31/90-07/31/90	0	1	
SHEN0568	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	03/15/95-03/15/95	0	1	
SHEN0631	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/05/96-08/05/96	0	1	
SHEN0635	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	06/25/96-06/25/96	0	1	
SHEN0651	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/18/92-07/21/97	4	3	
SHEN0754	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/16/92-07/16/92	0	1	
SHEN0755	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	06/24/96-06/24/96	0	1	
SHEN0774	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/14/92-07/14/92	0	1	
SHEN0775	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/23/91-07/24/96	5	2	
SHEN0777	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/23/91-07/24/96	5	2	
SHEN0780	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/14/92-07/14/92	0	1	
SHEN0783	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/23/91-07/25/96	5	2	
SHEN0785	No	39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	06/06/90-06/06/90	0	1	
SHEN0251	No	39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0755	No	39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	06/30/71-06/30/71	0	1	
SHEN0317	No	39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0038	No	39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	0	1	
SHEN0163	No	39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	0	1	
SHEN0201	No	39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0762	No	39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/10/93-09/10/93	0	1	
SHEN0251	No	39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0317	No	39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0038	No	39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	0	1	
SHEN0163	No	39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	0	1	
SHEN0201	No	39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0762	No	39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/10/93-09/10/93	0	1	
SHEN0251	No	39570	DIAZINON IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39570	DIAZINON IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0317	No	39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0038	No	39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	0	1	
SHEN0163	No	39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	0	1	
SHEN0201	No	39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0762	No	39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/10/93-09/10/93	0	1	
SHEN0251	No	39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0317	No	39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0002	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	06/16/71-06/16/71	0	1	
SHEN0004	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/14/82-07/14/82	0	1	
SHEN0162	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/14/82-07/14/82	0	1	
SHEN0204	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/14/82-07/14/82	0	1	
SHEN0252	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/07/82-07/07/82	0	1	
SHEN0579	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	11/02/78-11/02/78	0	1	
SHEN0635	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/07/82-07/07/82	0	1	
SHEN0755	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/07/82-07/07/82	0	1	
SHEN0774	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	10/31/78-07/06/82	3	2	
SHEN0777	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/06/82-07/06/82	0	1	
SHEN0783	No	39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/07/82-07/07/82	0	1	
SHEN0004	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/02/83-06/02/83	0	1	
SHEN0162	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/02/83-06/02/83	0	1	
SHEN0204	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/02/83-06/02/83	0	1	
SHEN0252	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/23/83-06/23/83	0	1	
SHEN0635	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/23/83-06/23/83	0	1	
SHEN0755	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/27/83-06/27/83	0	1	
SHEN0774	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/27/83-06/27/83	0	1	
SHEN0777	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/27/83-06/27/83	0	1	
SHEN0783	No	39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/23/83-06/23/83	0	1	
SHEN0038	No	39632	ATRAZINE DISSOLVED IN WATER PPB	09/13/93-09/13/93	0	1	
SHEN0163	No	39632	ATRAZINE DISSOLVED IN WATER PPB	09/13/93-09/13/93	0	1	
SHEN0201	No	39632	ATRAZINE DISSOLVED IN WATER PPB	06/23/92-06/23/92	0	1	
SHEN0762	No	39632	ATRAZINE DISSOLVED IN WATER PPB	09/10/93-09/10/93	0	1	
SHEN0004	No	39700	HEXACHLORO BENZENE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0162	No	39700	HEXACHLORO BENZENE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0204	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	0	2	
SHEN0252	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0635	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0755	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0774	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	0	2	
SHEN0777	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	0	2	
SHEN0783	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	0	1	
SHEN0786	No	39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	0	1	
SHEN0786	No	39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE(UG/L)	01/10/79-01/10/79	0	1	
SHEN0201	No	39720	PICLORAM IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0201	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0297	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0568	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0651	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0777	No	39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	0	1	
SHEN0317	No	39731	2,4-D IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0201	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0297	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0568	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0651	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0777	No	39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	0	1	
SHEN0317	No	39741	2,4,5-T IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0201	No	39750	SEVIN IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0201	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	0	1	
SHEN0297	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	0	1	
SHEN0317	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0372	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0568	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0651	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	0	1	
SHEN0777	No	39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	0	1	
SHEN0317	No	39761	SILVEX IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0774	No	39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	07/26/79-08/14/85	6	10	
SHEN0777	No	39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	07/28/83-07/28/83	0	1	
SHEN0780	No	39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	07/26/79-08/14/85	6	8	
SHEN0777	No	39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	06/07/71-06/07/71	0	1	
SHEN0754	No	39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	07/26/79-07/14/92	12	16	
SHEN0775	No	39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	08/14/85-09/12/90	5	7	
SHEN0781	No	39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	07/14/92-07/14/92	0	2	
SHEN0251	No	39786	TRITHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39786	TRITHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0317	No	39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0251	No	39790	METHYL TRITHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	0	3	
SHEN0317	No	39790	METHYL TRITHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	0	1	
SHEN0317	No	39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	0	1	
SHEN0754	No	45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	06/06/90-07/14/92	2	5	
SHEN0780	No	45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	07/14/92-07/14/92	0	2	
SHEN0785	No	45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	06/06/90-06/06/90	0	3	
SHEN0038	No	46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	09/10/93-09/10/93	0	1	
SHEN0297	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	03/25/93-07/21/94	1	2	
SHEN0372	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	09/20/94-09/20/94	0	1	
SHEN0568	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	03/01/93-09/20/94	1	2	
SHEN0651	No	46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	03/01/93-03/01/93	0	1	
SHEN0004	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/29/82-08/12/85	3	8	
SHEN0017	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	03/12/76-03/12/76	0	1	
SHEN0162	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/29/82-08/12/85	3	7	
SHEN0204	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/29/82-08/12/85	3	7	
SHEN0252	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/17/82-08/16/83	1	7	
SHEN0568	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/28/75-11/29/76	1	2	
SHEN0573	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	11/29/76-11/29/76	0	1	
SHEN0579	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/28/75-11/29/76	1	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0586	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	05/21/74-05/21/74	0	1	
SHEN0630	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	09/17/74-05/15/79	4	12	
SHEN0635	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	07/07/82-06/29/87	4	14	
SHEN0755	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/17/82-07/22/85	3	8	
SHEN0772	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/22/78-06/22/78	0	1	
SHEN0774	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	04/13/82-02/05/85	2	6	
SHEN0777	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	04/13/82-07/22/85	3	6	
SHEN0783	No	50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/17/82-08/16/83	1	7	
SHEN0018	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	0	1	
SHEN0034	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/15/77-01/15/77	0	1	
SHEN0137	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/14/77-01/14/77	0	1	
SHEN0241	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	0	1	
SHEN0325	Yes	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	0	1	
SHEN0393	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	0	1	
SHEN0492	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	0	1	
SHEN0501	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/22/77-04/22/77	0	1	
SHEN0577	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	0	1	
SHEN0653	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/12/77-04/12/77	0	1	
SHEN0732	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/06/77-04/06/77	0	1	
SHEN0749	No	50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/08/77-04/08/77	0	1	
SHEN0018	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	0	1	
SHEN0034	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/15/77-01/15/77	0	1	
SHEN0036	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/10/77-01/10/77	0	1	
SHEN0137	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/14/77-01/14/77	0	1	
SHEN0241	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	0	1	
SHEN0281	Yes	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	0	1	
SHEN0291	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	0	1	
SHEN0302	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	0	1	
SHEN0303	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	0	1	
SHEN0325	Yes	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	0	1	
SHEN0393	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	0	1	
SHEN0423	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	0	1	
SHEN0425	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/22/77-04/22/77	0	1	
SHEN0430	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	0	1	
SHEN0480	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	0	1	
SHEN0492	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	0	1	
SHEN0501	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/22/77-04/22/77	0	1	
SHEN0575	Yes	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/08/77-04/08/77	0	1	
SHEN0577	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	0	1	
SHEN0590	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/12/77-04/12/77	0	1	
SHEN0653	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/12/77-04/12/77	0	1	
SHEN0718	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/12/77-04/12/77	0	1	
SHEN0732	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/06/77-04/06/77	0	1	
SHEN0749	No	50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/08/77-04/08/77	0	1	
SHEN0018	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	0	1	
SHEN0023	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/10/77-01/10/77	0	1	
SHEN0034	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/15/77-01/15/77	0	1	
SHEN0036	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/10/77-01/10/77	0	1	
SHEN0137	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/14/77-01/14/77	0	1	
SHEN0239	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	0	1	
SHEN0241	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	0	1	
SHEN0291	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	0	1	
SHEN0302	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	0	1	
SHEN0303	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	0	1	
SHEN0304	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	0	1	
SHEN0325	Yes	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	0	1	
SHEN0387	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	0	1	
SHEN0393	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	0	1	
SHEN0423	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	0	1	
SHEN0480	No	50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	0	1	
SHEN0040	No	60050	ALGAE, TOTAL (CELLS/ML)	04/27/79-04/27/79	0	1	
SHEN0005	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/29/54-05/21/69	14	3	
SHEN0011	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/04/30-09/04/30	0	1	
SHEN0020	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/11/77-03/11/77	0	1	
SHEN0022	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/11/77-03/11/77	0	1	
SHEN0038	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/13/93-09/13/93	0	1	
SHEN0040	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	08/02/45-08/02/45	0	1	
SHEN0044	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	11/03/52-07/16/68	15	3	
SHEN0161	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/04/30-10/05/53	23	40	
SHEN0163	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/13/93-09/13/93	0	1	
SHEN0188	Yes	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	06/22/92-06/22/92	0	1	
SHEN0194	Yes	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/27/68-12/13/68	0	6	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station/Parameter Period of Record Tabulation From 09/04/30 To 12/21/98

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0201	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/04/30-06/23/92	61	22	
SHEN0231	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/27/72-12/27/73	1	5	
SHEN0251	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/27/72-03/14/73	0	3	
SHEN0263	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/14/30-05/23/69	38	9	
SHEN0317	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/01/48-10/01/48	0	1	
SHEN0659	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/20/56-01/20/56	0	1	
SHEN0738	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/26/68-10/01/68	0	6	
SHEN0748	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/10/52-05/21/69	16	2	
SHEN0756	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/05/30-06/17/86	55	421	T,S
SHEN0762	No	70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/10/93-09/10/93	0	1	
SHEN0005	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/05/68-05/21/69	1	2	
SHEN0020	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/11/77-03/11/77	0	1	
SHEN0022	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/11/77-03/11/77	0	1	
SHEN0044	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/16/68-07/16/68	0	1	
SHEN0161	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	04/08/69-04/08/69	0	1	
SHEN0194	Yes	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/27/68-12/13/68	0	6	
SHEN0201	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/05/68-05/21/69	1	4	
SHEN0263	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/05/68-05/23/69	1	3	
SHEN0738	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/26/68-10/01/68	0	6	
SHEN0748	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/10/52-05/21/69	16	2	
SHEN0756	No	70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	18	327	
SHEN0005	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	03/05/68-05/21/69	1	2	
SHEN0161	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	04/08/69-04/08/69	0	1	
SHEN0194	Yes	70302	SOLIDS, DISSOLVED-TONS PER DAY	03/27/68-12/13/68	0	6	
SHEN0201	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	03/05/68-05/21/69	1	4	
SHEN0263	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	03/05/68-05/23/69	1	3	
SHEN0738	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	03/26/68-10/01/68	0	6	
SHEN0748	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	10/10/52-05/21/69	16	2	
SHEN0756	No	70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	15	269	
SHEN0005	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/05/68-05/21/69	1	2	
SHEN0020	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/11/77-03/11/77	0	1	
SHEN0022	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/11/77-03/11/77	0	1	
SHEN0044	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	07/16/68-07/16/68	0	1	
SHEN0161	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/08/69-04/08/69	0	1	
SHEN0194	Yes	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/27/68-12/13/68	0	6	
SHEN0201	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/05/68-05/21/69	1	4	
SHEN0231	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	09/27/72-12/27/73	1	5	
SHEN0251	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	09/27/72-03/14/73	0	3	
SHEN0263	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/05/68-05/23/69	1	3	
SHEN0738	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/26/68-10/01/68	0	6	
SHEN0748	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/10/52-05/21/69	16	2	
SHEN0756	No	70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	15	324	
SHEN0028	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/12/95-09/16/97	2	3	
SHEN0047	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/19/95-06/19/95	0	1	
SHEN0049	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/15/95-06/09/98	2	5	
SHEN0056	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-10/29/97	2	6	
SHEN0057	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	02/06/97-06/15/98	1	4	
SHEN0068	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/15/95-06/11/98	2	2	
SHEN0071	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/08/97-06/15/98	0	3	
SHEN0073	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/19/95-06/19/95	0	1	
SHEN0075	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/20/95-06/11/98	2	2	
SHEN0077	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/20/95-06/20/95	0	1	
SHEN0086	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/14/95-06/10/98	2	4	
SHEN0089	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	0	2	
SHEN0091	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	0	1	
SHEN0093	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-06/17/98	3	2	
SHEN0096	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	0	1	
SHEN0097	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	0	1	
SHEN0104	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-05/31/95	0	1	
SHEN0106	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/17/98	3	2	
SHEN0109	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-05/31/95	0	3	
SHEN0111	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	0	1	
SHEN0113	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	0	1	
SHEN0115	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	0	2	
SHEN0121	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	0	1	
SHEN0123	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-05/31/95	0	1	
SHEN0131	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-04/26/95	0	1	
SHEN0132	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/16/98-06/16/98	0	2	
SHEN0134	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-05/13/97	1	6	
SHEN0136	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	0	1	
SHEN0139	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	0	2	
SHEN0141	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0146	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/07/95-06/07/95	0	1	
SHEN0151	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/07/95-06/07/95	0	1	
SHEN0152	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/07/95-05/21/97	1	5	
SHEN0165	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/21/95-06/21/95	0	1	
SHEN0166	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/21/95-06/21/95	0	2	
SHEN0186	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/16/97-09/16/97	0	1	
SHEN0192	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	02/06/97-05/21/97	0	2	
SHEN0208	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/12/95-07/12/95	0	1	
SHEN0212	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/12/95-07/12/95	0	1	
SHEN0243	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/15/97-09/15/97	0	1	
SHEN0247	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/11/95-05/21/97	1	2	
SHEN0255	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/04/96-06/23/98	2	3	
SHEN0264	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/04/96-06/23/98	2	3	
SHEN0270	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/24/98-06/24/98	0	1	
SHEN0271	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/13/95-05/14/97	1	4	
SHEN0272	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/24/98-06/24/98	0	1	
SHEN0276	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-10/29/97	2	6	
SHEN0279	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/11/95-06/22/98	2	2	
SHEN0285	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/22/98-06/22/98	0	1	
SHEN0299	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/17/95-08/17/95	0	1	
SHEN0312	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/08/95-08/08/95	0	1	
SHEN0326	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/18/97-07/06/98	0	2	
SHEN0331	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/13/95-06/29/98	2	2	
SHEN0337	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-04/27/95	0	1	
SHEN0338	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/24/95-05/15/97	1	7	
SHEN0342	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/24/95-05/24/95	0	1	
SHEN0348	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/24/95-05/24/95	0	2	
SHEN0352	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/26/95-07/26/95	0	1	
SHEN0353	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/24/95-06/30/98	3	3	
SHEN0357	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/25/95-05/25/95	0	2	
SHEN0359	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/30/95-05/30/95	0	2	
SHEN0361	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/30/95-07/08/98	3	3	
SHEN0364	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/30/95-05/30/95	0	2	
SHEN0370	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/25/95-07/08/98	3	3	
SHEN0371	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/07/98-07/07/98	0	1	
SHEN0375	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/25/95-07/25/95	0	1	
SHEN0376	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/25/95-05/15/97	1	5	
SHEN0378	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/07/98-07/07/98	0	1	
SHEN0390	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/18/97-07/07/98	0	2	
SHEN0401	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/22/95-07/13/98	2	2	
SHEN0405	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/21/95-05/22/97	1	3	
SHEN0406	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/08/95-06/08/95	0	1	
SHEN0409	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-10/29/97	2	6	
SHEN0416	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/21/95-05/28/97	1	2	
SHEN0418	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/26/95-07/13/98	2	2	
SHEN0421	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/13/98-07/13/98	0	1	
SHEN0431	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/14/95-08/14/95	0	1	
SHEN0438	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/08/95-05/22/97	1	4	
SHEN0441	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-10/29/97	2	6	
SHEN0443	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/10/95-08/10/95	0	1	
SHEN0460	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/28/95-05/28/97	1	2	
SHEN0473	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-10/29/97	2	8	
SHEN0474	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/09/95-08/09/95	0	1	
SHEN0477	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/03/98-08/03/98	0	1	
SHEN0489	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/16/95-09/23/97	2	5	
SHEN0490	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/15/95-07/21/98	2	2	
SHEN0502	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/21/98-07/21/98	0	1	
SHEN0505	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/20/98-07/20/98	0	1	
SHEN0507	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/17/95-07/16/98	2	2	
SHEN0508	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/20/98-07/20/98	0	1	
SHEN0513	No	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-10/29/97	2	6	
SHEN0515	No	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/23/95-08/23/95	0	1	
SHEN0518	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/27/95-05/27/97	1	3	
SHEN0548	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/28/95-05/29/97	1	2	
SHEN0552	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/14/97	1	4	
SHEN0556	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/18/98-06/18/98	0	1	
SHEN0561	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/24/95-08/24/95	0	3	
SHEN0570	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/16/95-05/16/95	0	1	
SHEN0571	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/17/95	0	1	
SHEN0572	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/18/98-06/18/98	0	1	
SHEN0576	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/21/95-07/09/98	2	2	
SHEN0578	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/17/95	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0584	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/17/95	0	1	
SHEN0596	No	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-10/29/97	2	6	
SHEN0605	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/08/95-07/14/98	3	2	
SHEN0611	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/21/95-08/21/95	0	1	
SHEN0613	No	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/28/98-07/28/98	0	1	
SHEN0614	No	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-05/27/97	2	6	
SHEN0617	No	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-04/26/95	0	1	
SHEN0624	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/14/98-07/14/98	0	1	
SHEN0626	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-05/22/95	0	1	
SHEN0637	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/14/98-07/14/98	0	1	
SHEN0644	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-05/22/95	0	1	
SHEN0650	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/27/98-07/27/98	0	1	
SHEN0663	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/17/95	0	1	
SHEN0666	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-10/29/97	2	6	
SHEN0672	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-08/28/95	0	2	
SHEN0673	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/28/97-05/28/97	0	1	
SHEN0680	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/27/98-07/27/98	0	1	
SHEN0686	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-07/29/98	3	2	
SHEN0690	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	0	1	
SHEN0693	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	0	1	
SHEN0697	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	0	4	
SHEN0698	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/14/95-05/20/97	1	4	
SHEN0700	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	0	1	
SHEN0702	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	0	1	
SHEN0705	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/22/98-07/22/98	0	1	
SHEN0708	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/20/95-09/20/95	0	1	
SHEN0722	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/15/98-07/15/98	0	1	
SHEN0726	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/18/95-05/18/95	0	1	
SHEN0734	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/18/95-08/16/95	0	2	
SHEN0737	Yes	70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/18/95-05/20/97	2	3	
SHEN0002	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-06/11/74	4	19	
SHEN0004	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	05/17/74-03/01/79	4	41	
SHEN0017	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	8	61	
SHEN0019	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	06/28/78-03/01/79	0	7	
SHEN0033	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	8	61	
SHEN0051	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	8	60	
SHEN0162	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	8	60	
SHEN0225	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	8	61	
SHEN0234	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	7	52	
SHEN0235	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	8	62	
SHEN0287	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	8	62	
SHEN0297	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	10/22/74-04/07/76	1	8	
SHEN0316	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	8	62	
SHEN0372	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	10/22/74-06/06/79	4	27	
SHEN0381	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	8	59	
SHEN0500	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/26/76-06/06/79	3	19	
SHEN0568	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	09/17/74-06/06/79	4	43	
SHEN0573	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	05/18/76-05/15/79	2	17	
SHEN0579	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/13/70-05/15/79	9	46	
SHEN0583	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	8	63	
SHEN0585	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	6	58	
SHEN0586	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/13/70-08/24/74	4	22	
SHEN0588	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-04/12/74	1	13	
SHEN0630	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	09/17/74-05/15/79	4	25	
SHEN0635	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	8	59	
SHEN0747	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-04/12/74	1	12	
SHEN0750	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	8	60	
SHEN0755	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	8	59	
SHEN0772	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	8	80	
SHEN0774	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	8	60	
SHEN0777	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	8	63	
SHEN0784	No	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	8	63	
SHEN0001	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/10/92-04/27/98	5	24	
SHEN0002	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-06/11/74	4	19	
SHEN0004	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	24	120	T
SHEN0017	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	8	61	
SHEN0019	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/28/78-03/01/79	0	7	
SHEN0024	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/29/94-07/29/97	2	4	
SHEN0033	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	8	61	
SHEN0051	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	8	60	
SHEN0162	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	28	136	T,S
SHEN0164	No	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/10/93-12/21/98	5	63	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0204	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	6	75	
SHEN0225	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	8	61	
SHEN0231	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/27/73	3	34	
SHEN0234	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	7	52	
SHEN0235	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	8	62	
SHEN0251	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	01/12/70-03/14/73	3	33	
SHEN0252	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	6	76	
SHEN0256	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/22/93-12/10/98	5	67	
SHEN0282	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/27/92-11/30/98	6	25	
SHEN0287	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	8	62	
SHEN0297	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/22/74-11/05/98	24	48	
SHEN0311	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/12/97-11/30/98	1	7	
SHEN0316	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	8	61	
SHEN0317	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	08/31/76-08/31/76	0	1	
SHEN0324	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-07/29/97	5	9	
SHEN0366	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-07/29/97	5	9	
SHEN0372	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/22/74-09/29/98	23	51	
SHEN0381	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	8	58	
SHEN0386	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	6	79	
SHEN0450	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	6	69	
SHEN0500	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/26/76-06/06/79	3	19	
SHEN0542	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-07/21/97	5	13	
SHEN0568	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/17/74-09/29/98	24	67	
SHEN0573	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/76-05/15/79	2	17	
SHEN0579	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/13/70-05/15/79	9	46	
SHEN0583	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	8	62	
SHEN0585	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	6	59	
SHEN0586	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/13/70-08/24/74	4	22	
SHEN0588	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-04/12/74	1	13	
SHEN0630	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/17/74-05/15/79	4	26	
SHEN0631	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	08/04/94-07/21/97	2	4	
SHEN0635	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	28	139	T,S
SHEN0651	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/18/92-04/22/98	5	20	
SHEN0747	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-04/12/74	1	12	
SHEN0750	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	8	60	
SHEN0755	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	28	137	T,S
SHEN0756	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/01/71-05/15/74	2	63	
SHEN0772	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	8	81	
SHEN0774	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	8	60	
SHEN0775	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	6	79	
SHEN0777	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	28	142	S
SHEN0783	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-07/14/97	5	30	
SHEN0784	No	70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	8	62	
SHEN0011	No	71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-09/04/30	0	1	
SHEN0161	No	71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-09/21/49	19	36	
SHEN0201	No	71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-03/31/31	0	2	
SHEN0263	No	71835	OXYGEN CONSUMED, FILTERED MG/L	09/14/30-03/31/31	0	2	
SHEN0317	No	71835	OXYGEN CONSUMED, FILTERED MG/L	10/01/48-10/01/48	0	1	
SHEN0756	No	71835	OXYGEN CONSUMED, FILTERED MG/L	09/05/30-04/01/31	0	2	
SHEN0011	No	71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/04/30-09/04/30	0	1	
SHEN0161	No	71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/04/30-08/21/49	18	34	
SHEN0201	No	71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/04/30-03/31/31	0	2	
SHEN0263	No	71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/14/30-03/31/31	0	2	
SHEN0317	No	71840	OXYGEN CONSUMED, UNFILTERED MG/L	10/01/48-10/01/48	0	1	
SHEN0756	No	71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/05/30-04/01/31	0	2	
SHEN0025	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	0	1	
SHEN0037	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/22/81-05/19/82	0	2	
SHEN0042	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/22/81-05/19/82	0	2	
SHEN0044	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-06/23/82	0	2	
SHEN0048	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	0	1	
SHEN0052	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	0	1	
SHEN0053	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-06/24/82	0	2	
SHEN0076	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	0	1	
SHEN0098	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-06/23/82	0	2	
SHEN0116	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	0	1	
SHEN0124	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	0	1	
SHEN0126	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/23/96-05/13/97	0	10	
SHEN0129	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	12/02/96-06/05/97	0	16	
SHEN0148	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	0	1	
SHEN0153	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/17/82-05/19/82	0	2	
SHEN0170	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	0	1	
SHEN0174	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/29/86-06/10/86	0	10	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0175	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/29/86-05/23/94	8	14	
SHEN0179	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	06/04/90-06/04/90	0	1	
SHEN0185	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	17	590	
SHEN0189	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/31/81-07/05/86	5	133	
SHEN0191	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	0	1	
SHEN0193	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/29/83-07/05/86	2	82	
SHEN0194	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	0	1	
SHEN0206	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	0	1	
SHEN0211	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	17	627	
SHEN0220	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	0	1	
SHEN0231	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/10/73-12/27/73	0	2	
SHEN0236	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-06/24/82	0	2	
SHEN0238	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	0	1	
SHEN0249	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	06/10/82-06/10/82	0	1	
SHEN0277	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/21/82-05/21/82	0	1	
SHEN0278	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/21/82-05/21/82	0	1	
SHEN0284	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-06/22/82	0	2	
SHEN0289	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	06/10/82-06/10/82	0	1	
SHEN0294	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/21/82-05/21/82	0	1	
SHEN0295	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	0	2	
SHEN0310	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	0	2	
SHEN0318	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/26/82-05/18/82	0	2	
SHEN0321	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/25/82-05/17/82	0	2	
SHEN0329	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	0	1	
SHEN0330	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	0	1	
SHEN0333	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/24/96-06/16/97	0	11	
SHEN0335	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/04/96-07/25/97	0	34	
SHEN0365	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-05/17/82	0	1	
SHEN0377	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-05/17/82	0	1	
SHEN0407	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/25/82-05/17/82	0	2	
SHEN0427	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-05/17/82	0	1	
SHEN0436	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-06/21/82	0	2	
SHEN0437	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/25/82-06/21/82	0	3	
SHEN0444	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/28/82-05/17/82	0	2	
SHEN0445	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-05/17/82	0	1	
SHEN0457	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-06/24/82	0	2	
SHEN0476	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/28/82-05/17/82	0	3	
SHEN0481	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-06/21/82	0	2	
SHEN0491	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	0	1	
SHEN0498	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-06/24/82	0	2	
SHEN0514	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/28/82-06/22/82	0	3	
SHEN0541	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	08/10/81-05/20/82	0	2	
SHEN0567	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	08/10/81-05/20/82	0	3	
SHEN0569	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/26/82-06/24/82	0	3	
SHEN0591	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/26/82-06/24/82	0	3	
SHEN0599	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	0	2	
SHEN0607	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	0	2	
SHEN0620	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	10/01/96-04/29/97	0	6	
SHEN0621	Yes	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/04/96-07/24/97	0	32	
SHEN0676	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	0	1	
SHEN0694	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/21/82	0	2	
SHEN0721	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/27/82-06/23/82	0	3	
SHEN0724	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/18/82-05/19/82	0	2	
SHEN0725	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/27/82-05/19/82	0	2	
SHEN0730	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	0	1	
SHEN0733	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/27/82-06/23/82	0	3	
SHEN0739	No	71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	0	2	
SHEN0003	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/28/86-04/11/86	0	2	
SHEN0005	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/29/54-05/21/69	14	3	
SHEN0011	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-09/04/30	0	1	
SHEN0014	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/28/86-04/11/86	0	2	
SHEN0020	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/11/77-03/11/77	0	1	
SHEN0022	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/11/77-03/11/77	0	1	
SHEN0027	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0039	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/24/87-04/24/87	0	1	
SHEN0040	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/02/45-08/02/45	0	1	
SHEN0044	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/03/52-07/16/68	15	3	
SHEN0045	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/28/87-04/28/87	0	1	
SHEN0046	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/28/87-04/28/87	0	1	
SHEN0054	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/16/87-07/30/97	9	41	
SHEN0058	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0059	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0070	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/01/86-04/15/86	0	2	
SHEN0072	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0074	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/24/87-04/24/87	0	1	
SHEN0078	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	2	5	
SHEN0085	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/01/86-04/15/86	0	2	
SHEN0087	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	4	
SHEN0099	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/29/87-04/29/87	0	1	
SHEN0100	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0105	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/29/87-04/29/87	0	1	
SHEN0107	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	5	
SHEN0117	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0125	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0126	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/11/92-01/19/95	2	100	
SHEN0133	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0135	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0138	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0149	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0154	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	2	7	
SHEN0161	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-04/08/69	38	41	S
SHEN0167	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0168	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0169	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0171	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	9	450	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0176	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	6	339	
SHEN0180	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0183	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/28/86-04/17/86	0	2	
SHEN0184	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0185	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	0	1	
SHEN0189	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	16	585	
SHEN0190	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0193	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	9	437	
SHEN0194	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/27/68-12/13/68	0	6	
SHEN0201	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-05/21/69	38	22	
SHEN0209	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0210	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/28/86-04/17/86	0	2	
SHEN0211	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	17	842	A
SHEN0215	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/86-04/15/86	0	2	
SHEN0217	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0218	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0231	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/13/72-12/27/73	1	4	
SHEN0237	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0240	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/86-04/15/86	0	2	
SHEN0242	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0244	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0245	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	1	3	
SHEN0251	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/13/72-03/14/73	0	2	
SHEN0258	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-08/19/93	1	4	
SHEN0260	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0261	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-08/19/93	1	4	
SHEN0263	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/14/30-05/23/69	38	9	
SHEN0265	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-11/19/94	2	5	
SHEN0273	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0274	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/14/87-07/30/97	9	41	
SHEN0298	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0300	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0308	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/02/87-05/02/87	0	1	
SHEN0309	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/02/87-05/02/87	0	1	
SHEN0317	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/01/48-10/01/48	0	1	
SHEN0320	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0322	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0323	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0327	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	8	
SHEN0328	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0332	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/25/97	4	223	
SHEN0336	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-01/20/96	3	199	
SHEN0339	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0340	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0341	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-10/05/94	2	3	
SHEN0345	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0346	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	7	
SHEN0351	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0354	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	5	8	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0503	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0504	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0506	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0510	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0511	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0512	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-07/30/97	9	41	
SHEN0516	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0517	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0520	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0521	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0522	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0523	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0524	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0525	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	2	
SHEN0526	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-04/23/94	1	2	
SHEN0527	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-04/23/94	1	3	
SHEN0528	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	4	
SHEN0529	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	4	
SHEN0530	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0531	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	4	
SHEN0532	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0533	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0534	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0535	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	4	
SHEN0537	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0538	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0540	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	4	
SHEN0543	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0557	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	10	513	
SHEN0558	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/86-04/11/86	0	2	
SHEN0559	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0560	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0562	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	0	1	
SHEN0594	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0595	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/29/87-07/30/97	9	40	
SHEN0597	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	2	
SHEN0598	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0600	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0603	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0608	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0615	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0616	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-04/26/95	7	33	
SHEN0618	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0619	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0634	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0636	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0639	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0652	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0654	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0659	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	01/20/56-01/20/56	0	1	
SHEN0660	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0662	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0664	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0677	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0684	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	6	
SHEN0695	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0709	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0710	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0713	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	0	1	
SHEN0727	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0728	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	0	1	
SHEN0735	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	0	1	
SHEN0738	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/26/68-10/01/68	0	6	
SHEN0742	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/27/86-04/10/86	0	2	
SHEN0743	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/27/86-04/10/86	0	2	
SHEN0748	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/10/52-05/21/69	16	2	
SHEN0756	No	71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	52	367	T,S
SHEN0020	No	71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	03/11/77-03/11/77	0	1	
SHEN0022	No	71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	03/11/77-03/11/77	0	1	
SHEN0231	No	71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	09/10/73-12/27/73	0	2	
SHEN0756	No	71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	8	88	
SHEN0003	No	71885	IRON (UG/L AS FE)	03/28/86-04/11/86	0	2	
SHEN0005	No	71885	IRON (UG/L AS FE)	11/29/54-11/29/54	0	1	
SHEN0011	No	71885	IRON (UG/L AS FE)	09/04/30-09/04/30	0	1	
SHEN0014	No	71885	IRON (UG/L AS FE)	03/28/86-04/11/86	0	2	
SHEN0040	No	71885	IRON (UG/L AS FE)	08/02/45-08/02/45	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0044	No	71885	IRON (UG/L AS FE)	11/03/52-07/16/68	15	3	
SHEN0070	Yes	71885	IRON (UG/L AS FE)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	71885	IRON (UG/L AS FE)	04/01/86-04/15/86	0	2	
SHEN0161	No	71885	IRON (UG/L AS FE)	09/04/30-10/05/53	23	40	
SHEN0183	Yes	71885	IRON (UG/L AS FE)	03/28/86-04/17/86	0	2	
SHEN0201	No	71885	IRON (UG/L AS FE)	09/04/30-01/16/56	25	18	
SHEN0210	No	71885	IRON (UG/L AS FE)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	71885	IRON (UG/L AS FE)	03/31/86-04/15/86	0	2	
SHEN0240	No	71885	IRON (UG/L AS FE)	03/31/86-04/15/86	0	2	
SHEN0263	No	71885	IRON (UG/L AS FE)	09/14/30-01/17/56	25	6	
SHEN0317	No	71885	IRON (UG/L AS FE)	10/01/48-10/01/48	0	1	
SHEN0462	Yes	71885	IRON (UG/L AS FE)	03/31/86-04/11/86	0	2	
SHEN0558	No	71885	IRON (UG/L AS FE)	03/31/86-04/11/86	0	2	
SHEN0659	No	71885	IRON (UG/L AS FE)	01/20/56-01/20/56	0	1	
SHEN0742	No	71885	IRON (UG/L AS FE)	03/27/86-04/10/86	0	2	
SHEN0743	No	71885	IRON (UG/L AS FE)	03/27/86-04/10/86	0	2	
SHEN0748	No	71885	IRON (UG/L AS FE)	10/10/52-10/10/52	0	1	
SHEN0756	No	71885	IRON (UG/L AS FE)	09/05/30-09/21/56	26	160	T,S
SHEN0008	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0009	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/16/73	0	4	
SHEN0015	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/17/73	0	4	
SHEN0031	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0032	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/16/73	0	4	
SHEN0050	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/16/73	0	4	
SHEN0160	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0196	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/16/73	0	4	
SHEN0199	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0200	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0202	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/72-04/16/73	0	3	
SHEN0223	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0224	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/72-04/16/73	0	3	
SHEN0229	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0233	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/72-04/16/73	0	3	
SHEN0254	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0293	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0301	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0305	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0306	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0307	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0315	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0373	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0382	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0384	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0389	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0574	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	0	2	
SHEN0582	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0587	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/17/73	0	5	
SHEN0592	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0593	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	08/18/69-08/18/69	0	1	
SHEN0632	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/72-04/16/73	0	3	
SHEN0633	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	0	4	
SHEN0746	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/20/72-04/18/73	0	3	
SHEN0753	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/29/69-08/18/69	0	2	
SHEN0760	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/72-04/18/73	0	4	
SHEN0765	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/72-04/18/73	0	4	
SHEN0768	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/72-04/18/73	0	4	
SHEN0769	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/72-04/18/73	0	4	
SHEN0771	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/29/69-08/18/69	0	2	
SHEN0779	No	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/29/69-08/19/69	0	2	
SHEN0317	No	71887	NITROGEN, TOTAL, AS NO3 - MG/L	08/31/76-08/31/76	0	1	
SHEN0006	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	07/23/97-08/04/97	0	2	
SHEN0019	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	07/23/97-08/04/97	0	2	
SHEN0021	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	07/23/97-08/04/97	0	2	
SHEN0162	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/24/98-06/24/98	0	1	
SHEN0226	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/24/98-06/24/98	0	1	
SHEN0297	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	05/20/97-05/20/97	0	1	
SHEN0499	No	71890	MERCURY, DISSOLVED (UG/L AS HG)	06/25/98-06/25/98	0	1	
SHEN0002	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-04/08/74	3	16	
SHEN0004	No	71900	MERCURY, TOTAL (UG/L AS HG)	10/03/74-07/14/82	7	8	
SHEN0009	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-02/13/73	0	2	
SHEN0015	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-02/13/73	0	2	
SHEN0016	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/01/79-05/01/79	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0017	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	7	24	
SHEN0019	No	71900	MERCURY, TOTAL (UG/L AS HG)	08/29/78-08/29/78	0	1	
SHEN0032	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-05/23/72	0	1	
SHEN0033	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	7	23	
SHEN0050	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-05/23/72	0	1	
SHEN0051	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	7	22	
SHEN0162	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	7	23	
SHEN0196	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-02/13/73	0	2	
SHEN0204	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/14/82-07/14/82	0	1	
SHEN0225	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	7	21	
SHEN0234	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-02/01/77	6	22	
SHEN0235	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	7	23	
SHEN0252	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/07/82-07/07/82	0	1	
SHEN0287	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/28/78	7	22	
SHEN0297	No	71900	MERCURY, TOTAL (UG/L AS HG)	06/20/91-07/21/94	3	2	
SHEN0301	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-02/13/73	0	2	
SHEN0305	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	0	1	
SHEN0306	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-02/13/73	0	2	
SHEN0307	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	0	1	
SHEN0316	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-03/01/79	8	28	
SHEN0317	No	71900	MERCURY, TOTAL (UG/L AS HG)	08/31/76-08/31/76	0	1	
SHEN0372	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/11/77-09/20/94	17	5	
SHEN0373	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	0	1	
SHEN0381	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-08/29/78	7	21	
SHEN0382	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	0	1	
SHEN0389	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	0	1	
SHEN0500	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/11/77-04/12/79	2	4	
SHEN0568	No	71900	MERCURY, TOTAL (UG/L AS HG)	04/11/77-09/20/94	17	7	
SHEN0573	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/25/77-11/02/78	1	2	
SHEN0579	No	71900	MERCURY, TOTAL (UG/L AS HG)	11/26/70-11/02/78	7	15	
SHEN0582	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-02/13/73	0	2	
SHEN0583	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-08/09/78	7	23	
SHEN0585	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/31/72-08/09/78	6	15	
SHEN0586	No	71900	MERCURY, TOTAL (UG/L AS HG)	11/26/70-05/21/74	3	15	
SHEN0587	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	0	1	
SHEN0588	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/31/72-04/12/74	1	6	
SHEN0592	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-02/13/73	0	2	
SHEN0630	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/25/77-11/02/78	1	2	
SHEN0633	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	0	1	
SHEN0635	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-07/07/82	11	24	
SHEN0651	No	71900	MERCURY, TOTAL (UG/L AS HG)	03/01/93-03/01/93	0	1	
SHEN0746	No	71900	MERCURY, TOTAL (UG/L AS HG)	02/13/73-02/13/73	0	1	
SHEN0747	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/04/72-04/12/74	1	7	
SHEN0750	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-08/09/78	7	22	
SHEN0755	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-07/07/82	11	23	
SHEN0760	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/24/72-05/24/72	0	1	
SHEN0765	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/24/72-05/24/72	0	1	
SHEN0768	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/24/72-02/13/73	0	2	
SHEN0769	No	71900	MERCURY, TOTAL (UG/L AS HG)	05/24/72-05/24/72	0	1	
SHEN0772	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-08/09/78	7	21	
SHEN0774	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-05/29/85	14	35	
SHEN0777	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-05/29/85	14	39	
SHEN0783	No	71900	MERCURY, TOTAL (UG/L AS HG)	07/07/82-07/07/82	0	1	
SHEN0784	No	71900	MERCURY, TOTAL (UG/L AS HG)	09/10/70-08/31/78	7	22	
SHEN0786	No	71900	MERCURY, TOTAL (UG/L AS HG)	01/10/79-01/10/79	0	1	
SHEN0774	No	71918	ARSENIC, TOTAL IN FISH, DRY WEIGHT BASIS	07/26/79-08/14/85	6	10	
SHEN0777	No	71918	ARSENIC, TOTAL IN FISH, DRY WEIGHT BASIS	07/28/83-07/28/83	0	1	
SHEN0780	No	71918	ARSENIC, TOTAL IN FISH, DRY WEIGHT BASIS	07/26/79-08/14/85	6	8	
SHEN0001	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/10/92-07/31/96	4	2	
SHEN0004	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0024	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/07/96-08/07/96	0	1	
SHEN0043	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/14/80-08/14/80	0	1	
SHEN0162	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0164	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/22/96-07/22/96	0	1	
SHEN0204	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/15/79-07/22/96	16	4	
SHEN0252	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/20/79-07/22/96	16	4	
SHEN0256	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/22/93-06/18/96	2	2	
SHEN0282	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/27/92-07/31/96	4	2	
SHEN0297	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	10/21/91-06/16/97	5	2	
SHEN0317	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	05/16/72-08/31/76	4	2	
SHEN0324	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/20/92-08/07/96	4	2	
SHEN0366	No	71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/20/92-08/07/96	4	2	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0386	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/16/91-06/25/96	4	2	
SHEN0450	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/20/92-06/25/96	3	2	
SHEN0542	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/20/92-08/05/96	4	2	
SHEN0566	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/31/90-07/31/90	0	1	
SHEN0568	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	03/15/95-03/15/95	0	1	
SHEN0631	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/05/96-08/05/96	0	1	
SHEN0635	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/20/79-06/25/96	16	3	
SHEN0651	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	03/15/95-07/21/97	2	2	
SHEN0754	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/16/92-07/16/92	0	1	
SHEN0755	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/20/79-06/24/96	16	3	
SHEN0756	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	05/16/72-05/16/72	0	1	
SHEN0774	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/20/79-07/14/92	12	4	
SHEN0775	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/24/96-07/24/96	0	1	
SHEN0777	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/21/79-07/24/96	16	4	
SHEN0781	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/14/92-07/14/92	0	1	
SHEN0783	No	71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/23/83-07/25/96	13	2	
SHEN0754	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/16/92-07/16/92	0	3	
SHEN0774	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/26/79-07/14/92	12	16	
SHEN0780	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/26/79-08/18/88	9	11	
SHEN0781	No	71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/14/92-07/14/92	0	3	
SHEN0774	No	71934	LEAD TOTAL IN FISH DRY WEIGHT BASIS	07/26/79-08/14/85	6	10	
SHEN0780	No	71934	LEAD TOTAL IN FISH DRY WEIGHT BASIS	07/26/79-08/14/85	6	8	
SHEN0754	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/16/92-07/16/92	0	3	
SHEN0774	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-07/14/92	8	12	
SHEN0780	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-08/18/88	5	9	
SHEN0781	No	71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/14/92-07/14/92	0	3	
SHEN0754	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/16/92-07/16/92	0	3	
SHEN0774	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-07/14/92	8	12	
SHEN0780	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-08/18/88	5	9	
SHEN0781	No	71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/14/92-07/14/92	0	3	
SHEN0754	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/16/92-07/16/92	0	3	
SHEN0774	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	08/17/88-07/14/92	3	6	
SHEN0780	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	08/18/88-08/18/88	0	3	
SHEN0781	No	71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/14/92-07/14/92	0	3	
SHEN0754	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	07/16/92-07/16/92	0	3	
SHEN0774	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-07/14/92	8	12	
SHEN0780	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-08/18/88	5	9	
SHEN0781	No	71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	07/14/92-07/14/92	0	3	
SHEN0754	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/16/92-07/16/92	0	3	
SHEN0774	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/28/83-07/14/92	8	12	
SHEN0780	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/26/79-08/18/88	9	10	
SHEN0781	No	71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/14/92-07/14/92	0	3	
SHEN0774	No	71941	CADMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	6	10	
SHEN0780	No	71941	CADMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	6	8	
SHEN0774	No	71942	COPPER,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	6	10	
SHEN0780	No	71942	COPPER,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	6	8	
SHEN0774	No	71943	CHROMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	6	10	
SHEN0780	No	71943	CHROMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	6	8	
SHEN0188	Yes	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	06/22/92-06/22/92	0	1	
SHEN0201	No	72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)	06/23/92-06/23/92	0	1	
SHEN0020	No	72008	DEPTH, TOTAL OF WELL (FT BELOW LAND SURFACE DATUM)	03/11/77-03/11/77	0	1	
SHEN0003	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/28/86-04/11/86	0	2	
SHEN0014	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/28/86-04/11/86	0	2	
SHEN0070	Yes	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	04/01/86-04/15/86	0	2	
SHEN0085	Yes	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	04/01/86-04/15/86	0	2	
SHEN0183	Yes	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/28/86-04/17/86	0	2	
SHEN0210	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/28/86-04/17/86	0	2	
SHEN0215	Yes	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/31/86-04/15/86	0	2	
SHEN0240	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/31/86-04/15/86	0	2	
SHEN0462	Yes	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/31/86-04/11/86	0	2	
SHEN0558	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/31/86-04/11/86	0	2	
SHEN0740	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/27/86-03/27/86	0	1	
SHEN0741	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/27/86-03/27/86	0	1	
SHEN0742	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/27/86-04/10/86	0	2	
SHEN0743	No	72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/27/86-04/10/86	0	2	
SHEN0028	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/18/96-06/18/96	0	1	
SHEN0029	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/18/96-06/18/96	0	1	
SHEN0049	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/16/96-06/09/98	1	3	
SHEN0057	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/17/96-06/15/98	1	3	
SHEN0068	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/17/96-06/11/98	1	3	
SHEN0071	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/16/97-06/15/98	0	2	
SHEN0075	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/17/96-06/11/98	1	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0086	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/17/96-06/10/98	1	3	
SHEN0093	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/27/96-06/17/98	1	3	
SHEN0106	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/27/96-06/17/98	1	3	
SHEN0132	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/26/96-06/16/98	1	3	
SHEN0192	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/26/96-06/26/96	0	1	
SHEN0227	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/17/97-06/17/97	0	1	
SHEN0255	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/25/96-06/23/98	1	3	
SHEN0264	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/25/96-06/23/98	1	3	
SHEN0270	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/24/96-06/24/98	2	3	
SHEN0272	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/24/96-06/24/98	2	3	
SHEN0279	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/22/98-06/22/98	0	1	
SHEN0285	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/22/98-06/22/98	0	1	
SHEN0326	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/08/96-07/06/98	1	3	
SHEN0331	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/08/97-06/29/98	0	2	
SHEN0353	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/08/97-06/30/98	0	2	
SHEN0361	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/10/96-07/08/98	1	3	
SHEN0370	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/10/96-07/08/98	1	3	
SHEN0371	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/11/96-07/07/98	1	3	
SHEN0378	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/10/96-07/07/98	1	3	
SHEN0380	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/01/96-07/01/96	0	1	
SHEN0388	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/01/96-07/01/96	0	1	
SHEN0390	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/10/96-07/07/98	1	3	
SHEN0401	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/11/96-07/13/98	2	3	
SHEN0418	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/15/96-07/13/98	1	3	
SHEN0421	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/11/96-07/13/98	2	3	
SHEN0434	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/13/97-08/13/97	0	1	
SHEN0447	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/25/97-06/25/97	0	1	
SHEN0477	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/03/98-08/03/98	0	1	
SHEN0482	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/25/97-06/25/97	0	1	
SHEN0490	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/30/96-07/21/98	1	3	
SHEN0502	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/25/96-07/21/98	1	3	
SHEN0505	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/24/96-07/20/98	1	3	
SHEN0507	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/16/98-07/16/98	0	1	
SHEN0508	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/24/96-07/20/98	1	3	
SHEN0515	No	72052	SLOPE OF TRANSECT, (F+/F+)	07/08/96-07/08/96	0	1	
SHEN0519	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/30/97-06/30/97	0	1	
SHEN0547	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/02/96-07/02/96	0	1	
SHEN0556	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/19/96-06/18/98	1	3	
SHEN0561	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/02/96-07/02/96	0	1	
SHEN0572	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/12/96-06/18/98	2	3	
SHEN0576	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/09/98-07/09/98	0	1	
SHEN0605	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/18/96-07/14/98	1	3	
SHEN0613	No	72052	SLOPE OF TRANSECT, (F+/F+)	08/07/96-07/28/98	1	3	
SHEN0624	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/21/97-07/14/98	0	2	
SHEN0637	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/21/97-07/14/98	0	2	
SHEN0650	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/06/96-07/27/98	1	3	
SHEN0672	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/20/96-08/20/96	0	1	
SHEN0680	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/06/96-07/27/98	1	3	
SHEN0686	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/08/96-07/29/98	1	3	
SHEN0705	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/05/96-07/22/98	1	3	
SHEN0722	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	07/23/96-07/15/98	1	3	
SHEN0729	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/12/97-08/12/97	0	1	
SHEN0731	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	08/12/97-08/12/97	0	1	
SHEN0736	Yes	72052	SLOPE OF TRANSECT, (F+/F+)	06/20/96-06/20/96	0	1	
SHEN0001	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	08/26/92-07/31/96	3	2	
SHEN0004	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/01/91-07/22/96	5	2	
SHEN0024	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	08/07/96-08/07/96	0	1	
SHEN0043	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	08/17/89-08/17/89	0	1	
SHEN0162	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/02/91-07/22/96	5	2	
SHEN0164	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/22/96-07/22/96	0	1	
SHEN0204	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/02/91-07/22/96	5	2	
SHEN0252	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/02/91-07/22/96	5	2	
SHEN0256	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/22/93-06/18/96	2	2	
SHEN0282	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/27/92-07/31/96	4	2	
SHEN0324	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/20/92-08/07/96	4	2	
SHEN0366	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/20/92-08/07/96	4	2	
SHEN0386	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/16/91-06/25/96	4	2	
SHEN0450	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/20/92-06/25/96	3	2	
SHEN0542	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/20/92-08/05/96	4	2	
SHEN0566	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/31/90-07/31/90	0	1	
SHEN0568	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	03/15/95-03/15/95	0	1	
SHEN0631	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	08/05/96-08/05/96	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0635	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	06/25/96-06/25/96	0	1	
SHEN0651	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	08/18/92-07/21/97	4	3	
SHEN0754	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/16/92-07/16/92	0	1	
SHEN0755	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	06/24/96-06/24/96	0	1	
SHEN0774	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/14/92-07/14/92	0	1	
SHEN0775	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/23/91-07/24/96	5	2	
SHEN0777	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/23/91-07/24/96	5	2	
SHEN0781	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/14/92-07/14/92	0	1	
SHEN0783	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/23/91-07/25/96	5	2	
SHEN0785	No	75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	06/06/90-06/06/90	0	1	
SHEN0201	No	77441	1-NAPHTHOL WHOLE WATER, UG/L	06/23/92-06/23/92	0	1	
SHEN0297	No	77825	ALACHLOR WHOLE WATER, UG/L	07/29/93-07/29/93	0	1	
SHEN0372	No	77825	ALACHLOR WHOLE WATER, UG/L	09/30/93-09/30/93	0	1	
SHEN0568	No	77825	ALACHLOR WHOLE WATER, UG/L	09/30/93-09/30/93	0	1	
SHEN0651	No	77825	ALACHLOR WHOLE WATER, UG/L	09/30/93-09/30/93	0	1	
SHEN0777	No	77825	ALACHLOR WHOLE WATER, UG/L	05/29/85-05/29/85	0	1	
SHEN0001	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	08/26/92-07/31/96	3	2	
SHEN0004	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/01/91-07/22/96	5	2	
SHEN0024	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	08/07/96-08/07/96	0	1	
SHEN0162	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/02/91-07/22/96	5	2	
SHEN0164	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/22/96-07/22/96	0	1	
SHEN0204	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/02/91-07/22/96	5	2	
SHEN0252	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/02/91-07/22/96	5	2	
SHEN0256	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/22/93-06/18/96	2	2	
SHEN0282	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/27/92-07/31/96	4	2	
SHEN0324	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/20/92-08/07/96	4	2	
SHEN0366	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/20/92-08/07/96	4	2	
SHEN0386	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/16/91-06/25/96	4	2	
SHEN0450	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/20/92-06/25/96	3	2	
SHEN0542	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/20/92-08/05/96	4	2	
SHEN0566	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/31/90-07/31/90	0	1	
SHEN0568	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	03/15/95-03/15/95	0	1	
SHEN0631	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	08/05/96-08/05/96	0	1	
SHEN0635	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	06/25/96-06/25/96	0	1	
SHEN0651	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	08/18/92-07/21/97	4	3	
SHEN0754	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/16/92-07/16/92	0	1	
SHEN0755	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	06/24/96-06/24/96	0	1	
SHEN0774	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/14/92-07/14/92	0	1	
SHEN0775	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/23/91-07/24/96	5	2	
SHEN0777	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/23/91-07/24/96	5	2	
SHEN0781	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/14/92-07/14/92	0	1	
SHEN0783	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/23/91-07/25/96	5	2	
SHEN0785	No	79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	06/06/90-06/06/90	0	1	
SHEN0263	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	08/27/74-07/22/75	0	2	
SHEN0756	No	80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	01/27/75-10/21/85	10	3	
SHEN0003	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/28/86-04/11/86	0	2	
SHEN0014	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/28/86-04/11/86	0	2	
SHEN0070	Yes	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	04/01/86-04/15/86	0	2	
SHEN0085	Yes	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	04/01/86-04/15/86	0	2	
SHEN0183	Yes	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/28/86-04/17/86	0	2	
SHEN0210	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/28/86-04/17/86	0	2	
SHEN0215	Yes	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/31/86-04/15/86	0	2	
SHEN0240	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/31/86-04/15/86	0	2	
SHEN0462	Yes	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/31/86-04/11/86	0	2	
SHEN0558	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/31/86-04/11/86	0	2	
SHEN0740	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/27/86-03/27/86	0	1	
SHEN0741	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/27/86-03/27/86	0	1	
SHEN0742	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/27/86-04/10/86	0	2	
SHEN0743	No	81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)	03/27/86-04/10/86	0	2	
SHEN0754	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/16/92-07/16/92	0	3	
SHEN0774	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/26/79-07/14/92	12	20	
SHEN0775	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	08/17/88-08/17/88	0	1	
SHEN0780	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/26/79-09/12/90	11	12	
SHEN0781	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/14/92-07/14/92	0	3	
SHEN0785	No	81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	06/06/90-06/06/90	0	3	
SHEN0754	No	81644	METHOXYCHLOR IN FISH TISSUE, UG/G WET WEIGHT	07/16/92-07/16/92	0	3	
SHEN0774	No	81644	METHOXYCHLOR IN FISH TISSUE, UG/G WET WEIGHT	07/26/79-07/14/92	12	16	
SHEN0775	No	81644	METHOXYCHLOR IN FISH TISSUE, UG/G WET WEIGHT	08/17/88-08/17/88	0	1	
SHEN0777	No	81644	METHOXYCHLOR IN FISH TISSUE, UG/G WET WEIGHT	08/18/88-08/18/88	0	1	
SHEN0780	No	81644	METHOXYCHLOR IN FISH TISSUE, UG/G WET WEIGHT	07/26/79-09/12/90	11	12	
SHEN0781	No	81644	METHOXYCHLOR IN FISH TISSUE, UG/G WET WEIGHT	07/14/92-07/14/92	0	2	
SHEN0754	No	81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	07/16/92-07/16/92	0	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0774	No	81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	07/14/92-07/14/92	0	2	
SHEN0780	No	81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	09/12/90-09/12/90	0	1	
SHEN0781	No	81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	07/14/92-07/14/92	0	2	
SHEN0754	No	81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	07/16/92-07/16/92	0	3	
SHEN0774	No	81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	08/17/88-07/14/92	3	6	
SHEN0780	No	81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	08/18/88-08/18/88	0	3	
SHEN0781	No	81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	07/14/92-07/14/92	0	3	
SHEN0754	No	81823	PENTACHLOROANISOLE(PCAI)NFISH TISSUE WET WGT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	81823	PENTACHLOROANISOLE(PCAI)NFISH TISSUE WET WGT MG/KG	08/16/88-07/14/92	3	6	
SHEN0775	No	81823	PENTACHLOROANISOLE(PCAI)NFISH TISSUE WET WGT MG/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	81823	PENTACHLOROANISOLE(PCAI)NFISH TISSUE WET WGT MG/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	81823	PENTACHLOROANISOLE(PCAI)NFISH TISSUE WET WGT MG/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	81823	PENTACHLOROANISOLE(PCAI)NFISH TISSUE WET WGT MG/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/16/88-07/14/92	3	6	
SHEN0775	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/17/88-08/17/88	0	1	
SHEN0780	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/16/88-07/14/92	3	6	
SHEN0774	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	08/16/88-07/14/92	3	6	
SHEN0775	No	81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	08/17/88-08/17/88	0	1	
SHEN0777	No	81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	08/18/88-08/18/88	0	1	
SHEN0780	No	81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	08/18/88-09/12/90	2	4	
SHEN0781	No	81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	07/14/92-07/14/92	0	2	
SHEN0754	No	82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	07/16/92-07/16/92	0	3	
SHEN0774	No	82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	07/14/92-07/14/92	0	2	
SHEN0780	No	82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	09/12/90-09/12/90	0	1	
SHEN0781	No	82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	07/14/92-07/14/92	0	2	
SHEN0568	No	82032	CALCIUM - TOTAL UG/L (AS CA)	03/01/93-03/01/93	0	1	
SHEN0651	No	82032	CALCIUM - TOTAL UG/L (AS CA)	03/01/93-03/01/93	0	1	
SHEN0297	No	82036	CALCIUM-DISSOLVED UG/L (AS CA)	05/20/97-05/20/97	0	1	
SHEN0297	No	82037	MAGNESIUM - DISSOLVED UG/L (AS MG)	05/20/97-05/20/97	0	1	
SHEN0054	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-08/28/93	1	4	
SHEN0055	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/16/87-07/30/97	9	41	
SHEN0059	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0060	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0062	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0063	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0064	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0065	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0066	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0067	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0069	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0072	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0078	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0079	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0080	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-08/28/93	1	4	
SHEN0081	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0082	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0083	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0084	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	2	5	
SHEN0087	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	6	
SHEN0088	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0090	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	4	
SHEN0092	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0094	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0095	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	4	
SHEN0100	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0101	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0102	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	5	
SHEN0103	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0107	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0108	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0110	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0112	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	6	
SHEN0114	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	5	
SHEN0117	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	5	
SHEN0118	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0119	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0120	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	5	
SHEN0122	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0125	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0126	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/29/97	4	263	
SHEN0127	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0128	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/14/87-04/26/95	7	32	
SHEN0129	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-06/05/97	4	151	
SHEN0130	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/11/92-01/19/95	2	100	
SHEN0135	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0138	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0140	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	6	
SHEN0142	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0143	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0144	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	2	5	
SHEN0145	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0147	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0149	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0150	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0154	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0155	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0156	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0157	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	2	7	
SHEN0169	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0171	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0172	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0173	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0174	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	9	416	
SHEN0175	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	9	450	
SHEN0176	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0177	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0178	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0179	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	6	339	
SHEN0180	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0181	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	5	298	
SHEN0182	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0185	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	17	790	A
SHEN0187	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	0	1	
SHEN0189	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	16	585	
SHEN0193	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	9	437	
SHEN0211	No	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	17	842	A
SHEN0245	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	1	3	
SHEN0246	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	1	3	
SHEN0248	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	1	3	
SHEN0258	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	1	3	
SHEN0259	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-08/19/93	1	4	
SHEN0261	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-08/19/93	1	4	
SHEN0265	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-08/19/93	1	4	
SHEN0266	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	1	2	
SHEN0267	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-08/19/93	1	4	
SHEN0268	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	1	2	
SHEN0269	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-11/19/94	2	5	
SHEN0274	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-11/19/94	2	5	
SHEN0275	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/14/87-07/30/97	9	41	
SHEN0327	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0332	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0333	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	4	260	
SHEN0334	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-04/27/95	7	33	
SHEN0335	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/25/97	4	223	
SHEN0336	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-01/20/96	3	199	
SHEN0341	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	7	
SHEN0343	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0344	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-10/05/94	2	3	
SHEN0346	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0347	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	4	
SHEN0349	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0350	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	7	
SHEN0354	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	6	
SHEN0356	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0358	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0360	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0362	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0363	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0367	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	
SHEN0368	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	6	
SHEN0374	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	5	8	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0540	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	2	4	
SHEN0543	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0544	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0545	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	2	4	
SHEN0546	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0549	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0550	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0553	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0554	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	2	4	
SHEN0555	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0557	No	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	10	513	
SHEN0559	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0562	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0563	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0564	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0565	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	0	1	
SHEN0594	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0595	No	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/29/87-07/30/97	9	40	
SHEN0597	No	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	2	
SHEN0600	No	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0601	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0603	No	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0604	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0606	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0608	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0609	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0610	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0612	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0615	No	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0616	No	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-04/26/95	7	33	
SHEN0619	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0620	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	4	256	
SHEN0621	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/24/97	4	219	
SHEN0622	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-05/16/95	2	211	
SHEN0623	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0625	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	6	
SHEN0627	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0628	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0629	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0634	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0636	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0638	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0639	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0640	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0641	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	6	
SHEN0642	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0643	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0645	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0646	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0647	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0649	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0652	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0654	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0655	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0656	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0657	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0658	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0660	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0664	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	2	
SHEN0665	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/16/87-07/30/97	9	41	
SHEN0667	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0668	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0669	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0670	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0671	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0674	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0675	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0677	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0679	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0681	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0682	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0683	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0684	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	0	1	
SHEN0685	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0687	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0688	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0689	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0691	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0692	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	6	
SHEN0695	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0696	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0699	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	6	
SHEN0701	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0703	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0704	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0706	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-10/28/94	2	5	
SHEN0707	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0710	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0711	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0713	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-10/28/94	2	5	
SHEN0714	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0715	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	4	
SHEN0716	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	3	7	
SHEN0717	Yes	82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	0	1	
SHEN0201	No	82052	BANVEL (DICAMBA) WHOLE WATER,UG/L	06/23/92-06/23/92	0	1	
SHEN0756	No	82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	03/02/81-08/26/81	0	5	
SHEN0001	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/10/92-06/23/94	2	8	
SHEN0004	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/19/92-06/08/94	2	26	
SHEN0162	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/18/92-06/20/94	2	24	
SHEN0164	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/10/93-06/20/94	1	11	
SHEN0204	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/18/92-06/20/94	2	24	
SHEN0252	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/18/92-06/20/94	2	24	
SHEN0256	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	07/22/93-05/17/94	0	10	
SHEN0282	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	07/27/92-02/23/94	1	7	
SHEN0297	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/14/92-06/23/94	2	23	
SHEN0324	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	07/20/92-03/17/94	1	5	
SHEN0366	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	07/20/92-03/17/94	1	5	
SHEN0372	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/18/92-06/16/94	1	8	
SHEN0386	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/03/92-06/06/94	2	25	
SHEN0450	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	07/20/92-06/06/94	1	16	
SHEN0542	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	07/20/92-06/06/94	1	8	
SHEN0568	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/18/92-06/16/94	1	7	
SHEN0635	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/03/92-06/06/94	2	25	
SHEN0651	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/18/92-06/16/94	1	7	
SHEN0755	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/03/92-06/23/94	2	25	
SHEN0775	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/04/92-06/13/94	2	26	
SHEN0777	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/04/92-06/13/94	2	26	
SHEN0783	No	82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/04/92-06/13/94	2	18	
SHEN0003	No	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/28/86-04/11/86	0	2	
SHEN0014	No	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/28/86-04/11/86	0	2	
SHEN0070	Yes	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	04/01/86-04/15/86	0	2	
SHEN0085	Yes	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	04/01/86-04/15/86	0	2	
SHEN0183	Yes	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/28/86-04/17/86	0	2	
SHEN0210	No	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/28/86-04/17/86	0	2	
SHEN0215	Yes	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/31/86-04/15/86	0	2	
SHEN0240	No	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/31/86-04/15/86	0	2	
SHEN0462	Yes	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/31/86-04/11/86	0	2	
SHEN0558	No	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/31/86-04/11/86	0	2	
SHEN0742	No	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/27/86-04/10/86	0	2	
SHEN0743	No	82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/27/86-04/10/86	0	2	
SHEN0201	No	82183	2,4-DP (DICHLORPROP) TOTAL UG/L	06/23/92-06/23/92	0	1	
SHEN0018	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/17/77-01/17/77	0	1	
SHEN0023	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/10/77-01/10/77	0	1	
SHEN0034	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/15/77-01/15/77	0	1	
SHEN0036	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/10/77-01/10/77	0	1	
SHEN0137	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/14/77-01/14/77	0	1	
SHEN0158	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/13/77-01/13/77	0	1	
SHEN0239	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/17/77-01/17/77	0	1	
SHEN0241	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/17/77-01/17/77	0	1	
SHEN0281	Yes	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/17/77-01/17/77	0	1	
SHEN0291	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/12/77-01/12/77	0	1	
SHEN0302	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/12/77-01/12/77	0	1	
SHEN0303	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/18/77-01/18/77	0	1	
SHEN0304	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/12/77-01/12/77	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0325	Yes	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/18/77-01/18/77	0	1	
SHEN0387	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/20/77-01/20/77	0	1	
SHEN0393	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/20/77-01/20/77	0	1	
SHEN0423	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/20/77-01/20/77	0	1	
SHEN0425	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/22/77-04/22/77	0	1	
SHEN0430	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/11/77-04/11/77	0	1	
SHEN0480	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/20/77-01/20/77	0	1	
SHEN0492	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/11/77-04/11/77	0	1	
SHEN0501	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/22/77-04/22/77	0	1	
SHEN0575	Yes	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/08/77-04/08/77	0	1	
SHEN0577	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/11/77-04/11/77	0	1	
SHEN0590	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/12/77-04/12/77	0	1	
SHEN0653	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/12/77-04/12/77	0	1	
SHEN0718	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/12/77-04/12/77	0	1	
SHEN0732	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/06/77-04/06/77	0	1	
SHEN0749	No	82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/08/77-04/08/77	0	1	
SHEN0756	No	82398	SAMPLING METHOD (CODES)	11/15/83-06/17/86	2	22	
SHEN0201	No	82584	3-HYDROXY CARBOFURAN, WATER, TOTAL RECOVERABLE,UG/L	06/23/92-06/23/92	0	1	
SHEN0201	No	82586	ALDICARB SULFOXIDE, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0201	No	82587	ALDICARB SULFONE, WH WATER, TOTAL RECOVERABLE,UG/L	06/23/92-06/23/92	0	1	
SHEN0201	No	82613	OXYAMYL, WHOLE WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0201	No	82615	CARBOFURAN, WHOLE WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0201	No	82619	ALDICARB, WHOLE WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	0	1	
SHEN0038	No	82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82660	DIETHYLANILINE, 2, 6,-0.7UM FILT,TOT RECV,WTR UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82660	DIETHYLANILINE, 2, 6,-0.7UM FILT,TOT RECV,WTR UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82660	DIETHYLANILINE, 2, 6,-0.7UM FILT,TOT RECV,WTR UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82660	DIETHYLANILINE, 2, 6,-0.7UM FILT,TOT RECV,WTR UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0161	No	82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	06/06/94-06/06/94	0	1	
SHEN0163	No	82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	06/23/92-06/06/94	1	2	
SHEN0756	No	82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	06/08/94-06/08/94	0	1	
SHEN0762	No	82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0762	No	82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0038	No	82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0163	No	82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	0	1	
SHEN0201	No	82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	0	1	
SHEN0762	No	82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	0	1	
SHEN0003	No	83509	STREAM, WIDTH METER	03/28/86-04/11/86	0	2	
SHEN0014	No	83509	STREAM, WIDTH METER	03/28/86-04/11/86	0	2	
SHEN0028	Yes	83509	STREAM, WIDTH METER	06/18/96-06/18/96	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0029	Yes	83509	STREAM, WIDTH METER	06/18/96-06/18/96	0	1	
SHEN0049	Yes	83509	STREAM, WIDTH METER	07/16/96-06/09/98	1	3	
SHEN0057	Yes	83509	STREAM, WIDTH METER	06/17/96-06/15/98	1	3	
SHEN0068	Yes	83509	STREAM, WIDTH METER	07/17/96-06/11/98	1	3	
SHEN0070	Yes	83509	STREAM, WIDTH METER	04/01/86-04/15/86	0	2	
SHEN0071	Yes	83509	STREAM, WIDTH METER	06/17/96-06/15/98	1	3	
SHEN0075	Yes	83509	STREAM, WIDTH METER	07/17/96-06/11/98	1	3	
SHEN0085	Yes	83509	STREAM, WIDTH METER	04/01/86-04/15/86	0	2	
SHEN0086	Yes	83509	STREAM, WIDTH METER	07/17/96-06/10/98	1	3	
SHEN0093	Yes	83509	STREAM, WIDTH METER	06/27/96-06/17/98	1	3	
SHEN0106	Yes	83509	STREAM, WIDTH METER	06/27/96-06/17/98	1	3	
SHEN0132	Yes	83509	STREAM, WIDTH METER	06/26/96-06/16/98	1	3	
SHEN0183	Yes	83509	STREAM, WIDTH METER	03/28/86-04/17/86	0	2	
SHEN0192	Yes	83509	STREAM, WIDTH METER	06/26/96-06/26/96	0	1	
SHEN0210	No	83509	STREAM, WIDTH METER	03/28/86-04/17/86	0	2	
SHEN0215	Yes	83509	STREAM, WIDTH METER	03/31/86-04/15/86	0	2	
SHEN0227	Yes	83509	STREAM, WIDTH METER	06/17/97-06/17/97	0	1	
SHEN0240	No	83509	STREAM, WIDTH METER	03/31/86-04/15/86	0	2	
SHEN0255	Yes	83509	STREAM, WIDTH METER	06/25/96-06/23/98	1	3	
SHEN0264	Yes	83509	STREAM, WIDTH METER	06/25/96-06/23/98	1	3	
SHEN0270	Yes	83509	STREAM, WIDTH METER	06/24/96-06/24/98	2	3	
SHEN0272	Yes	83509	STREAM, WIDTH METER	06/24/96-06/24/98	2	3	
SHEN0279	Yes	83509	STREAM, WIDTH METER	06/22/98-06/22/98	0	1	
SHEN0285	Yes	83509	STREAM, WIDTH METER	06/22/98-06/22/98	0	1	
SHEN0326	Yes	83509	STREAM, WIDTH METER	07/08/96-07/06/98	1	3	
SHEN0331	Yes	83509	STREAM, WIDTH METER	07/08/96-06/29/98	1	3	
SHEN0353	Yes	83509	STREAM, WIDTH METER	07/08/96-06/30/98	1	3	
SHEN0361	Yes	83509	STREAM, WIDTH METER	07/10/96-07/08/98	1	3	
SHEN0370	Yes	83509	STREAM, WIDTH METER	07/10/96-07/08/98	1	3	
SHEN0371	Yes	83509	STREAM, WIDTH METER	07/11/96-07/07/98	1	3	
SHEN0378	Yes	83509	STREAM, WIDTH METER	07/10/96-07/07/98	1	3	
SHEN0380	Yes	83509	STREAM, WIDTH METER	07/01/96-07/01/96	0	1	
SHEN0388	Yes	83509	STREAM, WIDTH METER	07/01/96-07/01/96	0	1	
SHEN0390	Yes	83509	STREAM, WIDTH METER	07/10/96-07/07/98	1	3	
SHEN0401	Yes	83509	STREAM, WIDTH METER	07/11/96-07/13/98	2	3	
SHEN0418	Yes	83509	STREAM, WIDTH METER	07/15/96-07/13/98	1	3	
SHEN0421	Yes	83509	STREAM, WIDTH METER	07/11/96-07/13/98	2	3	
SHEN0434	Yes	83509	STREAM, WIDTH METER	08/13/97-08/13/97	0	1	
SHEN0447	Yes	83509	STREAM, WIDTH METER	06/25/97-06/25/97	0	1	
SHEN0462	Yes	83509	STREAM, WIDTH METER	03/31/86-04/11/86	0	2	
SHEN0477	Yes	83509	STREAM, WIDTH METER	08/03/98-08/03/98	0	1	
SHEN0482	Yes	83509	STREAM, WIDTH METER	06/25/97-06/25/97	0	1	
SHEN0490	Yes	83509	STREAM, WIDTH METER	07/30/96-07/21/98	1	3	
SHEN0502	Yes	83509	STREAM, WIDTH METER	07/25/96-07/21/98	1	3	
SHEN0505	Yes	83509	STREAM, WIDTH METER	07/24/96-07/20/98	1	3	
SHEN0507	Yes	83509	STREAM, WIDTH METER	07/16/98-07/16/98	0	1	
SHEN0508	Yes	83509	STREAM, WIDTH METER	07/24/96-07/20/98	1	3	
SHEN0515	No	83509	STREAM, WIDTH METER	07/08/96-07/08/96	0	1	
SHEN0519	Yes	83509	STREAM, WIDTH METER	06/30/97-06/30/97	0	1	
SHEN0547	Yes	83509	STREAM, WIDTH METER	07/02/96-07/02/96	0	1	
SHEN0556	Yes	83509	STREAM, WIDTH METER	06/19/96-06/18/98	1	3	
SHEN0558	No	83509	STREAM, WIDTH METER	03/31/86-04/11/86	0	2	
SHEN0561	Yes	83509	STREAM, WIDTH METER	07/02/96-07/02/96	0	1	
SHEN0572	Yes	83509	STREAM, WIDTH METER	06/12/96-06/18/98	2	3	
SHEN0576	Yes	83509	STREAM, WIDTH METER	07/09/98-07/09/98	0	1	
SHEN0605	Yes	83509	STREAM, WIDTH METER	07/18/96-07/14/98	1	3	
SHEN0613	No	83509	STREAM, WIDTH METER	08/07/96-07/28/98	1	3	
SHEN0624	Yes	83509	STREAM, WIDTH METER	07/21/97-07/14/98	0	2	
SHEN0637	Yes	83509	STREAM, WIDTH METER	07/21/97-07/14/98	0	2	
SHEN0650	Yes	83509	STREAM, WIDTH METER	08/06/96-07/27/98	1	3	
SHEN0672	Yes	83509	STREAM, WIDTH METER	08/20/96-08/20/96	0	1	
SHEN0680	Yes	83509	STREAM, WIDTH METER	08/06/96-07/27/98	1	3	
SHEN0686	Yes	83509	STREAM, WIDTH METER	08/08/96-07/29/98	1	3	
SHEN0705	Yes	83509	STREAM, WIDTH METER	08/05/96-07/22/98	1	3	
SHEN0722	Yes	83509	STREAM, WIDTH METER	07/23/96-07/15/98	1	3	
SHEN0729	Yes	83509	STREAM, WIDTH METER	08/12/97-08/12/97	0	1	
SHEN0731	Yes	83509	STREAM, WIDTH METER	08/12/97-08/12/97	0	1	
SHEN0736	Yes	83509	STREAM, WIDTH METER	06/20/96-06/20/96	0	1	
SHEN0742	No	83509	STREAM, WIDTH METER	03/27/86-04/10/86	0	2	
SHEN0743	No	83509	STREAM, WIDTH METER	03/27/86-04/10/86	0	2	
SHEN0028	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/18/96-06/18/96	0	1	
SHEN0029	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/18/96-06/18/96	0	1	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

**Station/Parameter Period of Record Tabulation
From 09/04/30 To 12/21/98**

Station	In Park	Code	Name	Start - End	Years	Obs	Plots ¹
SHEN0049	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/16/96-06/09/98	1	3	
SHEN0057	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/17/96-06/15/98	1	3	
SHEN0068	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/17/96-06/11/98	1	3	
SHEN0071	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/17/96-06/15/98	1	3	
SHEN0075	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/17/96-06/11/98	1	3	
SHEN0086	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/17/96-06/10/98	1	3	
SHEN0093	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/27/96-06/17/98	1	3	
SHEN0106	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/27/96-06/17/98	1	3	
SHEN0132	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/26/96-06/16/98	1	3	
SHEN0192	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/26/96-06/26/96	0	1	
SHEN0227	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/17/97-06/17/97	0	1	
SHEN0255	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/25/96-06/23/98	1	3	
SHEN0264	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/25/96-06/23/98	1	3	
SHEN0270	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/24/96-06/24/98	2	3	
SHEN0272	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/24/96-06/24/98	2	3	
SHEN0326	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/08/96-07/06/98	1	3	
SHEN0331	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/08/96-06/29/98	1	3	
SHEN0353	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/08/96-06/30/98	1	3	
SHEN0361	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/10/96-07/08/98	1	3	
SHEN0370	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/10/96-07/08/98	1	3	
SHEN0371	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/11/96-07/07/98	1	3	
SHEN0378	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/10/96-07/07/98	1	3	
SHEN0380	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/01/96-07/01/96	0	1	
SHEN0388	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/01/96-07/01/96	0	1	
SHEN0390	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/10/96-07/07/98	1	3	
SHEN0401	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/11/96-07/13/98	2	3	
SHEN0418	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/15/96-07/13/98	1	2	
SHEN0421	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/11/96-07/13/98	2	3	
SHEN0434	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/13/97-08/13/97	0	1	
SHEN0447	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/25/97-06/25/97	0	1	
SHEN0477	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/03/98-08/03/98	0	1	
SHEN0482	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/25/97-06/25/97	0	1	
SHEN0490	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/30/96-07/21/98	1	3	
SHEN0502	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/25/96-07/21/98	1	3	
SHEN0505	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/24/96-07/20/98	1	3	
SHEN0507	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/16/98-07/16/98	0	1	
SHEN0508	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/24/96-07/20/98	1	3	
SHEN0515	No	83549	FLOW, CURRENT CUBIC METERS/SEC	07/08/96-07/08/96	0	1	
SHEN0519	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/30/97-06/30/97	0	1	
SHEN0547	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/02/96-07/02/96	0	1	
SHEN0556	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/19/96-06/18/98	1	3	
SHEN0561	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/02/96-07/02/96	0	1	
SHEN0572	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/12/96-06/18/98	2	3	
SHEN0576	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/09/98-07/09/98	0	1	
SHEN0605	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/18/96-07/14/98	1	3	
SHEN0613	No	83549	FLOW, CURRENT CUBIC METERS/SEC	08/07/96-07/28/98	1	3	
SHEN0624	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/21/97-07/14/98	0	2	
SHEN0637	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/21/97-07/14/98	0	2	
SHEN0650	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/06/96-07/27/98	1	3	
SHEN0672	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/20/96-08/20/96	0	1	
SHEN0680	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/06/96-07/27/98	1	3	
SHEN0686	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/08/96-07/29/98	1	3	
SHEN0705	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/05/96-07/22/98	1	3	
SHEN0722	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	07/23/96-07/15/98	1	3	
SHEN0729	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/12/97-08/12/97	0	1	
SHEN0731	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	08/12/97-08/12/97	0	1	
SHEN0736	Yes	83549	FLOW, CURRENT CUBIC METERS/SEC	06/20/96-06/20/96	0	1	
SHEN0022	No	84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)	03/11/77-03/11/77	0	1	
SHEN0022	No	84001	AQUIFER NAME CODE (SEE USGS CATALOG)	03/11/77-03/11/77	0	1	
SHEN0754	No	84007	ANATOMY ALPHA CODE	07/16/92-07/16/92	0	3	
SHEN0774	No	84007	ANATOMY ALPHA CODE	07/26/79-07/14/92	12	20	
SHEN0775	No	84007	ANATOMY ALPHA CODE	08/17/88-08/17/88	0	1	
SHEN0780	No	84007	ANATOMY ALPHA CODE	07/26/79-09/12/90	11	13	
SHEN0781	No	84007	ANATOMY ALPHA CODE	07/14/92-07/14/92	0	3	
SHEN0785	No	84007	ANATOMY ALPHA CODE	06/06/90-06/06/90	0	3	

¹T=Times Series Plot, A=Annual Plot, and S=Seasonal Plot

Station-By-Station Results

Station Inventory for Station: SHEN0001

NPS Station ID: SHEN0001 LAT/LON: 38.028338/ -78.931671
 Location: UPSTREAM OF ROUTE 624 BRIDGE AUGUSTA COUNTY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005002410.29 RF3 Mile Point: 11.92
 Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: BACK CREEK SECTION: 03 TOPO MAP #: 0067 TOPO MAP NAME: WAYNESBORO WEST, VA

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BBCK000.78
 Within Park Boundary: No

Date Created: 06/22/91

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 2.00
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0001

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	27	12.2	12.87	23.3	2.1	57.807	7.603	2.92	6.2	20.	23.2
00070	TURBIDITY, (JACKSON CANDLE UNITS)	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	16	2.25	3.713	25.	0.7	33.48	5.786	1.05	1.375	3.075	11.21
00080	COLOR (PLATINUM-COBALT UNITS)	4	11.5	16.25	35.	7.	168.917	12.997	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	24	33.5	34.5	50.	24.	54.174	7.36	24.5	29.	41.25	45.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	24	10.9	10.567	13.7	5.5	5.116	2.262	7.5	8.25	12.5	13.05
00300	OXYGEN, DISSOLVED MG/L	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	25 ##	0.5	0.728	1.2	0.5	0.07	0.265	0.5	0.5	1.	1.
00340	COD, .25N K2CR2O7 MG/L	24 ##	2.75	4.792	12.	0.5	8.998	3.	2.5	2.5	7.	9.
00400	PH (STANDARD UNITS)	27	7.8	7.862	9.5	6.5	0.443	0.666	7.144	7.3	8.3	8.66
00400	CONVERTED PH (STANDARD UNITS)	27	7.8	7.445	9.5	6.5	0.624	0.79	7.144	7.3	8.3	8.66
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	27	0.016	0.036	0.316	0.	0.004	0.062	0.002	0.005	0.05	0.073
00403	PH, LAB, STANDARD UNITS SU	26	6.5	6.542	7.2	5.9	0.083	0.287	6.14	6.4	6.7	6.9
00403	CONVERTED PH, LAB, STANDARD UNITS	26	6.5	6.448	7.2	5.9	0.092	0.303	6.14	6.4	6.7	6.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	26	0.316	0.357	1.259	0.063	0.074	0.272	0.126	0.2	0.398	0.742
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	26	9.5	9.885	16.	5.	10.026	3.166	5.7	7.	12.25	15.
00500	RESIDUE, TOTAL (MG/L)	4	30.	27.75	31.	20.	27.583	5.252	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	4	9.	9.	12.	6.	8.667	2.944	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	3	18.	18.667	25.	13.	36.333	6.028	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	25 ##	1.5	2.6	14.	1.	10.375	3.221	1.5	1.5	1.5	7.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	25 ##	1.5	1.4	1.5	0.	0.104	0.323	1.	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	25 ##	1.5	2.44	13.	1.	8.548	2.924	1.5	1.5	1.5	6.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	25 ##	0.02	0.021	0.04	0.02	0.	0.004	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	25 ##	0.005	0.006	0.02	0.005	0.	0.003	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	25	0.19	0.196	0.66	0.05	0.019	0.137	0.06	0.09	0.245	0.372
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	25	0.1	0.118	0.5	0.05	0.009	0.093	0.05	0.05	0.1	0.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	25 ##	0.05	0.065	0.4	0.03	0.005	0.071	0.05	0.05	0.05	0.07
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	17	1.7	2.171	11.	0.5	5.826	2.414	0.5	1.05	2.25	4.76
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	24	14.	13.375	24.	6.	17.375	4.168	6.5	11.25	16.	18.5
00940	CHLORIDE, TOTAL IN WATER MG/L	25	2.	2.02	5.	1.	1.031	1.015	1.	1.	2.5	3.4
00945	SULFATE, TOTAL (MG/L AS SO4)	25	3.	3.02	9.	2.	1.823	1.35	2.	2.5	3.	4.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0001

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00951	FLUORIDE, TOTAL (MG/L AS F)	02/25/92-02/18/93	4 ##	0.1	0.125	0.25	0.05	0.009	0.096	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/10/92-02/18/93	4	6.5	6.95	9.7	5.1	3.963	1.991	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/10/92-07/31/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/10/92-07/31/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/10/92-07/31/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/10/92-07/31/96	1	7.	7.	7.	7.	0.	0.	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/10/92-07/31/96	1	7.	7.	7.	7.	0.	0.	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/10/92-07/31/96	1	9.	9.	9.	9.	0.	0.	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/31/96-07/31/96	1	373.	373.	373.	373.	0.	0.	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/10/92-07/31/96	1	9.	9.	9.	9.	0.	0.	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	06/10/92-07/31/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/10/92-07/31/96	1	20.	20.	20.	20.	0.	0.	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/31/96-07/31/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/31/96-07/31/96	1	3660.	3660.	3660.	3660.	0.	0.	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/10/92-07/31/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/31/96-07/31/96	1	15700.	15700.	15700.	15700.	0.	0.	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/25/92-04/27/98	23	100.	146.957	400.	50.	14531.225	120.546	50.	50.	200.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/25/92-04/27/98	23	2.	2.049	2.602	1.699	0.1	0.317	1.699	1.699	2.301
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/25/92-04/27/98	23	2.	2.049	2.602	1.699	0.1	0.317	1.699	1.699	2.301
31616	GEOMETRIC MEAN =				111.872							
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/26/92-07/31/96	1 ##	35.	35.	35.	35.	0.	0.	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	1 ##	15.	15.	15.	15.	0.	0.	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	08/26/92-07/31/96	1 ##	20.	20.	20.	20.	0.	0.	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	1 ##	15.	15.	15.	15.	0.	0.	**	**	**
39383	DELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/26/92-07/31/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	1 ##	15.	15.	15.	15.	0.	0.	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/26/92-07/31/96	1 ##	70.	70.	70.	70.	0.	0.	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/26/92-07/31/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	08/26/92-07/31/96	1 ##	15.	15.	15.	15.	0.	0.	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/10/92-04/27/98	24	0.01	0.011	0.04	0.005	0.	0.009	0.005	0.005	0.01
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/10/92-07/31/96	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	08/26/92-07/31/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	08/26/92-07/31/96	1 ##	35.	35.	35.	35.	0.	0.	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/10/92-06/23/94	8	1.4	4.563	23.	0.2	58.774	7.666	**	**	**

** - Less than 9 observations # - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0001

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	1	0	0.00				1	0	0.00						
00076	TURBIDITY, HACH TURBIDIMETER	50.	16	0	0.00	5	0	0.00	7	0	0.00	4	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	24	0	0.00	6	0	0.00	11	0	0.00	7	0	0.00			
00300	OXYGEN, DISSOLVED	4.	1	0	0.00	1	0	0.00									
00400	PH	9.	27	1	0.04	8	0	0.00	11	1	0.09	8	0	0.00			
	Other-Lo Lim.	6.5	27	1	0.04	8	1	0.13	11	0	0.00	8	0	0.00			
00403	PH, LAB	9.	26	0	0.00	7	0	0.00	12	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	26	14	0.54	7	2	0.29	12	9	0.75	7	3	0.43			
00615	NITRITE NITROGEN, TOTAL AS N	1.	25	0	0.00	6	0	0.00	12	0	0.00	7	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	25	0	0.00	6	0	0.00	12	0	0.00	7	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	860.	25	0	0.00	6	0	0.00	12	0	0.00	7	0	0.00			
	Drinking Water	250.	25	0	0.00	6	0	0.00	12	0	0.00	7	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	25	0	0.00	6	0	0.00	12	0	0.00	7	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	4	0	0.00	1	0	0.00	3	0	0.00						
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	23	7	0.30	6	2	0.33	11	3	0.27	6	2	0.33			
82078	TURBIDITY, FIELD	50.	8	0	0.00	1	0	0.00	4	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0002

NPS Station ID: SHEN0002 LAT/LON: 38.047504/ -78.921116
 Location: ROUTE 653 BRIDGE, SOUTH OF WAYNESBORO AUGUSTA CO
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005002719.48 RF3 Mile Point: 19.96
 Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 0067 TOPO MAP NAME: WAYNESBORO WEST, VIRGINIA

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BSTH029.45
 Within Park Boundary: No

Date Created: 06/22/91

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.70
 Distance from RF3: 0.06

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	50	14.4	13.562	23.3	3.3	33.764	5.811	5.	8.9	18.3	21.1
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/18/71-07/20/71	4	6.	10.75	29.	2.	153.083	12.373	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	50	10.	10.384	14.7	7.4	2.564	1.601	8.1	9.35	11.2	12.2
00310	BOD, 5 DAY, 20 DEG C MG/L	02/25/68-03/08/71	7	1.6	1.671	2.3	0.8	0.246	0.496	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	50	8.	8.052	9.3	6.1	0.439	0.662	7.2	7.5	8.5	8.89
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	50	8.	7.457	9.3	6.1	0.801	0.895	7.2	7.5	8.5	8.89
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	50	0.01	0.035	0.794	0.001	0.013	0.113	0.001	0.003	0.032	0.063
00403	PH, LAB, STANDARD UNITS SU	09/20/67-05/29/70	5	7.6	7.78	8.5	7.3	0.227	0.476	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-05/29/70	5	7.6	7.62	8.5	7.3	0.259	0.509	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-05/29/70	5	0.025	0.024	0.05	0.003	0.	0.019	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-05/29/70	5	62.	66.6	97.	44.	383.3	19.578	**	**	**	**
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	02/25/68-02/25/68	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	02/25/68-05/29/70	4	111.	119.	144.	110.	278.	16.673	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	02/25/68-05/29/70	4	44.	39.5	48.	22.	145.667	12.069	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	02/25/68-05/29/70	4	66.5	79.5	122.	63.	809.667	28.455	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/25/68-05/29/70	4	9.5	9.25	10.	8.	0.917	0.957	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-05/29/70	3	6.	5.333	7.	3.	4.333	2.082	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/25/68-05/29/70	4	4.	5.25	10.	3.	10.917	3.304	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	02/25/68-06/11/74	20 ##	0.05	0.046	0.11	0.01	0.	0.019	0.021	0.033	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	02/25/68-06/11/74	19 ##	0.005	0.011	0.05	0.005	0.	0.014	0.005	0.005	0.01	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	02/25/68-06/11/74	19	0.6	0.561	0.85	0.2	0.029	0.17	0.27	0.47	0.69	0.79
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-06/11/74	19	0.2	0.232	0.5	0.05	0.025	0.157	0.1	0.1	0.4	0.5
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/25/68-02/25/68	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-09/20/67	1	102.	102.	102.	102.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/01/73	6 ##	2.5	2.167	2.5	0.5	0.667	0.816	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-04/08/74	8 ##	5.	4.438	5.	0.5	2.531	1.591	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-04/08/74	15 ##	5.	6.	10.	5.	4.286	2.07	5.	5.	5.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-04/08/74	15 ##	5.	8.	20.	5.	27.857	5.278	5.	5.	10.	20.
01045	IRON, TOTAL (UG/L AS FE)	11/19/70-04/18/71	2	200.	200.	200.	200.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-04/08/74	13 ##	5.	8.846	40.	5.	92.308	9.608	5.	5.	10.	28.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	2	55.	55.	60.	50.	50.	7.071	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-04/08/74	5 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-04/08/74	16 ##	5.	9.688	50.	5.	154.896	12.446	5.	5.	5.	36.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-09/08/70	7	2400.	2661.429	4600.	230.	2115080.952	1454.332	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	09/20/67-09/08/70	7	3.38	3.309	3.663	2.362	0.191	0.437	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			2035.244								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-06/11/74	40	150.	1330.	8800.	50.	6565358.974	2562.296	50.	50.	850.	6990.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-06/11/74	40	2.151	2.413	3.944	1.699	0.588	0.767	1.699	1.699	2.927	3.844
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			259.039								
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	06/16/71-06/16/71	1	0.56	0.56	0.56	0.56	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-06/11/74	19##	0.05	0.054	0.1	0.025	0.	0.017	0.05	0.05	0.05	0.1
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-06/11/74	19##	0.05	0.075	0.6	0.01	0.016	0.128	0.02	0.04	0.05	0.1
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-04/08/74	16##	0.25	0.25	0.25	0.25	0.	0.	0.25	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0002

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	4	0	0.00	1	0	0.00				3	0	0.00			
00300	OXYGEN, DISSOLVED	4.	50	0	0.00	13	0	0.00	23	0	0.00	14	0	0.00			
00400	PH	9.	50	4	0.08	13	2	0.15	23	1	0.04	14	1	0.07			
		6.5	50	1	0.02	13	1	0.08	23	0	0.00	14	0	0.00			
00403	PH, LAB	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
		6.5	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	19	0	0.00	3	0	0.00	10	0	0.00	6	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	19	0	0.00	3	0	0.00	10	0	0.00	6	0	0.00			
01002	ARSENIC, TOTAL	360.	6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
		50.	6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
01027	CADMIUM, TOTAL	3.9	1 &	0	0.00	1	0	0.00									
		5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	100.	15	0	0.00	3	0	0.00	6	0	0.00	6	0	0.00			
01042	COPPER, TOTAL	18.	15	2	0.13	3	0	0.00	6	1	0.17	6	1	0.17			
		1300.	15	0	0.00	3	0	0.00	6	0	0.00	6	0	0.00			
01051	LEAD, TOTAL	82.	13	0	0.00	3	0	0.00	6	0	0.00	4	0	0.00			
		15.	13	1	0.08	3	0	0.00	6	1	0.17	4	0	0.00			
01065	NICKEL, DISSOLVED	1400.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
		100.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
01092	ZINC, TOTAL	120.	16	0	0.00	4	0	0.00	6	0	0.00	6	0	0.00			
		5000.	16	0	0.00	4	0	0.00	6	0	0.00	6	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	1000.	7	6	0.86	4	4	1.00				3	2	0.67			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	40	20	0.50	9	6	0.67	20	8	0.40	11	6	0.55			
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	3.	1	0	0.00							1	0	0.00			
71900	MERCURY, TOTAL	2.4	16	0	0.00	4	0	0.00	6	0	0.00	6	0	0.00			
		2.	16	0	0.00	4	0	0.00	6	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1967 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	1	18.3	18.3	18.3	18.3	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	1	0.794	0.794	0.794	0.794	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	9	16.7	14.944	21.1	5.	37.473	6.122	5.	9.75	20.85	21.1
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	9	10.6	10.556	14.7	7.6	3.975	1.994	7.6	9.2	11.4	14.7
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	9	8.4	8.444	9.3	7.5	0.368	0.606	7.5	7.95	9.	9.3
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	9	8.4	8.114	9.3	7.5	0.491	0.7	7.5	7.95	9.	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	9	0.004	0.008	0.032	0.001	0.	0.01	0.001	0.001	0.011	0.032

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	12	14.4	13.133	23.3	3.3	38.504	6.205	3.81	6.55	18.025	21.98
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	12	10.3	10.667	14.4	8.	4.432	2.105	8.	9.25	12.75	14.16
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	12	8.1	8.042	8.8	7.2	0.304	0.552	7.23	7.525	8.5	8.74
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	12	8.089	7.745	8.8	7.2	0.4	0.633	7.23	7.525	8.5	8.74
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	12	0.008	0.018	0.063	0.002	0.	0.021	0.002	0.003	0.03	0.059

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	12	14.75	12.967	18.9	4.4	25.941	5.093	4.4	10.	17.075	18.57
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	12	9.9	9.95	12.2	7.4	1.826	1.351	7.88	9.	10.9	12.14
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	12	8.	7.742	8.5	6.9	0.301	0.548	6.93	7.125	8.	8.47
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	12	8.	7.434	8.5	6.9	0.404	0.636	6.93	7.125	8.	8.47
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	12	0.01	0.037	0.126	0.003	0.002	0.043	0.003	0.01	0.075	0.118

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	11	14.4	14.182	23.3	4.4	39.222	6.263	4.96	8.9	20.6	22.86
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	11	10.6	10.5	12.2	9.2	1.182	1.087	9.2	9.4	11.6	12.12
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	11	8.5	8.182	9.	7.3	0.386	0.621	7.3	7.5	8.5	8.98
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	11	8.5	7.807	9.	7.3	0.541	0.735	7.3	7.5	8.5	8.98
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	11	0.003	0.016	0.05	0.001	0.	0.02	0.001	0.003	0.032	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	4	10.85	12.775	22.2	7.2	42.482	6.518	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	4	10.15	10.325	11.2	9.8	0.409	0.64	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	4	8.	8.025	8.6	7.5	0.202	0.45	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	4	8.	7.869	8.6	7.5	0.235	0.485	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	4	0.01	0.014	0.032	0.003	0.	0.013	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	13	19.4	19.823	23.3	16.7	4.642	2.155	16.7	18.3	21.1	23.3
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	13	9.4	9.323	11.	7.4	1.384	1.176	7.64	8.	10.4	10.84
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	13	8.5	8.315	9.3	6.1	0.766	0.875	6.5	8.	8.85	9.26
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	13	8.5	7.154	9.3	6.1	2.228	1.493	6.5	8.	8.85	9.26
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	13	0.003	0.07	0.794	0.001	0.048	0.219	0.001	0.001	0.01	0.508

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	23	8.9	8.73	18.3	3.3	15.288	3.91	4.4	5.	11.1	14.2
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	23	11.2	11.287	14.7	7.6	3.046	1.745	9.08	9.8	12.2	14.08
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	23	7.8	7.778	9.	6.9	0.305	0.552	7.08	7.3	8.2	8.5
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	23	7.8	7.507	9.	6.9	0.382	0.618	7.08	7.3	8.2	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	23	0.016	0.031	0.126	0.001	0.001	0.033	0.003	0.006	0.05	0.085

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0002

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-06/11/74	14	15.6	15.686	22.2	10.6	11.751	3.428	10.6	13.575	17.35	21.4
00300	OXYGEN, DISSOLVED MG/L	09/20/67-06/11/74	14	9.9	9.886	11.2	9.	0.397	0.63	9.	9.35	10.1	11.
00400	PH (STANDARD UNITS)	09/20/67-06/11/74	14	8.3	8.257	9.	7.5	0.184	0.429	7.6	7.975	8.6	8.9
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-06/11/74	14	8.289	8.07	9.	7.5	0.222	0.471	7.6	7.975	8.6	8.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/11/74	14	0.005	0.009	0.032	0.001	0.	0.008	0.001	0.003	0.011	0.026

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0003

NPS Station ID: SHEN0003
 Location: JONES HOLLOW
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005002720.49
 Description:

LAT/LON: 38.055559/ -78.869727

Depth of Water: 0
 Elevation: 405
 RF1 Mile Point: 0.000
 RF3 Mile Point: 20.54

Agency: 12NSS
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 2B047100U /2BN2B047100U
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.90
 Distance from RF3: 0.07

On/Off RF1:
 On/Off RF3:

THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS, AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS. EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988) WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN; (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0003

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/28/86-04/11/86	2	11.35	11.35	11.7	11.	0.245	0.495	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/28/86-04/11/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/28/86-04/11/86	2	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/28/86-04/11/86	2	98.5	98.5	106.	91.	112.5	10.607	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/28/86-04/11/86	2	10.4	10.4	10.6	10.2	0.08	0.283	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/28/86-04/11/86	2	7.25	7.25	7.3	7.2	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/28/86-04/11/86	2	7.247	7.247	7.3	7.2	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/28/86-04/11/86	2	0.057	0.057	0.063	0.05	0.	0.009	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/28/86-04/11/86	2	261.7	261.7	313.7	209.7	5408.	73.539	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/28/86-04/11/86	2	15.	15.	19.	11.	32.	5.657	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/28/86-04/11/86	2	0.004	0.004	0.005	0.002	0.	0.002	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/28/86-04/11/86	2	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/28/86-04/11/86	2	3.2	3.2	4.	2.4	1.28	1.131	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/28/86-04/11/86	2	6.95	6.95	7.7	6.2	1.125	1.061	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/28/86-04/11/86	2	3.25	3.25	3.5	3.	0.125	0.354	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/28/86-04/11/86	2	5.94	5.94	6.31	5.57	0.274	0.523	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/28/86-04/11/86	2	1.095	1.095	1.13	1.06	0.002	0.049	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/28/86-04/11/86	2	12.	12.	13.	11.	2.	1.414	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/28/86-04/11/86	2	13.15	13.15	14.4	11.9	3.125	1.768	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0003

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/28/86-04/11/86	2	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/28/86-04/11/86	2	6.15	6.15	6.3	6.	0.045	0.212	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/28/86-04/11/86	2	11.	11.	14.	8.	18.	4.243	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/28/86-04/11/86	2	19.	19.	29.	9.	200.	14.142	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/28/86-04/11/86	2	0.2	0.2	0.3	0.1	0.02	0.141	**	**	**	**
71885	IRON (UG/L AS FE)	03/28/86-04/11/86	2	50.96	50.96	62.95	38.97	287.52	16.956	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/28/86-04/11/86	2	1330.	1330.	1330.	1330.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/28/86-04/11/86	2	0.8	0.8	1.	0.6	0.08	0.283	**	**	**	**
83509	STREAM, WIDTH METER	03/28/86-04/11/86	2	2.	2.	2.	2.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0003

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00						2	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	0	0.00						2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0004

NPS Station ID: SHEN0004	LAT/LON: 38.057226/ -78.908059	Agency: 21VASWCB	Date Created: 06/22/91
Location: ROUTE 664 BRIDGE - CITY OF WAYNESBORO		FIPS State/County: 51820 VIRGINIA/WAYNESBORO (CITY)	
Station Type: /TYPA/AMBNT/STREAM		STORET Station ID(s): 1BSTH027.85	
RMI-Indexes:		Within Park Boundary: No	
RMI-Miles:			
HUC: 02070005	Depth of Water: 0	Aquifer:	
Major Basin: 02-NORTH ATLANTIC	Elevation: 0	Water Body Id:	
Minor Basin: 1-POTOMAC-SHENANDOAH		ECO Region:	
RF1 Index: 02070005	RF1 Mile Point: 0.000	Distance from RF1: 0.00	On/Off RF1:
RF3 Index: 02070005027800.00	RF3 Mile Point: 0.00	Distance from RF3: 0.16	On/Off RF3:
Description:			
VIRGINIA STATE WATER CONTROL BOARD	AMBIENT MONITORING	BASIN: 1B SHENANDOAH	REGION: 6 VALLEY
RIVER: SOUTH RIVER	SECTION: 03	TOPO MAP #: 0067	TOPO MAP NAME: WAYNESBORO WEST, VIRGINIA

Parameter Inventory for Station: SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	249	14.	13.492	25.5	0.1	39.679	6.299	4.3	7.95	19.	21.1
00040	WIND DIRECTION, AZIMUTH	09/28/82-09/28/82	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/02/88-04/20/92	26	5.15	8.092	56.	0.9	113.403	10.649	1.9	3.075	9.175	15.97
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/12/94-12/15/98	54	5.6	7.074	28.	1.4	32.557	5.706	2.15	3.75	8.475	13.9
00080	COLOR (PLATINUM-COBALT UNITS)	04/30/91-12/15/92	21	17.	24.333	131.	6.	791.733	28.138	8.6	12.	23.	65.4
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	103	199.	202.476	1093.	56.	10846.585	104.147	120.2	150.	240.	263.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	101	166.	180.109	390.	45.	3978.438	63.075	104.4	131.5	242.	257.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/24/92-12/15/98	81	11.	10.957	14.6	7.	3.062	1.75	8.72	9.5	12.35	13.16
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	166	10.4	10.464	14.4	5.1	2.747	1.657	8.4	9.1	11.6	12.8
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	202	1.	1.055	5.	0.5	0.368	0.607	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	202	4.	5.745	33.	0.5	26.389	5.137	1.	2.5	8.	12.
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	246	8.1	8.078	9.5	6.4	0.316	0.562	7.3	7.7	8.448	9.
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	246	8.1	7.718	9.5	6.4	0.447	0.669	7.3	7.7	8.447	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	246	0.008	0.019	0.398	0.	0.001	0.036	0.001	0.004	0.02	0.05
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	147	7.7	7.652	8.5	6.5	0.176	0.42	7.	7.4	7.9	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	147	7.7	7.414	8.5	6.5	0.234	0.484	7.	7.4	7.9	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	147	0.02	0.039	0.316	0.003	0.003	0.053	0.008	0.013	0.04	0.1
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	146	75.	81.205	673.	13.	3182.151	56.411	43.7	54.75	105.	113.
00500	RESIDUE, TOTAL (MG/L)	04/30/79-08/13/92	38	112.5	121.105	319.	8.	2480.097	49.801	63.9	93.25	150.75	165.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/30/79-08/13/92	39	28.	30.	68.	2.	239.158	15.465	12.	20.	36.	56.
00510	RESIDUE, TOTAL FIXED (MG/L)	04/30/79-08/13/92	39	87.	94.154	263.	20.	1623.239	40.289	53.	71.	118.	129.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	203	6.	9.377	76.	0.5	108.	10.392	1.5	2.5	12.	18.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	203	2.	2.751	12.	0.	4.276	2.068	1.	1.5	3.	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	203	4.	7.204	65.	0.5	80.687	8.983	1.5	2.5	9.	15.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	240##	0.05	0.046	0.94	0.02	0.004	0.064	0.02	0.02	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	240##	0.005	0.013	0.7	0.005	0.002	0.045	0.005	0.005	0.01	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	228	0.7	0.72	4.8	0.02	0.124	0.352	0.449	0.55	0.85	1.
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	238	0.2	0.215	2.6	0.05	0.058	0.241	0.05	0.1	0.3	0.4
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	12/03/76-03/01/79	13	0.6	0.591	1.	0.26	0.049	0.222	0.288	0.385	0.8	0.92
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	198##	0.05	0.089	0.5	0.05	0.004	0.067	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	121	0.03	0.043	0.53	0.005	0.004	0.06	0.01	0.02	0.05	0.078
00680p	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	186	3.	3.254	19.	0.5	5.71	2.389	1.	1.575	4.	6.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	142	84.	86.352	138.	24.	876.939	29.613	48.6	62.	116.	123.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00940	CHLORIDE,TOTAL IN WATER MG/L	11/02/88-12/15/98	103	3.	4.026	33.	0.7	17.895	4.23	2.5	2.5	4.	5.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	103	7.	8.301	20.	4.	9.585	3.096	5.	6.	11.	13.
00951	FLUORIDE, TOTAL (MG/L AS F)	01/17/89-04/19/93	32 ##	0.1	0.115	0.5	0.025	0.009	0.093	0.05	0.05	0.15	0.222
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/13/89-12/15/92	30	7.45	7.277	9.5	4.	1.973	1.405	5.33	6.275	8.425	9.18
01002	ARSENIC, TOTAL (UG/L AS AS)	03/12/76-07/14/82	5 ##	1.	0.97	1.	0.5	0.05	0.224	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/15/79-07/22/96	4 ##	2.75	3.	4.9	1.6	1.94	1.393	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/02/83-07/22/96	2 ##	1.65	1.65	2.5	0.8	1.445	1.202	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	10/03/74-07/14/82	6 ##	5.	4.25	5.	0.5	3.375	1.837	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	4 ##	0.3	0.795	2.5	0.08	1.329	1.153	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	4	8.6	8.725	11.	6.7	3.343	1.828	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	10/03/74-07/14/82	8 ##	5.	4.438	5.	0.5	2.531	1.591	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	10/03/74-07/14/82	8 ##	5.	5.	5.	0.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/15/79-07/22/96	4	8.	8.725	16.	2.9	39.969	6.322	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	08/29/78-08/29/78	1	200.	200.	200.	200.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	10/03/74-07/14/82	8 ##	2.	2.875	6.	1.	4.696	2.167	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/15/79-07/22/96	4	18.	20.5	38.2	7.8	195.027	13.965	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	1	316.	316.	316.	316.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	10/03/74-08/29/78	6 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/82-07/14/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	4	6.85	7.663	16.	0.95	39.512	6.286	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/01/91-07/22/96	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	10/03/74-07/14/82	8	20.	25.625	80.	5.	674.554	25.972	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/15/79-07/22/96	4	28.5	31.975	47.	23.9	106.536	10.322	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	1	3620.	3620.	3620.	3620.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/02/83-07/22/96	2 ##	1.85	1.85	3.2	0.5	3.645	1.909	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	1	12000.	12000.	12000.	12000.	0.	0.	**	**	**	**
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/17/74-12/15/98	224	100.	534.821	8000.	50.	1416203.555	1190.044	50.	50.	500.	1150.
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/17/74-12/15/98	224	2.	2.268	3.903	1.699	0.328	0.573	1.699	1.699	2.699	3.06
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			185.484								
32240	TANNIN AND LIGNIN (MG/L)	05/19/92-04/19/93	3	0.2	0.4	0.8	0.2	0.12	0.346	**	**	**	**
34480	THALLIUM DRY WGT/BOTMG/KG	06/02/83-06/02/83	1 ##	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/01/91-07/22/96	2 ##	40.	40.	50.	30.	200.	14.142	**	**	**	**
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/14/82	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/02/83-07/22/96	2 ##	5.01	5.01	10.	0.02	49.8	7.057	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/01/91-07/22/96	2 ##	507.5	507.5	1000.	15.	485112.5	696.5	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	2 ##	55.	55.	100.	10.	4050.	63.64	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/01/91-07/22/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	2 ##	55.	55.	100.	10.	4050.	63.64	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/01/91-07/22/96	2 ##	532.5	532.5	1000.	65.	437112.5	661.145	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/01/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/01/91-07/22/96	2 ##	505.	505.	1000.	10.	490050.	700.036	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/14/82-07/14/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/02/83-06/02/83	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/29/82-08/12/85	8	0.	0.025	0.1	0.	0.002	0.046	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	05/17/74-03/01/79	41 ##	0.05	0.185	5.1	0.05	0.62	0.787	0.05	0.05	0.1
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	120	0.03	0.035	0.23	0.005	0.001	0.027	0.01	0.02	0.05
71900	MERCURY, TOTAL (UG/L AS HG)	10/03/74-07/14/82	8 ##	0.25	0.225	0.25	0.15	0.002	0.046	**	**	**
71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/15/79-07/22/96	4 ##	0.175	0.263	0.6	0.1	0.052	0.229	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/01/91-07/22/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/01/91-07/22/96	2 ##	65.	65.	100.	30.	2450.	49.497	**	**	**
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	05/19/92-06/08/94	26	5.65	11.665	94.	0.4	372.191	19.292	0.54	2.575	9.975

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0004

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	26	1	0.04	7	0	0.00	12	0	0.00	7	1	0.14			
00076	TURBIDITY, HACH TURBIDIMETER	50.	54	0	0.00	15	0	0.00	25	0	0.00	14	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	81	0	0.00	22	0	0.00	36	0	0.00	23	0	0.00			
00300	OXYGEN, DISSOLVED	4.	166	0	0.00	56	0	0.00	66	0	0.00	44	0	0.00			
00400	PH	9.	246	25	0.10	77	6	0.08	103	12	0.12	66	7	0.11			
		6.5	246	1	0.00	77	0	0.00	103	0	0.00	66	1	0.02			
00403	PH, LAB	9.	147	0	0.00	43	0	0.00	65	0	0.00	39	0	0.00			
		6.5	147	1	0.01	43	0	0.00	65	1	0.02	39	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	240	0	0.00	72	0	0.00	103	0	0.00	65	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	228	0	0.00	68	0	0.00	96	0	0.00	64	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	10.	13	0	0.00	4	0	0.00	7	0	0.00	2	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	103	0	0.00	28	0	0.00	46	0	0.00	29	0	0.00			
		250.	103	0	0.00	28	0	0.00	46	0	0.00	29	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	103	0	0.00	28	0	0.00	46	0	0.00	29	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
01002	ARSENIC, TOTAL	360.	5	0	0.00	3	0	0.00	2	0	0.00						
		50.	5	0	0.00	3	0	0.00	2	0	0.00						
01027	CADMIUM, TOTAL	3.9	1 &	0	0.00	1	0	0.00									
		5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	100.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
01042	COPPER, TOTAL	18.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
		1300.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
01051	LEAD, TOTAL	82.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
		15.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	1400.	6	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00			
		100.	6	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00			
01067	NICKEL, TOTAL	1400.	1	0	0.00	1	0	0.00									
		100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	120.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
		5000.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	224	110	0.49	67	41	0.61	98	41	0.42	59	28	0.47			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	20.	2	0	0.00	2	0	0.00									
		1.	2	0	0.00	2	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE	1.1	2	0	0.00	2	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	0.6	2	0	0.00	2	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	1050.	2	0	0.00	2	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	3.	3	0	0.00	3	0	0.00									
39350	CHLORDANE (TECH MIX & METABS), WHOLE WATE	2.4	2	0	0.00	2	0	0.00									
		2.	2	0	0.00	2	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.5	2	0	0.00	2	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	0.18	2	0	0.00	2	0	0.00									
		2.	2	0	0.00	2	0	0.00									
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	40.	2	0	0.00	2	0	0.00									
39630	ATRAZINE (AATREX) IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	6.	2	0	0.00	2	0	0.00									
		1.	2	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

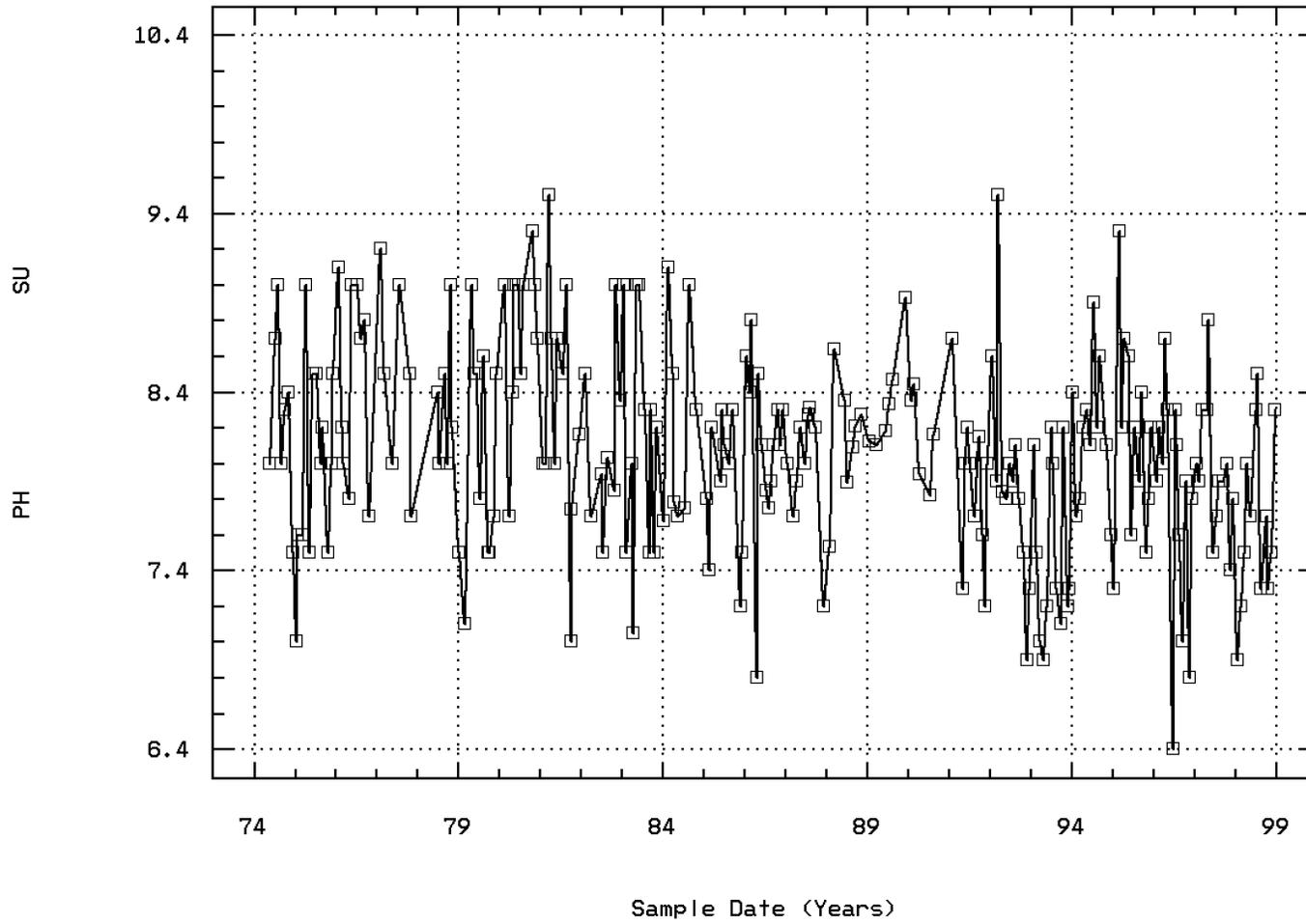
EPA Water Quality Criteria Analysis for Station: SHEN0004

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	8	2	0.25	5	2	0.40				3	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	2.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	26	1	0.04	7	0	0.00	11	0	0.00	8	1	0.13			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station: SHEN0004 Parameter Code: 00400

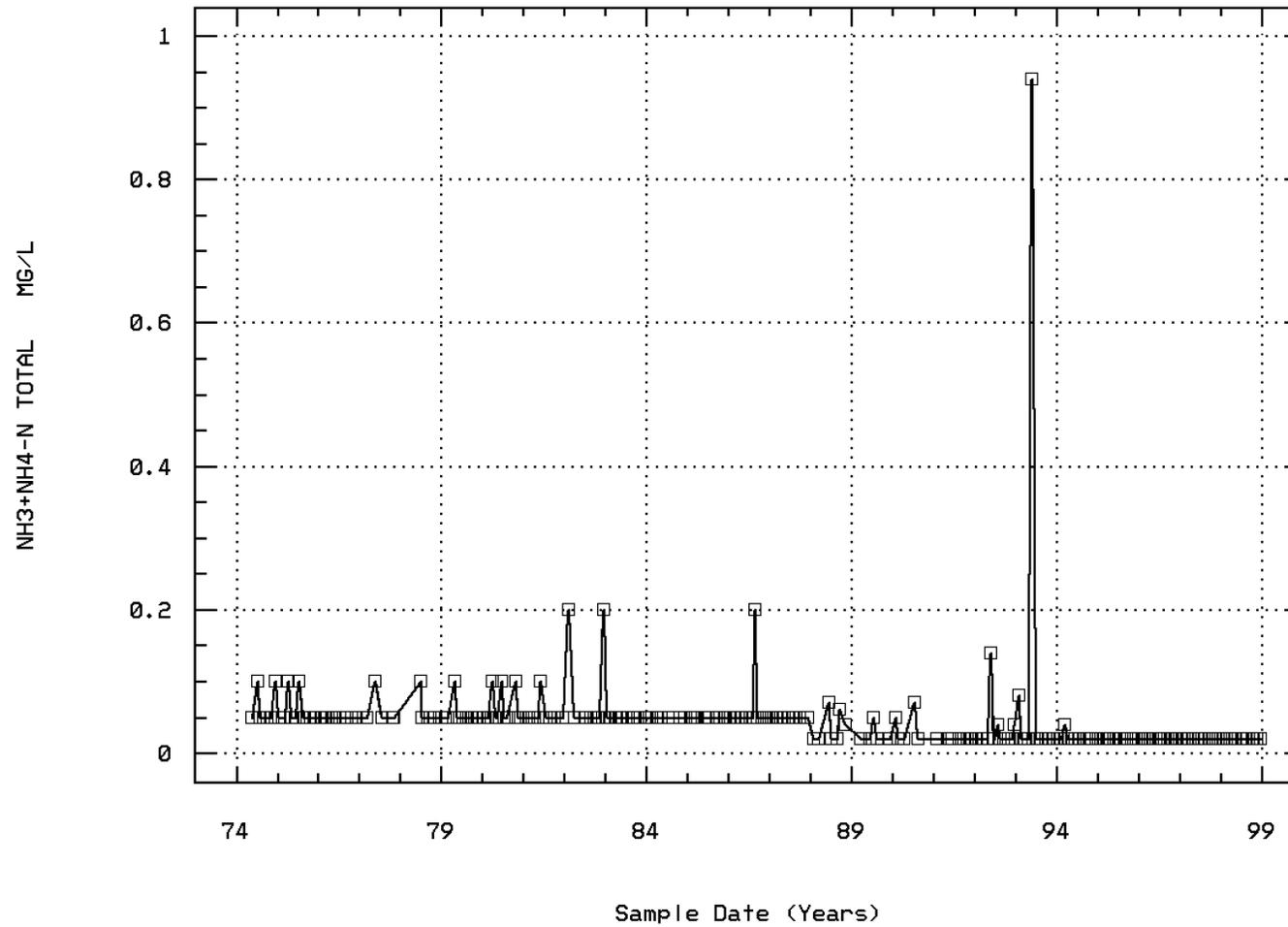
PH (STANDARD UNITS)



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 00610

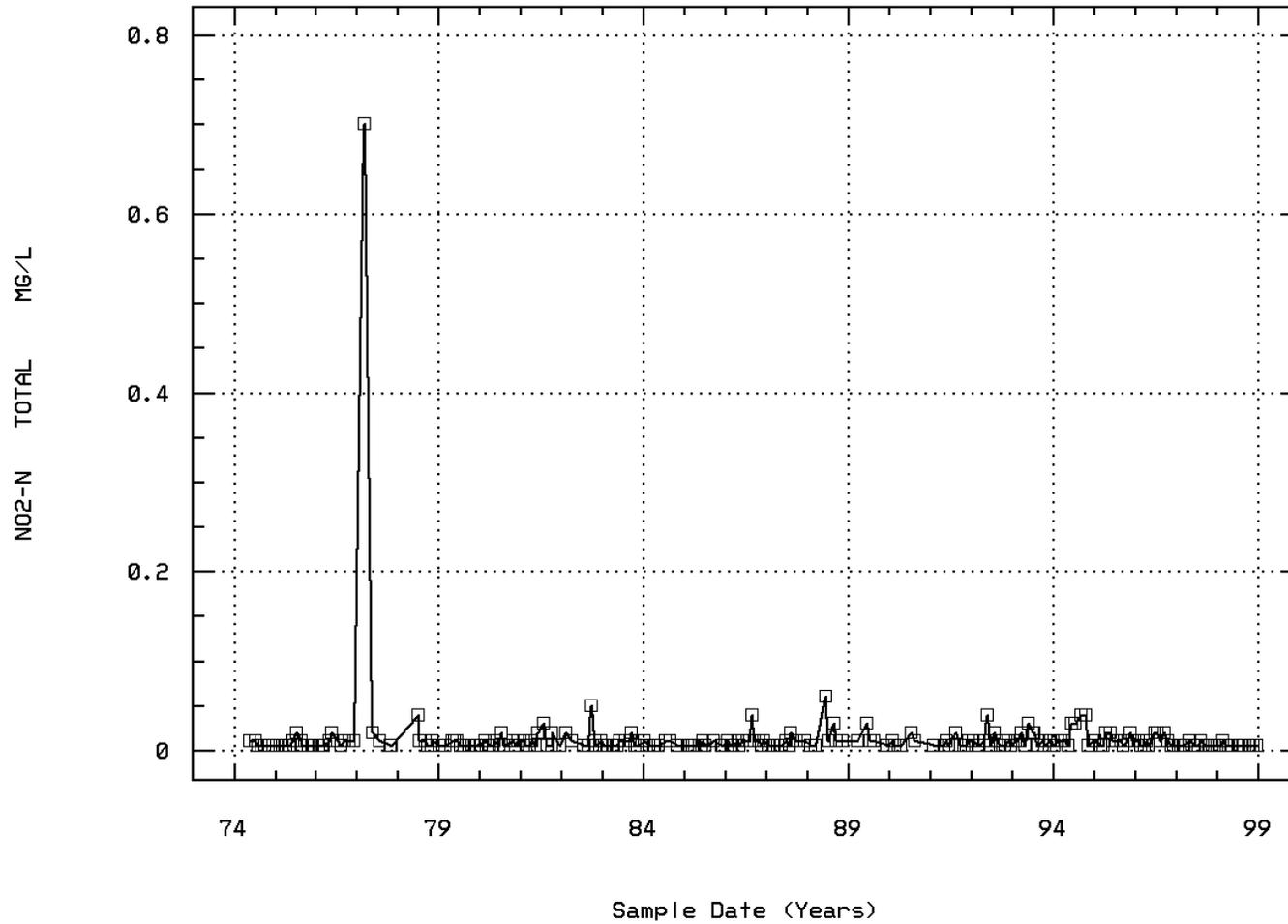
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 00615

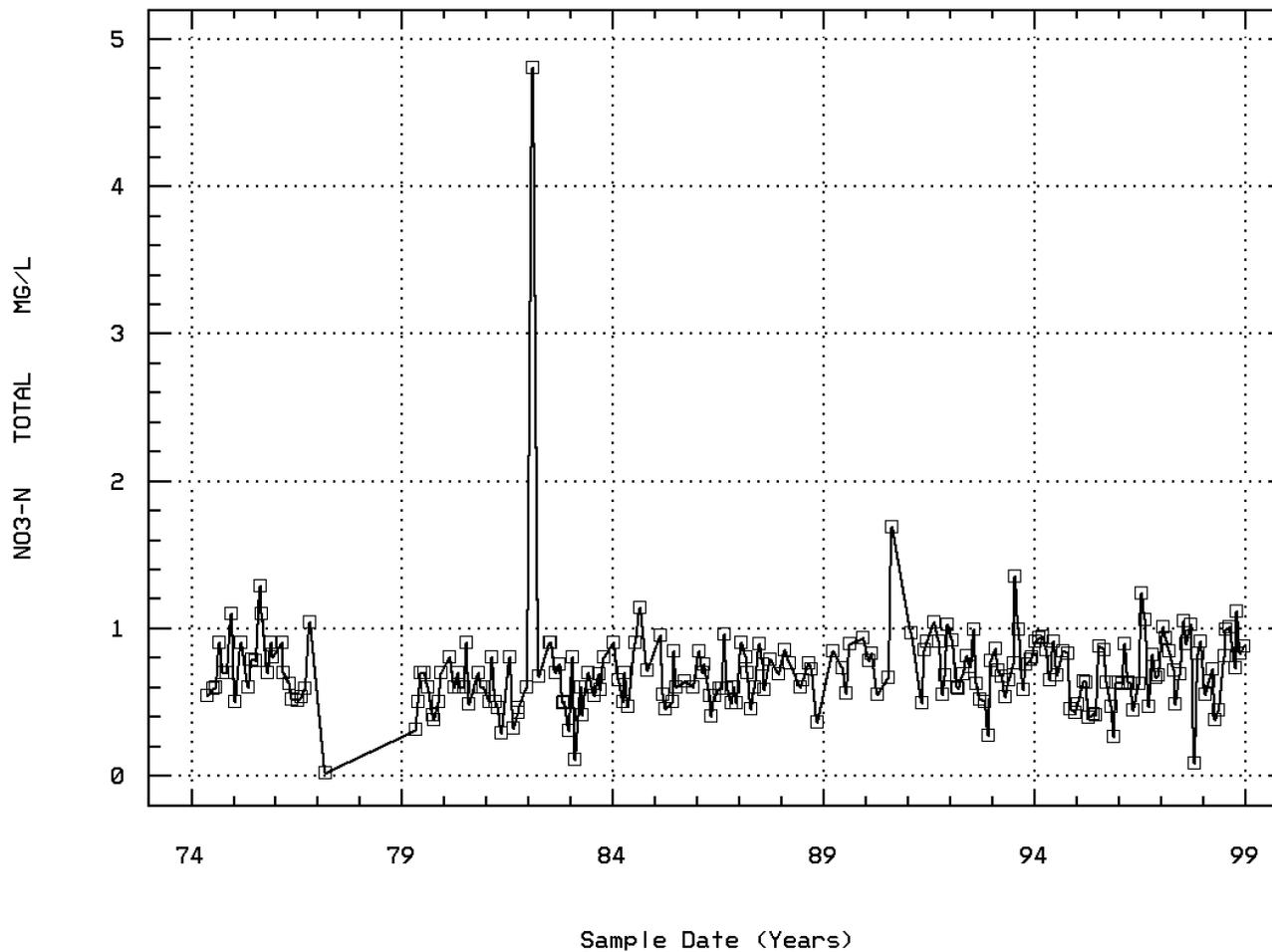
NITRITE NITROGEN, TOTAL (MG/L AS N)



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 00620

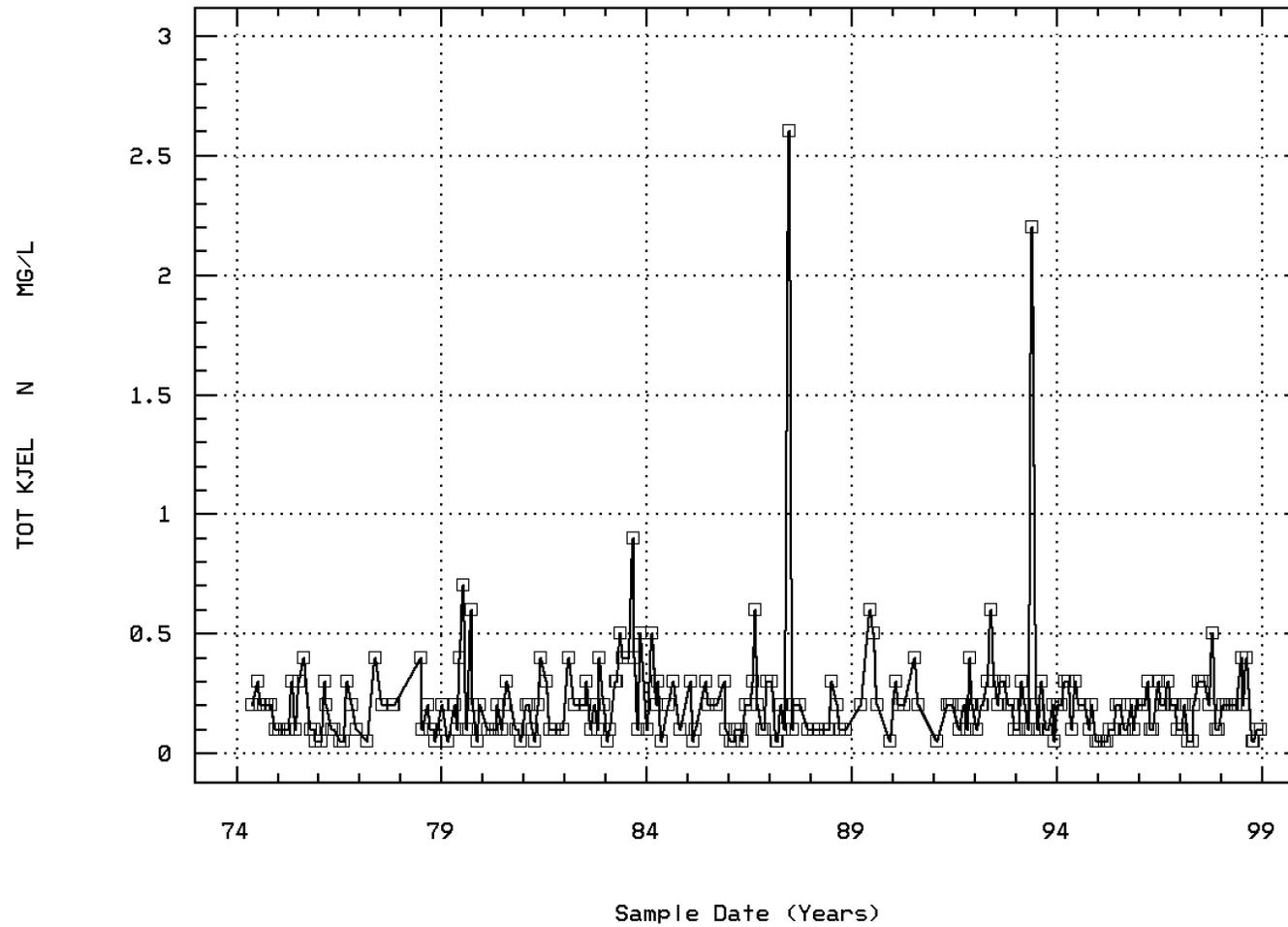
NITRATE NITROGEN, TOTAL (MG/L AS N)



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 00625

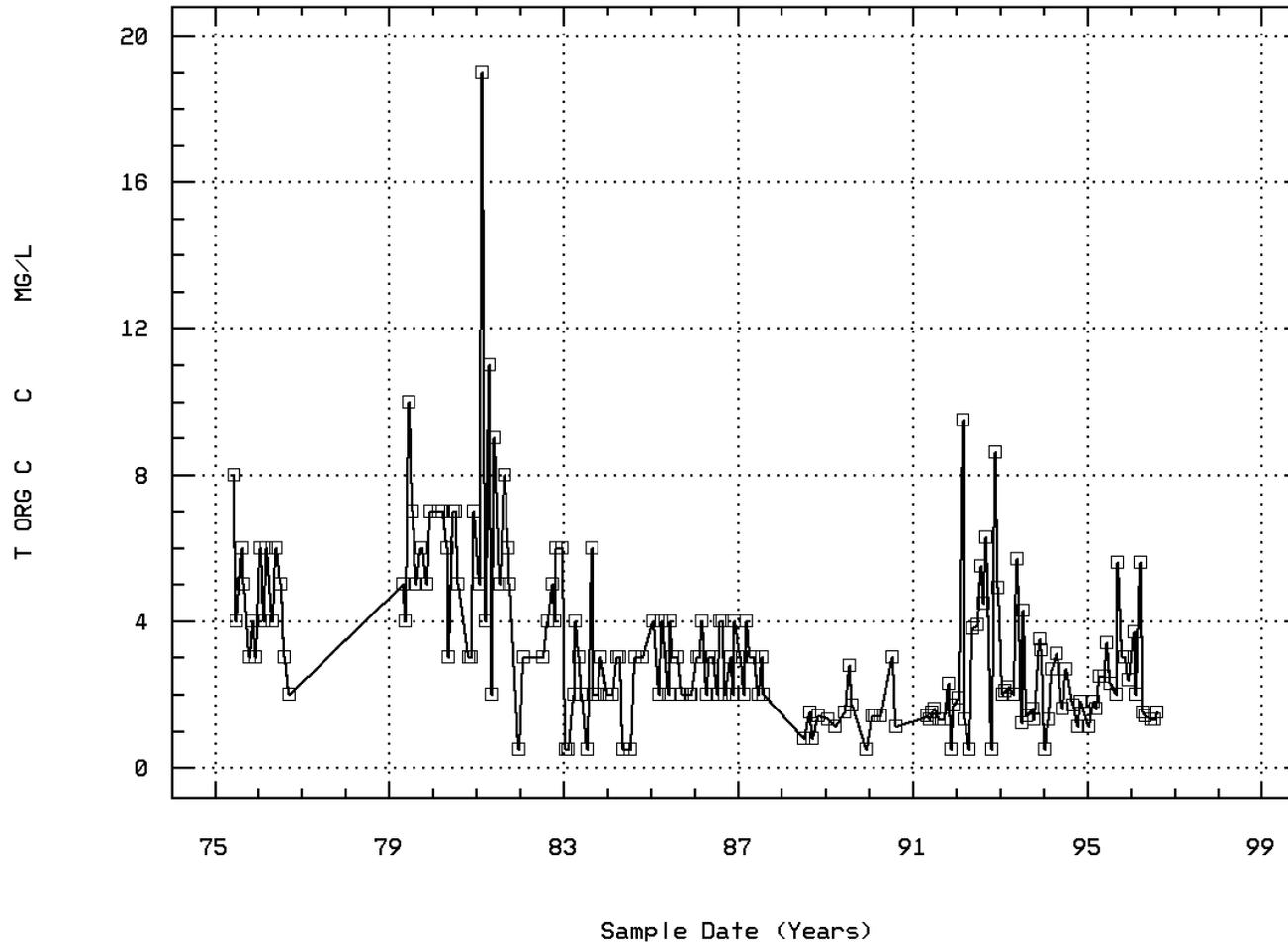
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 00680

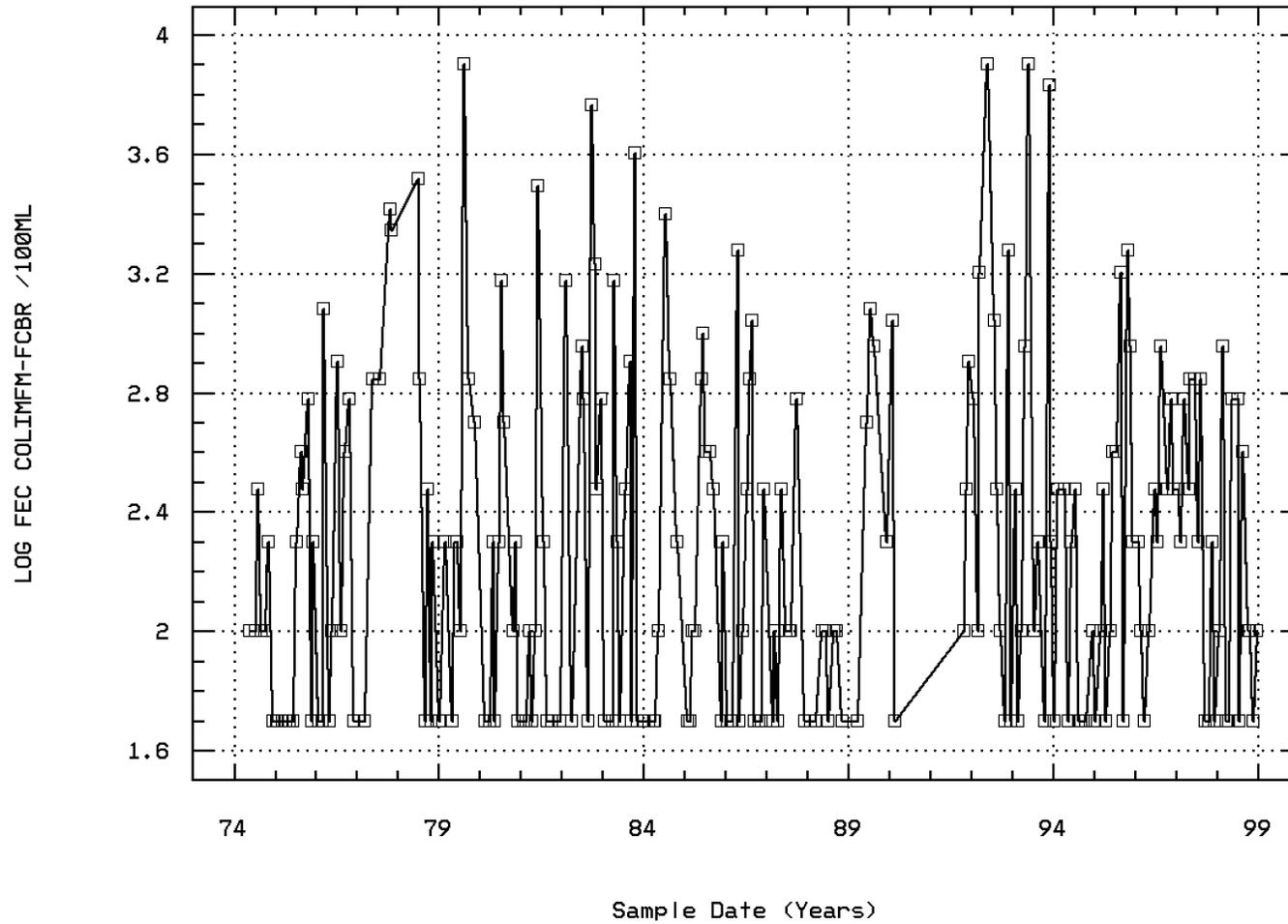
CARBON, TOTAL ORGANIC (MG/L AS C)



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 31616

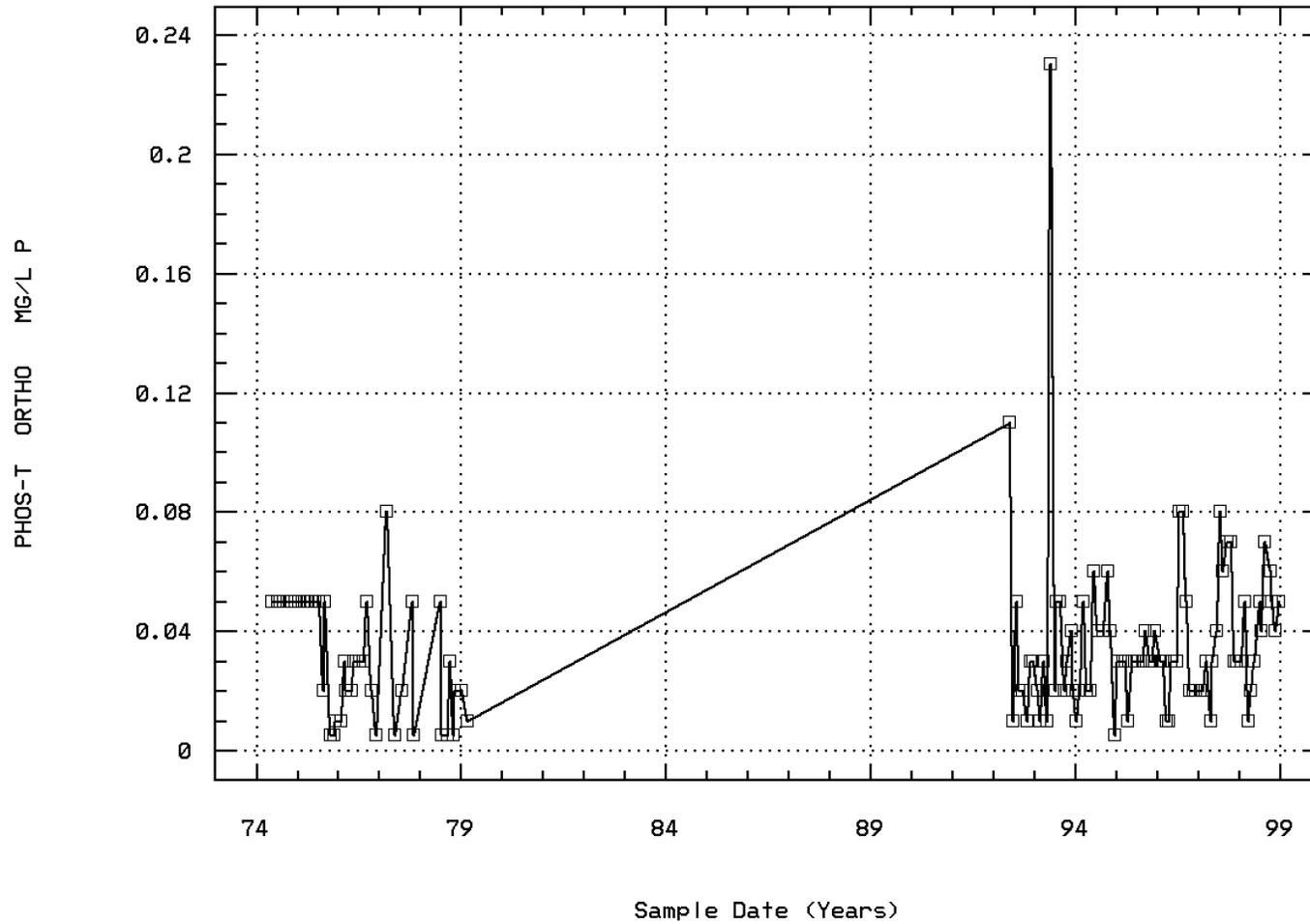
LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 70507

PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Annual Analysis for 1974 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	7	15.6	15.486	21.1	3.3	39.561	6.29	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	7	10.	10.1	12.8	8.1	2.13	1.459	**	**	**	**
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	7	8.3	8.271	9.	7.5	0.246	0.496	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	7	8.3	8.042	9.	7.5	0.307	0.554	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	7	0.005	0.009	0.032	0.001	0.	0.011	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	7###	0.05	0.064	0.1	0.05	0.001	0.024	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	7###	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	7	0.7	0.733	1.099	0.54	0.04	0.2	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	7	0.2	0.2	0.3	0.1	0.003	0.058	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	7	100.	135.714	300.	50.	7261.905	85.217	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	7	2.	2.068	2.477	1.699	0.063	0.25	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				116.993								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	7###	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	12	13.85	13.808	22.2	3.3	48.237	6.945	4.32	7.8	21.375	22.2
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	12	10.5	10.092	13.5	5.1	4.377	2.092	5.91	9.25	11.2	12.93
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	12	8.	7.992	9.	7.	0.328	0.573	7.15	7.525	8.5	8.85
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	12	8.	7.681	9.	7.	0.434	0.658	7.15	7.525	8.5	8.85
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	12	0.01	0.021	0.1	0.001	0.001	0.027	0.002	0.003	0.03	0.079
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	11##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11##	0.005	0.007	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.018
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11	0.8	0.851	1.289	0.5	0.05	0.224	0.52	0.7	1.	1.251
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	10	0.1	0.165	0.4	0.05	0.014	0.12	0.055	0.1	0.3	0.39
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	7	4.	4.714	8.	3.	3.238	1.799	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	12##	50.	170.833	600.	50.	32481.061	180.225	50.	50.	275.	540.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	12##	1.699	2.029	2.778	1.699	0.182	0.426	1.699	1.699	2.433	2.725
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				106.991								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	11##	0.05	0.035	0.05	0.005	0.	0.021	0.005	0.01	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	9	13.9	14.322	25.	2.2	41.422	6.436	2.2	10.3	18.05	25.
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	9	10.2	9.889	12.4	6.3	3.444	1.856	6.3	8.65	11.3	12.4
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	9	8.7	8.478	9.1	7.7	0.307	0.554	7.7	7.9	9.	9.1
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	9	8.7	8.187	9.1	7.7	0.402	0.634	7.7	7.9	9.	9.1
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	9	0.002	0.006	0.02	0.001	0.	0.007	0.001	0.001	0.013	0.02
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	9##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	10	0.01	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	9	0.62	0.712	1.039	0.51	0.045	0.212	0.51	0.525	0.95	1.039
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	10	0.1	0.145	0.3	0.05	0.01	0.098	0.05	0.05	0.225	0.3
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	8	4.5	4.5	6.	2.	2.286	1.512	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10	100.	340.	1200.	50.	163777.778	404.695	50.	50.	650.	1160.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10	2.	2.216	3.079	1.699	0.316	0.562	1.699	1.699	2.809	3.062
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				164.375								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	10	0.025	0.025	0.05	0.005	0.	0.013	0.006	0.018	0.03	0.048

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	6	13.25	14.583	22.	7.	27.642	5.258	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	6	9.15	10.367	14.4	7.1	9.859	3.14	**	**	**	**
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	6	8.5	8.483	9.2	7.7	0.326	0.571	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	6	8.5	8.199	9.2	7.7	0.422	0.65	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	6	0.003	0.006	0.02	0.001	0.	0.007	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	5 ##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	5	0.01	0.148	0.7	0.005	0.095	0.309	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	5	0.2	0.21	0.4	0.05	0.016	0.124	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	1	1.	1.	1.	1.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	5	700.	1250.	2600.	50.	1192500.	1092.016	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	5	2.845	2.829	3.415	1.699	0.471	0.686	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			675.013								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	5	0.02	0.032	0.08	0.005	0.001	0.033	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	7	19.	19.3	24.8	14.	22.65	4.759	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	7	8.4	8.771	10.	7.7	0.876	0.936	**	**	**	**
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	6	8.3	8.35	9.	8.	0.143	0.378	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	6	8.289	8.241	9.	8.	0.157	0.397	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	6	0.005	0.006	0.01	0.001	0.	0.004	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	6 ##	0.05	0.058	0.1	0.05	0.	0.02	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	6	0.01	0.013	0.04	0.005	0.	0.013	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	6	0.1	0.158	0.4	0.05	0.016	0.128	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	6	250.	766.667	3300.	50.	1597666.667	1263.988	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	6	2.389	2.423	3.519	1.699	0.489	0.699	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			265.023								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	6 ##	0.013	0.019	0.05	0.005	0.	0.018	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	11	16.1	13.609	21.	4.	32.509	5.702	4.6	7.	17.5	20.3
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	9	170.	269.889	1093.	80.	98561.611	313.945	80.	119.	238.5	1093.
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	9	10.6	10.578	12.3	8.5	1.439	1.2	8.5	9.65	11.5	12.3
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	8	1.	0.938	1.	0.5	0.031	0.177	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	9	6.	6.111	10.	2.	7.861	2.804	2.	3.5	8.5	10.
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	11	7.8	8.018	9.	7.1	0.38	0.616	7.18	7.5	8.5	8.92
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	11	7.8	7.693	9.	7.1	0.496	0.704	7.18	7.5	8.5	8.92
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	11	0.016	0.02	0.079	0.001	0.001	0.023	0.001	0.003	0.032	0.07
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	9	8.	10.667	20.	5.	27.	5.196	5.	6.5	15.	20.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	9	5.	4.889	9.	1.	7.111	2.667	1.	2.5	7.	9.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	9	6.	5.944	11.	0.5	15.403	3.925	0.5	2.	9.5	11.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	11 ##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	9	0.5	0.533	0.7	0.31	0.022	0.149	0.31	0.395	0.7	0.7
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	11	0.2	0.255	0.7	0.05	0.048	0.22	0.05	0.1	0.4	0.68
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	9 ##	0.05	0.111	0.4	0.05	0.014	0.119	0.05	0.05	0.15	0.4
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	9	0.02	0.016	0.03	0.005	0.	0.008	0.005	0.01	0.02	0.03

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	9	6.	6.111	10.	4.	3.111	1.764	4.	5.	7.	10.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	9	200.	1111.111	8000.	50.	6720486.111	2592.39	50.	75.	600.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	9	2.301	2.416	3.903	1.699	0.465	0.682	1.699	1.849	2.772	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			260.895								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	10	12.25	14.07	25.5	3.	48.153	6.939	3.49	8.725	20.4	25.05
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	10	252.	227.6	283.	136.	2907.378	53.92	137.7	181.5	272.25	282.3
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	10	10.95	10.71	11.8	9.4	0.857	0.926	9.42	9.75	11.55	11.79
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	10	1.	1.	2.	0.5	0.167	0.408	0.5	0.875	1.	1.9
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	10	2.5	3.4	9.	0.5	9.544	3.089	0.5	0.875	5.75	8.9
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	10	9.	8.76	9.3	7.7	0.212	0.46	7.77	8.475	9.	9.27
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	10	9.	8.461	9.3	7.7	0.311	0.558	7.77	8.475	9.	9.27
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	10	0.001	0.003	0.02	0.001	0.	0.006	0.001	0.001	0.003	0.018
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	10	8.	8.9	28.	2.5	66.433	8.151	2.5	2.5	11.75	26.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	10	2.5	2.4	6.	0.	2.378	1.542	0.1	1.75	2.625	5.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	10	4.75	7.5	26.	2.	57.278	7.568	2.05	2.5	9.5	24.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	10 ##	0.05	0.065	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	10 ##	0.008	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	10	0.6	0.658	0.9	0.48	0.015	0.121	0.492	0.6	0.725	0.89
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	10	0.1	0.135	0.3	0.05	0.006	0.075	0.055	0.1	0.2	0.29
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	10 ##	0.05	0.08	0.2	0.05	0.002	0.048	0.05	0.05	0.1	0.19
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	10	0.015	0.026	0.08	0.005	0.001	0.026	0.005	0.009	0.045	0.078
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	10	6.5	5.5	7.	3.	3.389	1.841	3.	3.	7.	7.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10	150.	290.	1500.	50.	199888.889	447.089	50.	50.	275.	1400.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10	2.151	2.157	3.176	1.699	0.251	0.501	1.699	1.699	2.401	3.128
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			143.682								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	11	13.	12.918	22.	1.	40.958	6.4	2.16	8.1	19.5	21.76
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	11	246.	237.091	286.	155.	1776.691	42.151	161.8	190.	270.	283.8
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	11	10.9	10.891	13.2	9.	1.693	1.301	9.	10.4	11.4	13.12
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	11	1.	1.364	3.	1.	0.455	0.674	1.	1.	2.	2.8
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	11	6.	6.364	15.	3.	11.255	3.355	3.	4.	8.	13.6
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	11	8.16	8.3	9.5	7.	0.458	0.677	7.148	8.	8.7	9.4
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	11	8.16	7.828	9.5	7.	0.704	0.839	7.148	8.	8.7	9.4
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	11	0.007	0.015	0.1	0.	0.001	0.029	0.	0.002	0.01	0.084
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	9.	12.409	56.	2.5	230.791	15.192	2.5	2.5	14.	48.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	2.5	3.5	10.	1.	7.7	2.775	1.	1.	6.	9.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	5.	9.591	46.	2.	165.491	12.864	2.1	2.5	13.	39.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	11 ##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11 ##	0.005	0.011	0.03	0.005	0.	0.009	0.005	0.005	0.02	0.028
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11	0.5	0.56	1.	0.29	0.049	0.22	0.296	0.43	0.8	0.96
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	11	0.1	0.168	0.4	0.05	0.011	0.106	0.06	0.1	0.2	0.38
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	11 ##	0.05	0.141	0.5	0.05	0.026	0.161	0.05	0.05	0.2	0.48
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	11	0.06	0.115	0.53	0.005	0.022	0.148	0.012	0.04	0.17	0.46

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	11	5.	6.773	19.	0.5	25.368	5.037	0.8	4.	9.	17.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	11 ##	50.	350.	3100.	50.	834000.	913.236	50.	50.	100.	2520.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	11 ##	1.699	1.971	3.491	1.699	0.294	0.542	1.699	1.699	2.	3.253
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			93.622								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	9	13.	13.389	20.	5.	30.736	5.544	5.	8.5	19.75	20.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	9	207.	189.556	289.	56.	6062.278	77.861	56.	125.	250.	289.
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	9	11.2	10.889	13.8	8.5	2.201	1.484	8.5	9.75	11.45	13.8
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	9	1.	1.222	2.	1.	0.194	0.441	1.	1.	1.5	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	9	8.	9.111	18.	1.	32.111	5.667	1.	4.5	14.	18.
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	8	7.985	8.109	9.	7.5	0.235	0.485	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	8	7.983	7.925	9.	7.5	0.274	0.523	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	8	0.01	0.012	0.032	0.001	0.	0.01	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	9	9.	21.333	76.	2.5	758.688	27.544	2.5	3.75	38.5	76.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	9	4.	4.667	11.	2.	7.938	2.817	2.	2.5	6.	11.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	9	4.	17.222	65.	1.	619.382	24.887	1.	2.5	34.	65.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	9 ##	0.05	0.083	0.2	0.05	0.004	0.066	0.05	0.05	0.125	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	8	0.01	0.014	0.05	0.005	0.	0.015	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	9	0.7	1.112	4.8	0.3	1.951	1.397	0.3	0.495	0.9	4.8
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	9	0.2	0.233	0.4	0.1	0.013	0.112	0.1	0.15	0.35	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	9	0.1	0.106	0.2	0.05	0.003	0.058	0.05	0.05	0.15	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	9	0.06	0.072	0.17	0.02	0.002	0.044	0.02	0.05	0.095	0.17
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	9	4.	3.667	6.	1.	3.5	1.871	1.	2.	5.5	6.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	9	600.	1277.778	5800.	50.	3213819.444	1792.713	50.	175.	1600.	5800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	9	2.778	2.728	3.763	1.699	0.47	0.686	1.699	2.088	3.203	3.763
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			535.053								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	11	14.	13.373	22.	3.6	41.758	6.462	3.68	9.	20.5	21.8
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	11	193.	175.182	238.	79.	2784.564	52.769	82.4	133.	214.	234.8
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	11	11.	11.045	13.	9.5	1.141	1.068	9.52	10.2	12.	12.82
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	10	1.	1.05	2.	0.5	0.136	0.369	0.55	1.	1.	1.9
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	11	3.	4.545	14.	0.5	14.423	3.798	0.5	3.	7.	12.6
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	11	8.2	8.123	9.	7.05	0.471	0.686	7.14	7.5	9.	9.
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	11	8.2	7.712	9.	7.05	0.656	0.81	7.14	7.5	9.	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	11	0.006	0.019	0.089	0.001	0.001	0.026	0.001	0.001	0.032	0.078
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	7.	9.5	19.	2.5	34.55	5.878	3.	5.	17.	18.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	3.	3.318	7.	1.	2.914	1.707	1.2	2.	5.	6.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	4.	6.409	14.	2.	22.041	4.695	2.	2.	12.	13.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	11 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11 ##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.018
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11	0.6	0.621	1.	0.11	0.053	0.231	0.17	0.54	0.8	0.96
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	11	0.4	0.359	0.9	0.05	0.057	0.24	0.06	0.1	0.5	0.82
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	11 ##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	11	0.04	0.044	0.09	0.01	0.001	0.024	0.012	0.03	0.06	0.086
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	11	2.	2.318	6.	0.5	2.764	1.662	0.5	0.5	3.	5.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10 ##	125.	705.	4000.	1562472.222	1249.989	50.	50.	975.	3750.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10 ##	2.	2.295	3.602	1.699	0.72	1.699	1.699	2.971	3.559
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN = 197.435										

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	8	12.65	12.938	18.	6.	17.957	4.238	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	8	138.	165.875	260.	98.	4434.125	66.589	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	8	10.8	10.863	14.	8.	4.588	2.142	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	8	1.	1.125	2.	1.	0.125	0.354	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	8	2.5	2.813	8.	0.5	5.281	2.298	**	**	**
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	8	8.04	8.226	9.1	7.68	0.349	0.591	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	8	7.966	7.973	9.1	7.68	0.423	0.65	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	8	0.011	0.011	0.021	0.001	0.	0.009	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	1	103.	103.	103.	103.	0.	0.	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	8 ##	5.25	12.625	43.	2.5	210.125	14.496	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	8 ##	2.5	3.25	6.	2.	2.071	1.439	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	8 ##	4.25	10.625	37.	2.5	150.982	12.287	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	8 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	8 ##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	8	0.705	0.746	1.14	0.47	0.05	0.224	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	8	0.2	0.219	0.5	0.05	0.021	0.146	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	8 ##	0.05	0.075	0.2	0.05	0.003	0.053	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	8	0.03	0.033	0.05	0.02	0.	0.013	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	8	2.5	2.125	3.	0.5	1.196	1.094	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	8 ##	75.	462.5	2500.	50.	726964.286	852.622	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	8 ##	1.849	2.167	3.398	1.699	0.414	0.643	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN = 147.06										

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	11	9.5	11.582	20.2	0.1	44.926	6.703	0.88	7.3	18.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	11	190.	177.273	240.	112.	2061.618	45.405	115.	129.	226.
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	11	10.5	11.009	13.5	8.7	2.531	1.591	8.84	9.8	12.6
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	11	1.	1.	2.	0.5	0.3	0.548	0.5	0.5	1.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	11	1.	1.864	5.	0.5	2.705	1.645	0.5	0.5	3.
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	10	7.95	7.87	8.3	7.2	0.151	0.389	7.22	7.475	8.225
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	10	7.947	7.705	8.3	7.2	0.181	0.426	7.22	7.475	8.225
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	10	0.011	0.02	0.063	0.005	0.	0.019	0.005	0.006	0.034
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	11	7.6	7.691	8.1	7.3	0.069	0.263	7.32	7.5	7.9
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	11	7.6	7.622	8.1	7.3	0.074	0.272	7.32	7.5	7.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	11	0.025	0.024	0.05	0.008	0.	0.014	0.008	0.013	0.032
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	11	78.	79.455	106.	47.	410.873	20.27	49.	57.	99.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	6.	8.	19.	2.5	37.1	6.091	2.5	2.5	13.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	3.	3.273	7.	2.	1.918	1.385	2.1	2.5	4.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	5.	5.864	16.	1.	20.155	4.489	1.3	2.5	9.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	10 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	10 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	10	0.62	0.713	1.	0.45	0.045	0.213	0.455	0.538	0.962
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	8	0.2	0.194	0.3	0.05	0.01	0.102	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	8 ##	0.05	0.106	0.3	0.05	0.009	0.094	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	10	0.03	0.033	0.07	0.02	0.	0.015	0.02	0.02	0.04
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	11	2.	2.636	4.	1.	1.055	1.027	1.2	2.	4.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	10	84.	88.7	134.	50.	604.456	24.586	51.6	70.5	108.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	11	200.	304.545	1000.	50.	94727.273	307.778	50.	50.	400.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	11	2.301	2.266	3.	1.699	0.225	0.475	1.699	1.699	2.602
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			184.435							2.969

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	13	13.5	12.069	20.5	2.2	38.487	6.204	3.6	6.4	18.1
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	13	221.	206.462	248.	141.	1215.269	34.861	143.8	179.5	232.5
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	13	11.	10.854	13.9	7.8	4.138	2.034	8.04	8.9	12.7
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	13	1.	1.077	2.	0.5	0.202	0.449	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	13	2.	3.269	13.	0.5	9.942	3.153	0.7	2.	3.5
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	13	8.1	8.115	8.8	6.8	0.248	0.498	7.18	7.875	8.45
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	13	8.1	7.719	8.8	6.8	0.418	0.647	7.18	7.875	8.45
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	13	0.008	0.019	0.158	0.002	0.002	0.042	0.002	0.004	0.013
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	13	7.9	7.785	8.1	7.3	0.055	0.234	7.38	7.6	7.95
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	13	7.9	7.721	8.1	7.3	0.059	0.243	7.38	7.6	7.95
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	13	0.013	0.019	0.05	0.008	0.	0.012	0.009	0.011	0.026
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	13	94.	90.308	111.	63.	248.064	15.75	65.	77.	103.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	13	6.	9.462	34.	2.5	88.311	9.397	2.5	2.5	15.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	13	4.	3.692	6.	2.5	1.772	1.331	2.5	2.5	4.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	13	2.5	6.923	28.	1.	58.952	7.678	1.4	2.5	11.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	13 ##	0.05	0.062	0.2	0.05	0.002	0.042	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	13	0.01	0.011	0.04	0.005	0.	0.009	0.005	0.005	0.01
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	13	0.59	0.622	0.96	0.4	0.024	0.154	0.436	0.515	0.725
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	13	0.1	0.181	0.6	0.05	0.024	0.153	0.05	0.075	0.25
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	13	0.1	0.117	0.2	0.05	0.004	0.061	0.05	0.06	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	13	0.05	0.062	0.32	0.01	0.007	0.082	0.01	0.02	0.07
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	13	3.	3.	4.	2.	0.667	0.816	2.	2.	4.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	12	108.	102.	122.	70.	322.182	17.949	72.4	85.5	118.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	13 ##	50.	365.385	1900.	50.	315160.256	561.391	50.	50.	500.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	13 ##	1.699	2.155	3.279	1.699	0.351	0.592	1.699	1.699	2.661
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			142.82							3.184

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	9	14.5	13.511	21.9	4.3	51.424	7.171	4.3	6.1	21.4
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	10	161.5	178.2	249.	119.	2671.067	51.682	120.	129.75	241.
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	9	10.	10.156	11.8	8.1	2.403	1.55	8.1	8.75	11.7
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	10	1.	0.8	1.	0.5	0.067	0.258	0.5	0.5	1.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	10	5.	5.5	12.	1.	12.944	3.598	1.	2.5	7.75
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	9	8.	7.976	8.31	7.2	0.123	0.351	7.2	7.8	8.235

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	9	8.	7.813	8.31	7.2	0.153	0.391	7.2	7.8	8.235	8.31
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	9	0.01	0.015	0.063	0.005	0.	0.018	0.005	0.006	0.016	0.063
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	10	7.4	7.36	7.9	6.6	0.209	0.458	6.62	7.025	7.825	7.9
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	10	7.389	7.145	7.9	6.6	0.261	0.511	6.62	7.025	7.825	7.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	10	0.041	0.072	0.251	0.013	0.006	0.078	0.013	0.015	0.099	0.242
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	10	59.	66.	108.	45.	601.333	24.522	45.	45.75	81.75	108.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	10	6.5	8.15	18.	2.5	33.614	5.798	2.5	2.5	13.25	17.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	10###	2.5	4.25	12.	1.	12.292	3.506	1.15	2.5	6.	11.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	10###	2.5	5.	15.	2.	25.389	5.039	2.05	2.5	6.5	14.9
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	10###	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	10###	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	10	0.725	0.715	0.9	0.45	0.02	0.142	0.463	0.595	0.823	0.899
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	10	0.15	0.39	2.6	0.05	0.609	0.781	0.05	0.088	0.225	2.37
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	10###	0.05	0.09	0.2	0.05	0.004	0.061	0.05	0.05	0.125	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	10	0.025	0.028	0.05	0.005	0.	0.013	0.007	0.02	0.04	0.049
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	8	3.	2.75	4.	2.	0.5	0.707	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	10	68.	79.6	124.	50.	902.044	30.034	50.4	55.5	117.5	123.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	9	100.	161.111	600.	50.	32986.111	181.621	50.	50.	200.	600.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	9	2.	2.039	2.778	1.699	0.136	0.369	1.699	1.699	2.239	2.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			109.429								

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	7	16.6	13.686	20.4	1.5	44.415	6.664	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	7	226.	214.429	247.	166.	919.286	30.32	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	7	9.8	10.3	13.3	9.	2.427	1.558	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	7	1.	1.	2.	0.5	0.25	0.5	**	**	**	**
00340	COD, 25N K2CR2O7 MG/L	04/30/79-12/15/98	7	4.	5.286	15.	1.	22.238	4.716	**	**	**	**
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	7	8.21	8.14	8.64	7.53	0.126	0.354	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	7	8.21	8.007	8.64	7.53	0.146	0.382	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	7	0.006	0.01	0.03	0.002	0.	0.009	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	7	7.9	7.829	7.9	7.6	0.012	0.111	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	7	7.9	7.815	7.9	7.6	0.013	0.112	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	7	0.013	0.015	0.025	0.013	0.	0.005	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	6	91.5	90.333	103.	70.	180.667	13.441	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	7	2.5	2.5	4.	1.	1.5	1.225	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	7	2.5	2.071	4.	1.	1.286	1.134	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	7###	2.5	1.786	3.	0.5	1.155	1.075	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	7###	0.02	0.036	0.07	0.02	0.	0.021	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	7	0.01	0.019	0.06	0.005	0.	0.02	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	7	0.72	0.671	0.85	0.36	0.025	0.159	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	7	0.1	0.143	0.3	0.1	0.006	0.079	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	7	0.1	0.093	0.1	0.05	0.	0.019	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	7	0.03	0.027	0.05	0.01	0.	0.015	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	5	1.	1.1	1.5	0.8	0.11	0.332	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	7	110.	102.	122.	74.	277.333	16.653	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	1	13.	13.	13.	13.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	8###	75.	75.	100.	50.	714.286	26.726	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	8###	1.849	1.849	2.	1.699	0.026	0.161	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			70.711								

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	19.	14.678	19.5	3.6	49.399	7.028	3.6	6.25	19.5	19.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	4	158.	166.25	200.	149.	548.25	23.415	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	2	149.5	149.5	169.	130.	760.5	27.577	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	9	9.1	9.722	11.9	8.	2.542	1.594	8.	8.5	11.7	11.9
00310	BOD, 5 DAY, 20 DEG C MG/L	6	1.	1.083	2.	0.5	0.242	0.492	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	6	3.	5.	16.	2.	29.6	5.441	**	**	**	**
00400p	PH (STANDARD UNITS)	9	8.33	8.346	8.93	8.1	0.067	0.26	8.1	8.15	8.47	8.93
00400p	CONVERTED PH (STANDARD UNITS)	9	8.33	8.291	8.93	8.1	0.071	0.266	8.1	8.15	8.47	8.93
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.005	0.005	0.008	0.001	0.	0.002	0.001	0.003	0.007	0.008
00403	PH, LAB, STANDARD UNITS SU	6	7.65	7.717	7.9	7.6	0.022	0.147	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	6	7.647	7.697	7.9	7.6	0.022	0.149	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	6	0.023	0.02	0.025	0.013	0.	0.006	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	6	65.	67.833	88.	53.	157.767	12.561	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	6	3.5	7.083	26.	0.5	91.442	9.563	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	6	2.5	2.75	5.	0.5	3.775	1.943	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	6	1.5	4.5	21.	0.5	65.8	8.112	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	5 ##	0.02	0.026	0.05	0.02	0.	0.013	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	5	0.01	0.013	0.03	0.005	0.	0.01	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	5	0.84	0.79	0.93	0.56	0.022	0.149	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	5	0.2	0.31	0.6	0.05	0.053	0.23	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	5	0.1	0.1	0.2	0.05	0.004	0.061	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	5	0.03	0.032	0.05	0.02	0.	0.011	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	6	1.4	1.483	2.8	0.5	0.586	0.765	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	6	75.	78.	100.	62.	180.8	13.446	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	5	3.	3.6	5.	3.	0.8	0.894	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	5	7.	6.8	8.	6.	0.7	0.837	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	5	500.	570.	1200.	50.	229500.	479.062	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	5	2.699	2.546	3.079	1.699	0.313	0.559	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			351.948								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	5	6.7	9.32	20.5	2.1	50.572	7.111	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	5	168.	174.8	252.	131.	2279.7	47.746	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	5	11.2	10.48	12.5	8.4	3.337	1.827	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	5	1.	1.3	3.	0.5	0.95	0.975	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	5	4.	3.5	7.	0.5	6.	2.449	**	**	**	**
00400p	PH (STANDARD UNITS)	5	8.16	8.142	8.44	7.82	0.069	0.263	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	5	8.16	8.08	8.44	7.82	0.074	0.272	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	5	0.007	0.008	0.015	0.004	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	5	7.5	7.66	8.1	7.4	0.083	0.288	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	5	7.5	7.596	8.1	7.4	0.088	0.297	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	5	0.032	0.025	0.04	0.008	0.	0.013	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	5	75.	75.2	115.	53.	593.2	24.356	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	5	11.	12.5	28.	0.5	98.25	9.912	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	5	4.	3.7	6.	0.5	5.95	2.439	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	5	8.	8.9	22.	0.5	64.55	8.034	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	5 ##	0.02	0.036	0.07	0.02	0.001	0.023	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	5	0.01	0.01	0.02	0.005	0.	0.006	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	5	0.78	0.902	1.69	0.55	0.206	0.454	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	5	0.2	0.26	0.4	0.2	0.008	0.089	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	5	0.1	0.08	0.1	0.05	0.001	0.027	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	5	0.02	0.028	0.05	0.01	0.	0.016	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	6	1.4	1.66	3.	1.1	0.578	0.76	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	5	84.	84.4	126.	666.8	25.822	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	5	3.	3.4	4.	0.3	0.548	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	5	6.	9.2	20.	38.7	6.221	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	2 ##	575.	575.	1100.	551250.	742.462	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	2 ##	2.37	2.37	3.041	1.699	0.949	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			234.521							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	10	15.4	15.14	21.5	22.894	4.785	7.14	11.625	19.375	21.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	10	243.	219.4	260.	128.	2018.711	44.93	131.8	185.5	259.9
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	10	10.4	10.22	11.5	8.8	1.011	1.005	8.83	9.25	11.49
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	10	1.	1.15	2.	0.5	0.392	0.626	0.5	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	9	8.	7.5	11.	0.5	13.875	3.725	0.5	4.5	11.
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	10	8.	7.885	8.7	7.2	0.2	0.447	7.21	7.525	8.163
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	10	8.	7.691	8.7	7.2	0.242	0.492	7.21	7.525	8.162
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	10	0.01	0.02	0.063	0.002	0.	0.02	0.002	0.007	0.031
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	10	8.	7.87	8.2	7.4	0.065	0.254	7.41	7.65	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	10	8.	7.795	8.2	7.4	0.071	0.266	7.41	7.65	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	10	0.01	0.016	0.04	0.006	0.	0.011	0.007	0.01	0.023
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	10	109.	96.3	115.	54.	500.9	22.381	55.1	79.25	113.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	10	6.	6.65	20.	1.5	31.725	5.632	1.5	2.25	8.75
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	10	1.25	1.55	3.	1.	0.525	0.725	1.	1.	2.125
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	10	5.	5.65	18.	1.5	24.503	4.95	1.5	1.875	7.25
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	9 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	9 ##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	9	0.91	0.824	1.04	0.49	0.041	0.203	0.49	0.615	0.995
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	9	0.2	0.183	0.4	0.05	0.01	0.1	0.05	0.1	0.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	9	0.1	0.078	0.1	0.05	0.001	0.026	0.05	0.05	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	9	0.02	0.016	0.03	0.005	0.	0.008	0.005	0.008	0.02
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	9	1.4	1.433	2.3	0.5	0.222	0.472	0.5	1.3	1.65
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	9	122.	115.556	138.	62.	501.778	22.4	62.	110.	130.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	9	3.	6.444	33.	2.	99.528	9.976	2.	3.	4.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	9	11.	9.667	13.	5.	8.75	2.958	5.	7.	12.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	3	300.	400.	800.	100.	130000.	360.555	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	3	2.477	2.46	2.903	2.	0.204	0.452	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			288.45							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	12	14.35	12.542	20.5	0.5	40.619	6.373	1.58	6.925	17.925
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	12	152.5	164.417	253.	45.	3285.902	57.323	71.1	132.5	220.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/24/92-12/15/98	10	9.45	9.67	12.4	7.7	2.645	1.626	7.72	8.2	11.05
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	3	13.1	12.133	13.2	10.1	3.103	1.762	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	12	1.	1.042	2.	0.5	0.248	0.498	0.5	0.625	1.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	12	10.	12.333	31.	1.	93.333	9.661	1.3	4.75	19.
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	12	7.87	7.928	9.5	6.9	0.421	0.649	7.02	7.575	8.075
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	12	7.869	7.602	9.5	6.9	0.537	0.733	7.02	7.575	8.075
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	12	0.014	0.025	0.126	0.	0.001	0.034	0.001	0.008	0.028

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	12	7.9	7.817	8.2	6.9	0.154	0.393	7.05	7.55	8.175	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	12	7.9	7.609	8.2	6.9	0.201	0.449	7.05	7.55	8.175	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	12	0.013	0.025	0.126	0.006	0.001	0.034	0.006	0.007	0.029	0.1
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	12	64.	119.333	673.	13.	31220.606	176.694	24.1	51.25	103.5	505.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	7.5	14.25	48.	1.	236.205	15.369	1.9	4.25	22.5	45.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	1.	2.	6.	0.	3.636	1.907	0.3	1.	3.5	5.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	6.5	12.25	43.	1.	188.568	13.732	1.6	3.25	17.5	40.9
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	12 ##	0.02	0.033	0.14	0.02	0.001	0.034	0.02	0.02	0.035	0.11
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12 ##	0.008	0.011	0.04	0.005	0.	0.01	0.005	0.005	0.01	0.034
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12	0.655	0.669	0.99	0.27	0.039	0.197	0.339	0.538	0.803	0.969
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	12	0.2	0.25	0.6	0.1	0.017	0.131	0.1	0.2	0.3	0.51
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	12 ##	0.075	0.083	0.2	0.05	0.002	0.044	0.05	0.05	0.1	0.17
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	4	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	12	4.2	4.267	9.5	0.5	8.673	2.945	0.5	1.45	6.1	9.23
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	12	71.	77.5	126.	24.	891.545	29.859	34.8	61.25	108.	124.5
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	12	3.	5.25	33.	1.	76.75	8.761	1.3	3.	3.	24.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	12	7.	7.833	13.	4.	7.788	2.791	4.6	6.	10.5	12.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10	450.	1380.	8000.	50.	5867888.889	2422.373	50.	87.5	1675.	7390.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10	2.628	2.608	3.903	1.699	0.568	0.753	1.699	1.925	3.223	3.841
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			405.562								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	8	0.025	0.035	0.11	0.01	0.001	0.033	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	12	13.2	12.958	24.3	2.9	53.781	7.334	3.23	6.35	19.15	23.88
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	12	169.	178.167	257.	95.	4479.606	66.93	98.9	114.75	249.5	255.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/24/92-12/15/98	12	11.2	11.008	14.	7.	4.052	2.013	7.63	9.625	12.55	13.97
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	12	1.	1.25	5.	0.5	1.432	1.197	0.5	1.	1.	3.8
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	12	5.	5.667	15.	2.5	14.697	3.834	2.5	2.5	7.5	13.5
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	12	7.3	7.5	8.2	6.9	0.238	0.488	6.93	7.125	8.075	8.2
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	12	7.3	7.305	8.2	6.9	0.279	0.529	6.93	7.125	8.075	8.2
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	12	0.05	0.049	0.126	0.006	0.002	0.039	0.006	0.008	0.075	0.118
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	12	7.8	7.75	8.4	7.	0.199	0.446	7.03	7.375	8.1	8.34
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	12	7.789	7.537	8.4	7.	0.249	0.499	7.03	7.375	8.1	8.34
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	12	0.016	0.029	0.1	0.004	0.001	0.031	0.005	0.008	0.044	0.094
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	12	69.	74.75	114.	37.	1071.114	32.728	37.3	44.25	110.75	113.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	7.	8.417	25.	1.5	45.492	6.745	1.5	4.	10.5	22.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	1.5	3.	10.	1.	9.955	3.155	1.	1.	5.	9.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	5.5	5.667	17.	1.5	16.561	4.069	1.5	3.	6.75	14.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	12 ##	0.02	0.102	0.94	0.02	0.07	0.265	0.02	0.02	0.02	0.682
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12	0.01	0.013	0.03	0.005	0.	0.008	0.005	0.006	0.02	0.027
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12	0.755	0.787	1.35	0.53	0.047	0.216	0.545	0.655	0.845	1.242
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	12	0.15	0.329	2.2	0.05	0.354	0.595	0.065	0.1	0.275	1.63
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	12 ##	0.05	0.083	0.4	0.05	0.01	0.101	0.05	0.05	0.05	0.31
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	12	2.05	2.542	5.7	1.2	1.895	1.377	1.23	1.45	3.425	5.28
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	12	89.	87.333	128.	38.	1338.424	36.584	39.8	51.5	125.	128.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	11	4.	3.7	5.	0.7	1.39	1.179	1.16	3.	4.	5.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	11	7.	9.273	14.	5.	14.618	3.823	5.2	6.	13.	14.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10	200.	1670.	8000.	50.	9261777.778	3043.317	50.	87.5	2375.	7880.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10	2.301	2.517	3.903	1.699	0.646	0.804	1.699	1.925	3.174	3.896
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			328.622								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	12	0.025	0.044	0.23	0.01	0.004	0.06	0.01	0.02	0.048	0.176

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	11	14.1	13.345	21.8	3.6	46.031	6.785	3.82	5.5	20.1	21.6
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/12/94-12/15/98	6	2.15	3.	6.5	1.9	3.208	1.791	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	12	210.	190.917	255.	87.	3550.447	59.586	98.7	133.25	240.75	254.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/24/92-12/15/98	11	11.6	11.527	14.6	8.8	3.146	1.774	8.82	10.4	12.9	14.36
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	12 ##	0.75	0.875	2.	0.5	0.218	0.467	0.5	0.5	1.175	1.76
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	11	7.	8.591	33.	2.5	74.391	8.625	2.5	2.5	9.	28.8
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	11	8.2	8.173	8.9	7.6	0.148	0.385	7.62	7.8	8.4	8.84
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	11	8.2	8.032	8.9	7.6	0.17	0.412	7.62	7.8	8.4	8.84
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	11	0.006	0.009	0.025	0.001	0.	0.008	0.002	0.004	0.016	0.024
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	12	7.9	7.642	8.3	6.5	0.272	0.521	6.65	7.25	8.	8.21
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	12	7.9	7.289	8.3	6.5	0.408	0.638	6.65	7.25	8.	8.21
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	12	0.013	0.051	0.316	0.005	0.008	0.088	0.007	0.01	0.057	0.251
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	12	93.	82.833	115.	26.	919.788	30.328	33.8	55.75	108.5	114.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	4.	6.625	31.	1.5	69.688	8.348	1.5	1.5	9.5	24.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	12 ##	1.5	1.667	4.	1.	0.652	0.807	1.	1.125	1.875	3.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	3.	5.625	27.	1.5	51.96	7.208	1.5	1.5	7.75	21.3
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	11 ##	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.036
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11	0.01	0.018	0.04	0.005	0.	0.014	0.005	0.005	0.03	0.04
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	11	0.84	0.765	0.94	0.43	0.035	0.187	0.434	0.65	0.91	0.938
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	11	0.2	0.195	0.3	0.05	0.007	0.085	0.06	0.1	0.3	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	11 ##	0.05	0.073	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.18
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	11	1.6	1.682	3.1	0.5	0.692	0.832	0.6	1.	2.7	3.02
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	11	86.	86.636	118.	36.	903.455	30.058	39.6	60.	115.	118.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	12	4.	4.167	6.	3.	1.061	3.	3.	3.	5.	5.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	12	7.5	8.5	14.	4.	10.636	3.261	4.3	6.	11.5	13.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10 ##	75.	145.	300.	50.	13583.333	116.548	50.	50.	300.	300.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	10 ##	1.849	2.023	2.477	1.699	0.136	0.368	1.699	1.699	2.477	2.477
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			105.372								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	11	0.04	0.033	0.06	0.005	0.	0.019	0.006	0.02	0.05	0.06

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	12	13.95	13.65	23.7	3.3	48.452	6.961	3.9	6.95	19.95	22.71
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/12/94-12/15/98	12	4.6	6.142	12.	2.3	9.895	3.146	2.48	3.9	9.	11.49
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	12	155.	158.25	288.	55.	4810.568	69.358	60.7	106.25	196.25	279.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/24/92-12/15/98	12	10.7	10.808	13.	8.7	2.304	1.518	8.82	9.325	12.35	12.88
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	12 ##	0.75	1.258	4.	0.5	1.312	1.145	0.5	0.5	1.675	3.7
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	12	6.	6.875	17.	2.5	26.369	5.135	2.5	2.5	8.75	16.7
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	12	8.2	8.142	9.3	7.3	0.321	0.566	7.36	7.65	8.55	9.12
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	12	8.2	7.866	9.3	7.3	0.403	0.635	7.36	7.65	8.55	9.12
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	12	0.006	0.014	0.05	0.001	0.	0.015	0.001	0.003	0.023	0.045
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	12	7.45	7.433	8.5	6.6	0.337	0.58	6.63	6.9	7.775	8.41
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	12	7.447	7.136	8.5	6.6	0.433	0.658	6.63	6.9	7.775	8.41
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	12	0.036	0.073	0.251	0.003	0.007	0.083	0.004	0.017	0.135	0.236
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	12	62.5	62.417	111.	16.	949.72	30.818	18.4	36.75	87.5	110.1
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	3.5	5.458	19.	1.5	30.521	5.525	1.5	1.5	9.	16.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	12 ##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	3.	4.792	17.	1.5	23.248	4.822	1.5	1.5	7.75	14.9
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12	0.01	0.011	0.02	0.005	0.	0.006	0.005	0.006	0.018	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12	0.555	0.557	0.88	0.26	0.035	0.187	0.299	0.413	0.638	0.871
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	12	0.1	0.121	0.2	0.05	0.004	0.062	0.05	0.063	0.2	0.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	12 ##	0.05	0.067	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	12	2.45	2.6	5.6	1.1	1.305	1.143	1.25	1.85	3.	4.94

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	66.	68.167	120.	24.	967.424	31.103	25.8	42.	86.75	120.
00940	CHLORIDE, TOTAL IN WATER MG/L	12	3.5	3.417	4.	2.	0.447	0.669	2.3	3.	4.	4.
00945	SULFATE, TOTAL (MG/L AS SO4)	12	7.	7.583	13.	4.	7.356	2.712	4.3	5.25	8.75	12.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12	250.	504.167	1900.	50.	400662.879	632.979	50.	62.5	775.	1810.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12	2.389	2.376	3.279	1.699	0.328	0.573	1.699	1.774	2.866	3.256
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			237.88								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	12	0.03	0.03	0.04	0.01	0.	0.007	0.016	0.03	0.03	0.04

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	13	12.6	12.815	23.2	3.5	56.773	7.535	3.74	5.	20.7	23.04
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12	6.2	8.533	28.	3.2	51.972	7.209	3.26	3.85	9.5	24.7
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	136.	148.25	260.	80.	2890.205	53.761	87.2	111.25	154.75	256.1
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	13	10.1	10.446	13.	7.7	3.293	1.815	7.82	8.9	12.2	12.76
00310	BOD, 5 DAY, 20 DEG C MG/L	12 ##	0.5	0.833	3.	0.5	0.515	0.718	0.5	0.5	1.	2.4
00340	COD, .25N K2CR2O7 MG/L	12 ##	4.25	5.833	14.	2.5	15.652	3.956	2.5	2.5	9.	12.8
00400p	PH (STANDARD UNITS)	13	7.9	7.769	8.7	6.4	0.437	0.661	6.56	7.3	8.25	8.54
00400p	CONVERTED PH (STANDARD UNITS)	13	7.9	7.234	8.7	6.4	0.748	0.865	6.56	7.3	8.25	8.54
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	13	0.013	0.058	0.398	0.002	0.013	0.112	0.003	0.006	0.063	0.302
00403	PH, LAB, STANDARD UNITS SU	12	7.45	7.525	8.1	6.9	0.162	0.403	6.96	7.2	7.9	8.04
00403	CONVERTED PH, LAB, STANDARD UNITS	12	7.425	7.367	8.1	6.9	0.189	0.435	6.96	7.2	7.9	8.04
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.038	0.043	0.126	0.008	0.001	0.036	0.009	0.013	0.063	0.112
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	53.5	58.	109.	25.	619.818	24.896	29.5	40.75	62.	107.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12	6.	7.458	18.	1.5	28.975	5.383	1.95	3.25	8.75	18.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12 ##	1.5	1.5	1.5	0.	0.	0.	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12	5.	6.333	16.	1.5	24.379	4.937	1.5	3.	7.75	16.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12	0.01	0.01	0.02	0.005	0.	0.006	0.005	0.005	0.018	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	0.645	0.729	1.24	0.44	0.055	0.235	0.449	0.62	0.873	1.186
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.2	0.2	0.3	0.1	0.005	0.074	0.1	0.125	0.275	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12 ##	0.05	0.067	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	8	1.5	2.288	5.6	1.3	2.433	1.56	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	64.	67.083	116.	39.	598.629	24.467	40.2	46.	73.	114.5
00940	CHLORIDE, TOTAL IN WATER MG/L	12 ##	2.5	2.75	5.	2.5	0.523	0.723	2.5	2.5	2.5	4.4
00945	SULFATE, TOTAL (MG/L AS SO4)	12	6.	6.667	12.	5.	5.333	2.309	5.	5.25	6.	11.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	250.	305.	900.	50.	68027.778	260.821	55.	100.	375.	870.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	2.389	2.346	2.954	1.699	0.141	0.376	1.729	2.	2.552	2.937
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			222.064								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	12	0.03	0.034	0.08	0.01	0.001	0.024	0.01	0.02	0.045	0.08

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	12.25	12.317	20.	1.2	42.658	6.531	2.25	6.575	19.15	20.
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12	5.95	7.45	15.8	4.2	11.872	3.446	4.32	5.55	9.825	14.51
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	181.5	196.333	261.	147.	1952.061	44.182	148.8	156.75	249.75	259.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11	12.	11.782	13.8	9.1	2.026	1.423	9.34	10.6	12.8	13.68
00310	BOD, 5 DAY, 20 DEG C MG/L	12 ##	1.	0.875	2.	0.5	0.188	0.433	0.5	0.5	1.	1.7
00340	COD, .25N K2CR2O7 MG/L	12 ##	2.5	3.667	8.	2.5	3.515	1.875	2.5	2.5	5.	7.4
00400p	PH (STANDARD UNITS)	12	7.9	7.958	8.8	7.4	0.143	0.378	7.43	7.725	8.225	8.65

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	12	7.9	7.832	8.8	7.4	0.16	0.4	7.43	7.725	8.225	8.65
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	12	0.013	0.015	0.04	0.002	0.	0.011	0.003	0.006	0.019	0.037
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	12	7.9	7.867	8.3	7.3	0.084	0.29	7.36	7.625	8.1	8.24
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	12	7.9	7.771	8.3	7.3	0.094	0.307	7.36	7.625	8.1	8.24
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	12	0.013	0.017	0.05	0.005	0.	0.013	0.006	0.008	0.024	0.045
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	12	75.5	84.167	118.	58.	527.061	22.958	59.5	64.5	111.5	117.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	6.5	7.792	17.	1.5	25.43	5.043	1.95	3.5	12.5	16.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	12 ##	1.5	1.625	3.	1.5	0.188	0.433	1.5	1.5	1.5	2.55
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	12	5.	6.292	14.	1.5	21.157	4.6	1.5	2.125	10.5	14.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.009	0.01
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12	0.865	0.787	1.05	0.08	0.076	0.275	0.2	0.695	0.99	1.041
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	12	0.2	0.2	0.5	0.05	0.018	0.133	0.05	0.1	0.3	0.44
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	12	0.1	0.087	0.2	0.05	0.002	0.043	0.05	0.05	0.1	0.17
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	12	89.5	93.25	129.	56.	559.659	23.657	60.5	73.75	118.	127.2
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	12	3.5	3.708	5.	2.5	1.475	1.215	2.5	2.5	5.	5.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	12	8.5	8.917	12.	6.	6.265	2.503	6.	6.25	12.	12.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	12	250.	337.5	700.	50.	70056.818	264.682	50.	87.5	675.	700.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	12	2.389	2.356	2.845	1.699	0.203	0.45	1.699	1.849	2.828	2.845
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			226.799								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	12	0.03	0.041	0.08	0.01	0.001	0.023	0.013	0.023	0.068	0.077

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

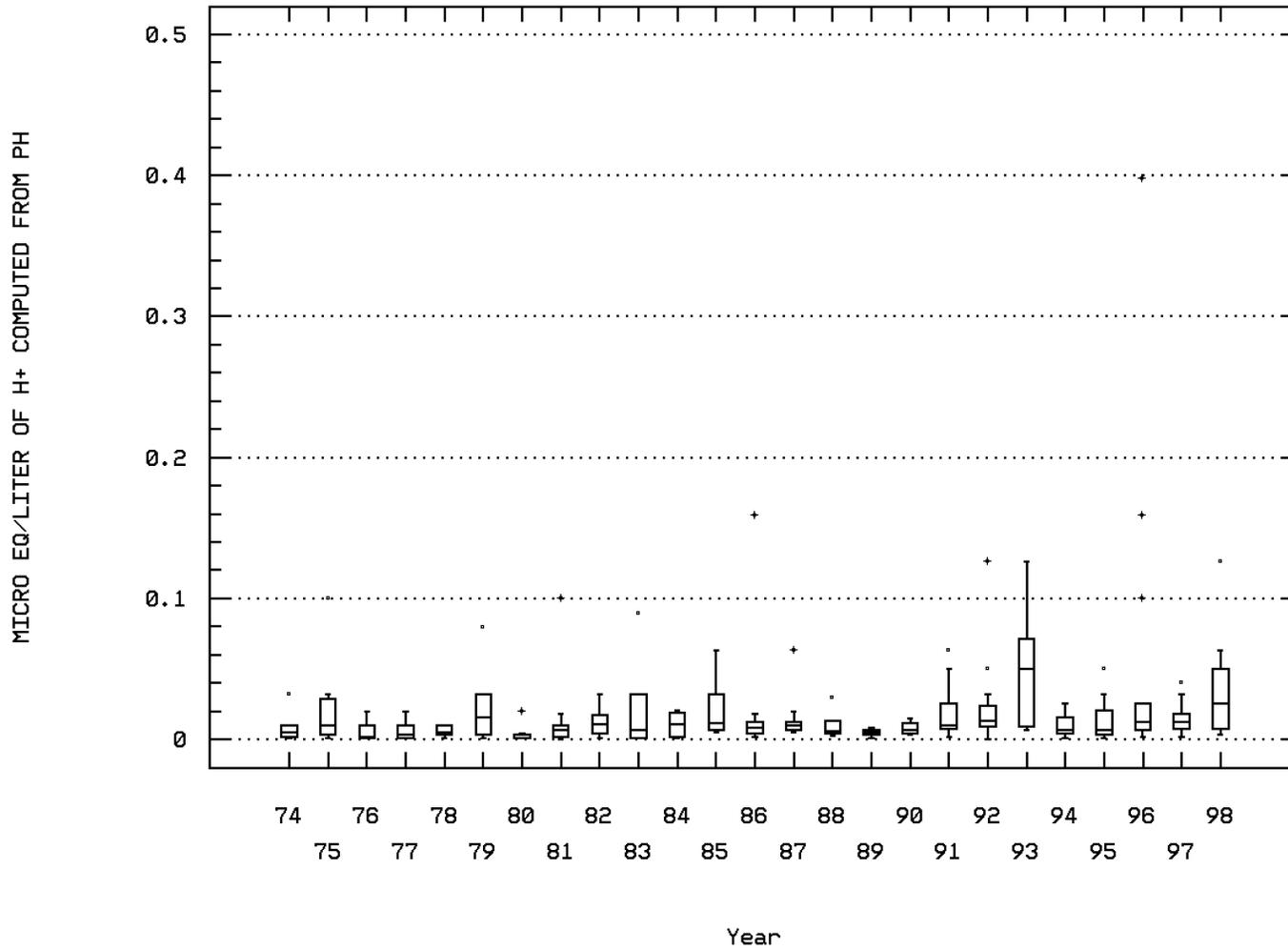
Annual Analysis for 1998 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	12	14.25	13.967	22.5	3.8	37.566	6.129	4.79	8.375	19.375	22.38
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/12/94-12/15/98	12	4.4	8.208	27.	1.4	67.788	8.233	1.55	3.2	10.2	25.65
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	12	204.	199.	390.	92.	8357.273	91.418	93.8	118.25	268.5	354.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/24/92-12/15/98	12	11.7	11.4	13.8	9.1	2.393	1.547	9.22	9.85	12.45	13.74
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	12 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	12 ##	3.75	5.833	17.	2.5	24.015	4.901	2.5	2.5	7.5	16.1
00400p	PH (STANDARD UNITS)	05/17/74-12/15/98	12	7.6	7.683	8.5	6.9	0.249	0.499	6.99	7.3	8.225	8.44
00400p	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	12	7.589	7.461	8.5	6.9	0.303	0.55	6.99	7.3	8.225	8.44
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	12	0.026	0.035	0.126	0.003	0.001	0.035	0.004	0.006	0.05	0.107
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	12	7.25	7.283	8.1	6.7	0.267	0.517	6.7	6.8	7.775	8.07
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	12	7.247	7.059	8.1	6.7	0.322	0.568	6.7	6.8	7.775	8.07
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	12	0.057	0.087	0.2	0.008	0.006	0.076	0.009	0.017	0.158	0.2
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	12	87.5	81.583	133.	29.	1385.538	37.223	30.8	47.5	116.	129.1
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	8.	9.364	23.	1.5	47.405	6.885	1.5	3.	13.	21.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	11 ##	1.5	1.864	4.	1.5	0.705	0.839	1.5	1.5	1.5	3.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	11	6.	7.409	19.	1.5	34.391	5.864	1.5	1.5	11.	18.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12 ##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.009
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	12	0.77	0.758	1.11	0.38	0.052	0.227	0.398	0.573	0.963	1.08
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	12	0.2	0.192	0.4	0.05	0.013	0.114	0.05	0.1	0.2	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	12	0.1	0.087	0.1	0.05	0.001	0.023	0.05	0.063	0.1	0.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	12	91.5	86.5	136.	34.	1556.818	39.457	34.6	48.5	126.5	134.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	12 ##	2.5	3.625	6.	2.5	2.006	1.416	2.5	2.5	5.	5.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	12	7.5	8.25	12.	5.	7.477	2.734	5.	6.	11.	11.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	12	100.	258.333	900.	50.	85378.788	292.196	50.	50.	550.	810.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	12	2.	2.159	2.954	1.699	0.231	0.481	1.699	1.699	2.734	2.901
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			144.225								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	12	0.045	0.042	0.07	0.01	0.	0.017	0.013	0.03	0.05	0.067

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0004 Parameter Code: 00400

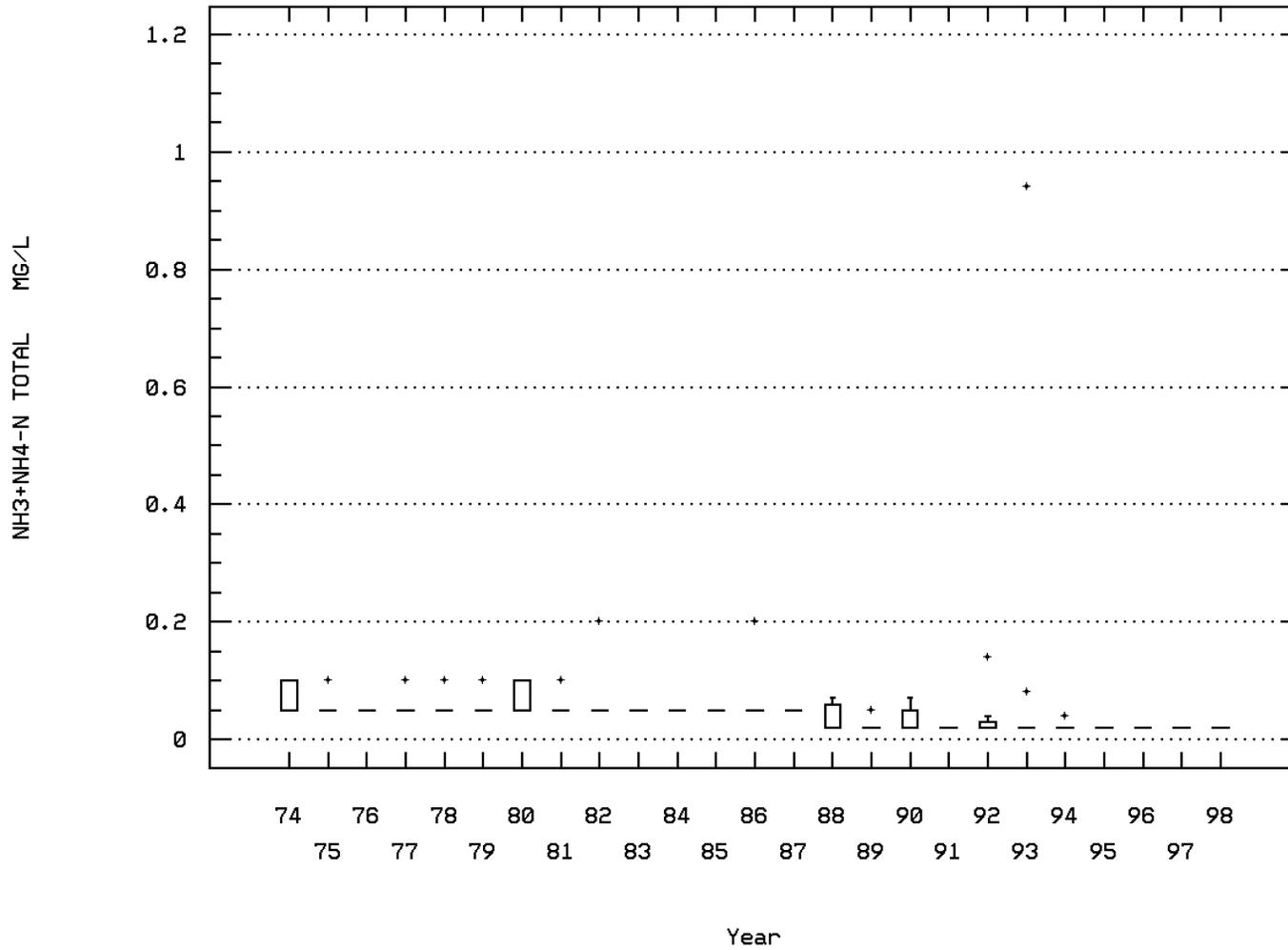
MICRO EQ/LITER OF H+ COMPUTED FROM PH



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 00610

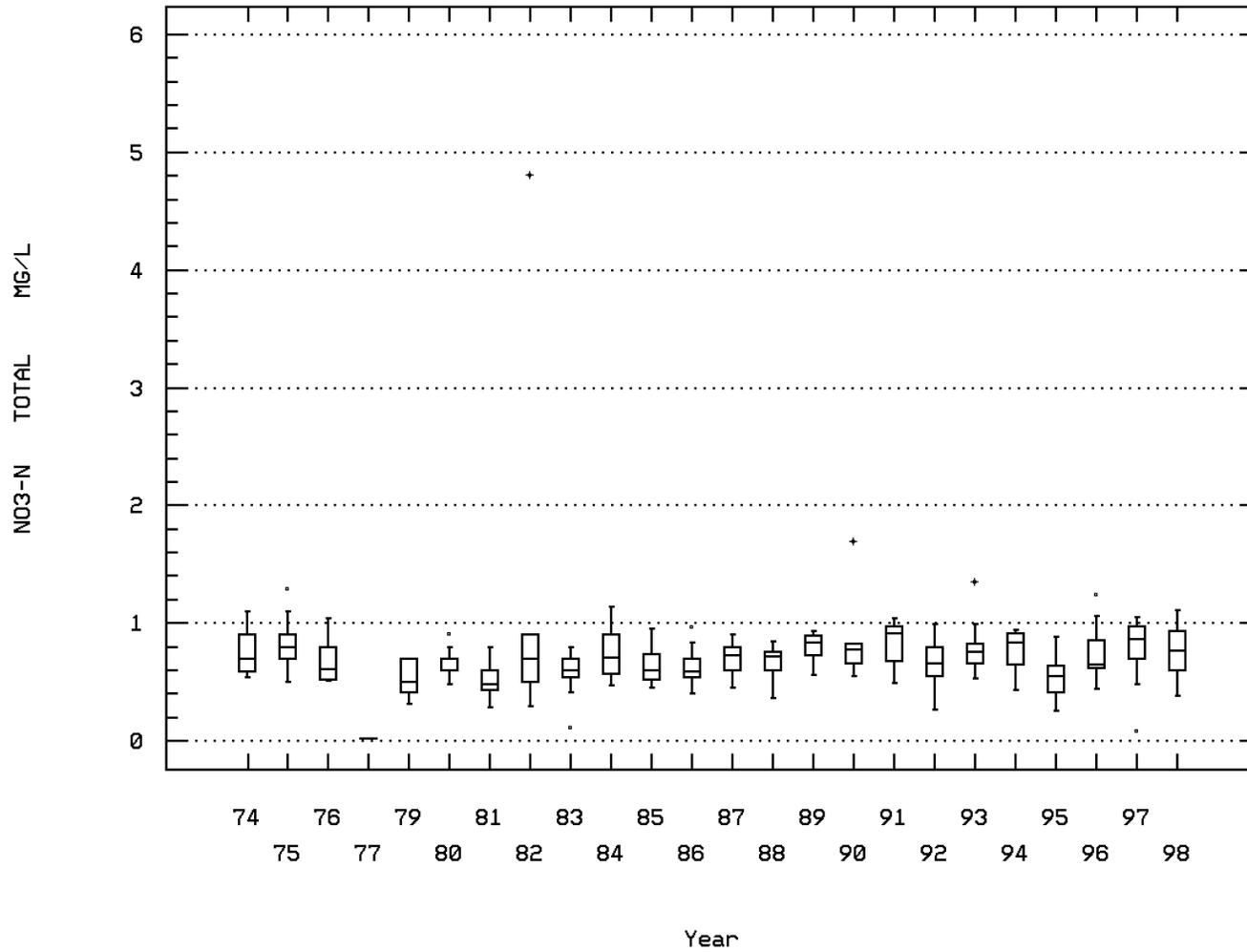
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Station: SHEN0004 Parameter Code: 00620

NITRATE NITROGEN, TOTAL (MG/L AS N)



ROUTE 664 BRIDGE - CITY OF WAYNESBORO

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	79	19.5	19.023	25.5	2.1	12.917	3.594	15.	17.2	21.	22.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	33	232.	227.848	289.	80.	2017.258	44.914	182.6	217.	248.	280.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	28	246.	232.964	288.	106.	1663.739	40.789	176.8	223.5	256.75	262.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	22	9.35	9.618	12.3	7.7	2.015	1.419	7.76	8.375	10.625	11.95
00300	OXYGEN, DISSOLVED MG/L	56	9.1	9.327	11.4	6.3	1.037	1.018	8.07	8.55	10.	10.69
00310	BOD, 5 DAY, 20 DEG C MG/L	61	1.	0.946	4.	0.5	0.277	0.526	0.5	0.5	1.	1.
00340	COD, .25N K2CR2O7 MG/L	60	5.	6.092	31.	0.5	24.987	4.999	2.	2.5	8.	11.9
00400	PH (STANDARD UNITS)	77	8.1	8.113	9.	7.	0.224	0.474	7.5	7.81	8.435	8.82
00400	CONVERTED PH (STANDARD UNITS)	77	8.1	7.856	9.	7.	0.292	0.54	7.5	7.81	8.435	8.82
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	77	0.008	0.014	0.1	0.001	0.	0.019	0.002	0.004	0.015	0.032
00403	PH, LAB, STANDARD UNITS SU	43	7.9	7.898	8.5	7.2	0.073	0.27	7.44	7.8	8.1	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	43	7.9	7.805	8.5	7.2	0.082	0.286	7.44	7.8	8.1	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	43	0.013	0.016	0.063	0.003	0.	0.012	0.006	0.008	0.016	0.037
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	42	105.	100.429	118.	40.	276.69	16.634	75.6	96.25	110.25	115.
00500	RESIDUE, TOTAL (MG/L)	13	153.	136.308	170.	63.	1252.731	35.394	63.4	123.	158.	168.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	13	33.	34.231	68.	2.	441.359	21.009	3.2	20.	52.5	66.
00510	RESIDUE, TOTAL FIXED (MG/L)	13	111.	102.077	138.	44.	912.244	30.203	49.6	76.5	125.5	134.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	61	8.	10.721	43.	1.	75.696	8.7	1.5	4.5	14.5	24.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	61	2.5	3.205	12.	1.	5.361	2.315	1.	1.5	5.	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	61	5.	7.893	37.	0.5	56.559	7.521	1.5	2.5	11.	19.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	71 ##	0.05	0.043	0.2	0.02	0.001	0.026	0.02	0.02	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	72	0.01	0.012	0.05	0.005	0.	0.009	0.005	0.005	0.01	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	68	0.725	0.767	1.69	0.32	0.063	0.251	0.479	0.59	0.9	1.064
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	71	0.2	0.239	0.9	0.05	0.023	0.152	0.1	0.1	0.3	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	58	0.1	0.104	0.4	0.05	0.004	0.064	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	37	0.04	0.047	0.17	0.01	0.001	0.03	0.02	0.03	0.055	0.082
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	58	3.	3.343	8.	0.5	3.778	1.944	1.28	1.675	5.	6.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	41	116.	111.439	136.	39.	379.302	19.476	83.2	107.	123.5	128.
00940	CHLORIDE, TOTAL IN WATER MG/L	28	4.	4.679	33.	2.5	31.8	5.639	2.5	3.	4.	6.
00945	SULFATE, TOTAL (MG/L AS SO4)	28	12.	11.179	20.	5.	8.152	2.855	7.8	9.25	12.75	14.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	67	300.	653.731	8000.	50.	1648054.048	1283.766	50.	100.	700.	1260.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	67	2.477	2.417	3.903	1.699	0.317	0.563	1.699	2.	2.845	3.099
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			261.488								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	35	0.05	0.043	0.08	0.005	0.	0.02	0.02	0.03	0.05	0.074

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	103	7.1	7.825	17.	0.1	15.598	3.949	3.3	4.7	10.7	13.74
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	39	190.	187.385	271.	56.	2987.032	54.654	129.	141.	237.	265.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	46	152.5	161.957	390.	45.	4477.909	66.917	84.9	117.75	188.75	255.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	36	12.4	12.217	14.6	9.1	1.583	1.258	10.49	11.4	12.975	13.83
00300	OXYGEN, DISSOLVED MG/L	66	11.6	11.521	14.4	7.1	2.396	1.548	9.34	10.6	12.65	13.5
00310	BOD, 5 DAY, 20 DEG C MG/L	83	1.	1.106	3.	0.5	0.279	0.528	0.5	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	84	3.	5.423	28.	0.5	27.623	5.256	1.	2.5	7.	13.
00400	PH (STANDARD UNITS)	103	8.	8.025	9.5	6.8	0.392	0.626	7.2	7.5	8.4	9.
00400	CONVERTED PH (STANDARD UNITS)	103	8.	7.661	9.5	6.8	0.526	0.725	7.2	7.5	8.4	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	103	0.01	0.022	0.158	0.	0.001	0.029	0.001	0.004	0.032	0.063
00403	PH, LAB, STANDARD UNITS SU	65	7.6	7.56	8.3	6.5	0.201	0.448	6.8	7.3	7.9	8.04
00403	CONVERTED PH, LAB, STANDARD UNITS	65	7.6	7.306	8.3	6.5	0.266	0.516	6.8	7.3	7.9	8.04
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	65	0.025	0.049	0.316	0.005	0.004	0.064	0.009	0.013	0.05	0.158
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	65	64.	77.569	673.	13.	6420.374	80.127	32.6	48.	84.	113.8
00500	RESIDUE, TOTAL (MG/L)	12	102.	106.75	181.	48.	1059.114	32.544	59.4	94.75	109.25	171.7
00505	RESIDUE, TOTAL VOLATILE (MG/L)	13	25.	25.615	37.	12.	58.256	7.633	14.4	19.5	33.	36.6
00510	RESIDUE, TOTAL FIXED (MG/L)	13	81.	85.231	145.	20.	1003.692	31.681	35.2	72.5	105.	137.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	85	4.	7.647	76.	0.5	136.987	11.704	1.5	2.5	8.	17.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	85 ##	2.	2.335	11.	0.	2.877	1.696	1.	1.5	2.5	4.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	85	2.5	6.247	65.	0.5	104.557	10.225	1.5	2.	6.	14.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	103 ##	0.05	0.041	0.2	0.02	0.001	0.028	0.02	0.02	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	103 ##	0.005	0.014	0.7	0.005	0.005	0.068	0.005	0.005	0.01	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	96	0.71	0.751	4.8	0.02	0.223	0.472	0.464	0.593	0.898	1.
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	103	0.1	0.156	0.5	0.05	0.011	0.104	0.05	0.1	0.2	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	84 ##	0.05	0.077	0.5	0.05	0.004	0.061	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	48	0.025	0.05	0.53	0.005	0.008	0.087	0.01	0.01	0.05	0.081
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	73	3.	3.179	19.	0.5	7.335	2.708	0.7	1.55	4.	6.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	63	72.	76.81	138.	24.	857.382	29.281	36.8	56.	96.	121.2
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	46	3.	4.189	33.	0.7	20.339	4.51	2.5	2.875	5.	5.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	46	6.5	7.565	14.	4.	7.496	2.738	5.	6.	8.25	12.3
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	98	100.	384.694	6800.	50.	691309.699	831.45	50.	50.	300.	1110.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	98	2.	2.159	3.833	1.699	0.292	0.54	1.699	1.699	2.477	3.045
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			144.08								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	55	0.03	0.029	0.08	0.005	0.	0.018	0.005	0.02	0.04	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0004

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/74-12/15/98	67	15.5	15.684	22.9	6.1	18.122	4.257	9.16	13.	19.3	21.26
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-08/08/89	31	160.	194.452	1093.	79.	29872.323	172.836	98.4	129.	197.	239.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/15/98	27	147.	156.222	245.	95.	1639.641	40.492	104.	131.	178.	237.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/24/92-12/15/98	23	10.1	10.265	13.	7.	1.802	1.343	8.84	9.4	11.5	11.86
00300	OXYGEN, DISSOLVED MG/L	05/17/74-04/20/92	44	10.4	10.327	13.8	5.1	2.174	1.474	8.3	9.575	11.425	11.9
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/15/98	58	1.	1.097	5.	0.5	0.587	0.766	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/15/98	58	5.	5.853	33.	0.5	26.676	5.165	1.	2.5	8.	11.3
00400	PH (STANDARD UNITS)	05/17/74-12/15/98	66	8.14	8.121	9.	6.4	0.306	0.553	7.44	7.83	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	05/17/74-12/15/98	66	8.138	7.675	9.	6.4	0.507	0.712	7.44	7.83	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/74-12/15/98	66	0.007	0.021	0.398	0.001	0.003	0.054	0.001	0.003	0.015	0.037
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/15/98	39	7.6	7.536	8.4	6.6	0.162	0.403	6.9	7.2	7.9	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/15/98	39	7.6	7.339	8.4	6.6	0.202	0.45	6.9	7.2	7.9	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/15/98	39	0.025	0.046	0.251	0.004	0.003	0.053	0.01	0.013	0.063	0.126
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/15/98	39	63.	66.564	112.	37.	379.568	19.483	47.	52.	78.	101.
00500	RESIDUE, TOTAL (MG/L)	04/30/79-08/13/92	13	108.	119.154	319.	8.	4962.808	70.447	35.2	86.	139.5	249.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/30/79-08/13/92	13	29.	30.154	56.	8.	217.474	14.747	10.	18.5	40.5	54.4
00510	RESIDUE, TOTAL FIXED (MG/L)	04/30/79-08/13/92	13	79.	95.154	263.	36.	3068.974	55.398	42.8	69.5	110.5	204.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/15/98	57	8.	10.518	56.	0.5	95.151	9.755	2.5	5.	12.5	19.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/15/98	57	2.	2.886	10.	0.	4.857	2.204	1.	1.5	3.5	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/15/98	57	6.	7.895	46.	0.5	71.221	8.439	1.5	2.5	10.	15.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/17/74-12/15/98	66 ##	0.05	0.058	0.94	0.02	0.013	0.114	0.02	0.02	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	65	0.01	0.011	0.06	0.005	0.	0.01	0.005	0.005	0.01	0.024
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/17/74-12/15/98	64	0.6	0.622	1.	0.29	0.028	0.169	0.41	0.493	0.725	0.87
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/17/74-12/15/98	64	0.2	0.285	2.6	0.05	0.164	0.405	0.1	0.1	0.3	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/15/98	56 ##	0.05	0.091	0.4	0.05	0.006	0.076	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-04/20/92	36	0.02	0.028	0.18	0.005	0.001	0.031	0.005	0.01	0.03	0.04
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-08/12/96	55	3.	3.26	11.	0.5	5.777	2.403	1.5	4.	7.	7.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/15/98	38	71.5	75.105	122.	40.	512.745	22.644	46.7	60.	85.75	118.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/15/98	29	3.	3.138	5.	2.	0.552	0.743	2.5	2.5	4.	4.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/15/98	29	6.	6.69	12.	5.	3.15	1.775	5.	5.5	7.5	9.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	59	100.	649.153	8000.	50.	2345818.235	1531.606	50.	50.	600.	1500.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/17/74-12/15/98	59	2.	2.281	3.903	1.699	0.368	0.607	1.699	1.699	2.778	3.176
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			191.055								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/17/74-12/15/98	30	0.03	0.038	0.23	0.005	0.002	0.042	0.01	0.018	0.05	0.059

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0005

NPS Station ID: SHEN0005
 Location: SOUTH RIVER NEAR WAYNESBORO, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005002303.47
 Description:

LAT/LON: 38.057504/ -78.908338

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 8.47

Agency: 112WRD
 FIPS State/County: 51820 VIRGINIA/WAYNESBORO (CITY)
 STORET Station ID(s): 01626000
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0005

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/05/68-05/21/69	2	10.	10.	16.	4.	72.	8.485	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	11/29/54-05/21/69	3	140.	174.333	291.	92.	10784.333	103.848	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	11/29/54-05/21/69	3	8.	7.667	10.	5.	6.333	2.517	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/29/54-05/21/69	3	133.	116.333	165.	51.	3457.333	58.799	**	**	**
00400	PH (STANDARD UNITS)	11/29/54-05/21/69	3	7.8	7.733	7.9	7.5	0.043	0.208	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/29/54-05/21/69	3	7.8	7.699	7.9	7.5	0.045	0.212	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/29/54-05/21/69	3	0.016	0.02	0.032	0.013	0.	0.01	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/05/68-05/21/69	2	47.	47.	76.	18.	1682.	41.012	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/29/54-05/21/69	3	70.	61.667	93.	22.	1312.333	36.226	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/05/68-05/21/69	2	0.	0.	0.	0.	0.	0.	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/05/68-05/21/69	2	0.15	0.15	0.3	0.	0.045	0.212	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/29/54-05/21/69	3	63.	56.333	84.	22.	994.333	31.533	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	11/29/54-05/21/69	3	6.	6.	8.	4.	4.	2.	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	11/29/54-05/21/69	3	17.	15.6	23.	6.8	67.08	8.19	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/29/54-05/21/69	3	5.	4.167	6.3	1.2	7.023	2.65	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/29/54-05/21/69	3	0.9	1.033	1.4	0.8	0.103	0.321	**	**	**
00931	SODIUM ADSORPTION RATIO	03/05/68-05/21/69	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**
00932	SODIUM, PERCENT	03/05/68-05/21/69	2	5.5	5.5	8.	3.	12.5	3.536	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/29/54-05/21/69	3	1.1	1.033	1.2	0.8	0.043	0.208	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/29/54-05/21/69	3	2.	2.	3.	1.	1.	1.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/29/54-05/21/69	3	5.	5.667	7.	5.	1.333	1.155	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/29/54-05/21/69	3	0.1	0.1	0.1	0.1	0.	0.	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	11/29/54-05/21/69	3	5.3	6.167	8.1	5.1	2.813	1.677	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/05/68-05/21/69	2	40.	40.	60.	20.	800.	28.284	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	11/29/54-05/21/69	3	77.	74.333	101.	45.	789.333	28.095	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/05/68-05/21/69	2	64.5	64.5	96.	33.	1984.5	44.548	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	03/05/68-05/21/69	2	30.25	30.25	35.4	25.1	53.045	7.283	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/05/68-05/21/69	2	0.1	0.1	0.14	0.06	0.003	0.057	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/29/54-05/21/69	3	2.5	1.9	2.8	0.4	1.71	1.308	**	**	**
71885	IRON (UG/L AS FE)	11/29/54-11/29/54	1	30.	30.	30.	30.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0005

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	3	0	0.00				2	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00				2	0	0.00	1	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	3	0	0.00				2	0	0.00	1	0	0.00			
	Drinking Water	250.	3	0	0.00				2	0	0.00	1	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00				2	0	0.00	1	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00				2	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	3	0	0.00				2	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0006

NPS Station ID: SHEN0006
 Location: WAYNE AVE. BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:

LAT/LON: 38.059726/ -78.895281

Agency: 21VASWCB
 FIPS State/County: 51820 VIRGINIA/WAYNESBORO (CITY)
 STORET Station ID(s): 1BSTH025.83
 Within Park Boundary: No

Date Created: 06/22/97

RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 1B67 TOPO MAP NAME: WAYNESBORO WEST, VA

Parameter Inventory for Station: SHEN0006

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/23/97-08/04/97	2	22.5	22.5	23.5	21.5	2.	1.414	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/04/97-08/04/97	1	280.	280.	280.	280.	0.	0.	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/04/97-08/04/97	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	07/23/97-08/04/97	2	7.45	7.45	7.5	7.4	0.005	0.071	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/23/97-08/04/97	2	7.447	7.447	7.5	7.4	0.005	0.071	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/23/97-08/04/97	2	0.036	0.036	0.04	0.032	0.	0.006	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/23/97-08/04/97	2	137.5	137.5	145.	130.	112.5	10.607	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/23/97-08/04/97	2	20.	20.	25.	15.	50.	7.071	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/23/97-08/04/97	2	4.	4.	5.	3.	2.	1.414	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/23/97-08/04/97	2	16.	16.	22.	10.	72.	8.485	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/23/97-08/04/97	2	4.	4.	5.	3.	2.	1.414	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/23/97-08/04/97	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/23/97-08/04/97	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	07/23/97-08/04/97	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/23/97-08/04/97	2##	5.	5.	5.	5.	0.	0.	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/23/97-08/04/97	2	9.1	9.1	14.7	3.5	62.72	7.92	**	**	**
01057	THALLIUM, DISSOLVED (UG/L AS TL)	07/23/97-08/04/97	2##	0.1	0.1	0.1	0.1	0.	0.	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	07/23/97-08/04/97	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	07/23/97-08/04/97	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/23/97-08/04/97	2##	0.75	0.75	1.	0.5	0.125	0.354	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/23/97-08/04/97	2##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	07/23/97-08/04/97	2##	0.1	0.1	0.1	0.1	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0006

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE																	
00400	PH																	
	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00										
	Fresh Chronic	9.	2	0	0.00	2	0	0.00										
	Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00										
01000	ARSENIC, DISSOLVED																	
	Fresh Acute	360.	2	0	0.00	2	0	0.00										
	Drinking Water	50.	2	0	0.00	2	0	0.00										
01025	CADMIUM, DISSOLVED																	
	Fresh Acute	3.9	2	0	0.00	2	0	0.00										
	Drinking Water	5.	2	0	0.00	2	0	0.00										
01030	CHROMIUM, DISSOLVED																	
	Drinking Water	100.	2	0	0.00	2	0	0.00										
01040	COPPER, DISSOLVED																	
	Fresh Acute	18.	2	0	0.00	2	0	0.00										
	Drinking Water	1300.	2	0	0.00	2	0	0.00										
01049	LEAD, DISSOLVED																	
	Fresh Acute	82.	2	0	0.00	2	0	0.00										
	Drinking Water	15.	2	0	0.00	2	0	0.00										
01057	THALLIUM, DISSOLVED																	
	Fresh Acute	1400.	2	0	0.00	2	0	0.00										
	Drinking Water	2.	2	0	0.00	2	0	0.00										
01065	NICKEL, DISSOLVED																	
	Fresh Acute	1400.	2	0	0.00	2	0	0.00										
	Drinking Water	100.	2	0	0.00	2	0	0.00										
01075	SILVER, DISSOLVED																	
	Fresh Acute	4.1	2	0	0.00	2	0	0.00										
	Drinking Water	100.	2	0	0.00	2	0	0.00										
01090	ZINC, DISSOLVED																	
	Fresh Acute	120.	2	0	0.00	2	0	0.00										
	Drinking Water	5000.	2	0	0.00	2	0	0.00										
01095	ANTIMONY, DISSOLVED																	
	Fresh Acute	88.	2	0	0.00	2	0	0.00										
	Drinking Water	6.	2	0	0.00	2	0	0.00										
01145	SELENIUM, DISSOLVED																	
	Fresh Acute	20.	2	0	0.00	2	0	0.00										
	Drinking Water	50.	2	0	0.00	2	0	0.00										
71890	MERCURY, DISSOLVED																	
	Fresh Acute	2.4	2	0	0.00	2	0	0.00										
	Drinking Water	2.	2	0	0.00	2	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0007

NPS Station ID: SHEN0007
 Location: SOUTH R. WAYNE ST.BR WAYNESBORO
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070007000100.00
 Description:

LAT/LON: 38.060559/ -78.895559

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 21.240
 RF3 Mile Point: 0.23

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 007 /007 /SOUTH S-1
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0007

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/22/67	4	24.	24.	25.	23.	0.833	0.913	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	06/21/67-06/23/67	3	48.	53.	64.	47.	91.	9.539	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	5	7.9	6.06	8.1	2.4	7.343	2.71	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	5	3.5	4.54	7.3	2.3	6.108	2.471	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	3	1720.	1573.333	2210.	790.	520233.333	721.272	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	06/21/67-06/22/67	3	3.236	3.159	3.344	2.898	0.054	0.233	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			1442.722								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	3	460.	696.667	1300.	330.	277233.333	526.53	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	3	2.663	2.765	3.114	2.519	0.096	0.311	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			582.199								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0007

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	2	0.40						5	2	0.40			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	3	2	0.67						3	2	0.67			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	3	3	1.00						3	3	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0008

NPS Station ID: SHEN0008
 Location: SOUTH R. WAYNE ST.BR WAYNESBORO
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070007000109.75
 Description:

LAT/LON: 38.060559/ -78.895559

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 21.240
 RF3 Mile Point: 9.75

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 060 /060 /SOUTH-S1
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0008

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	24.	24.	25.	23.	2.	1.414	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	32.5	32.5	35.	30.	12.5	3.536	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	8.7	8.7	9.3	8.1	0.72	0.849	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	3.15	3.15	4.3	2.	2.645	1.626	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.167	0.167	0.226	0.108	0.007	0.083	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	0.553	0.553	0.711	0.394	0.05	0.224	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	0.785	0.785	0.88	0.69	0.018	0.134	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	35850.	35850.	54200.	17500.	673445000.	25950.819	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	4.489	4.489	4.734	4.243	0.121	0.347	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			30797.727							
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	20900.	20900.	34800.	7000.	386420000.	19657.569	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	4.193	4.193	4.542	3.845	0.243	0.492	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			15607.69							
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	10.125	10.125	13.5	6.75	22.781	4.773	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.12	0.12	0.13	0.11	0.	0.014	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0008

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0009

NPS Station ID: SHEN0009
 Location: SOUTH RIV AT RT 664 059
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005027
 RF3 Index: 02080203059200.00
 Description:

LAT/LON: 38.060559/ -78.896948

Depth of Water: 999
 Elevation: 0
 RF1 Mile Point: 21.340
 RF3 Mile Point: 3.64

Agency: 1112A9WQ
 FIPS State/County: 51013 VIRGINIA/ARLINGTON
 STORET Station ID(s): UP-POT-059 /SHEN-059 /059 /S RIV 059
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 13.10
 Distance from RF3: 0.26

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0009

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/16/73	4	14.75	13.5	20.	4.5	42.167	6.494	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/16/73	4	10.15	10.45	12.5	9.	2.763	1.662	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-04/16/73	4	1.7	2.	3.7	0.9	1.427	1.194	**	**	**
00400	PH (STANDARD UNITS)	05/23/72-02/13/73	2	7.2	7.2	7.8	6.6	0.72	0.849	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/23/72-02/13/73	2	6.874	6.874	7.8	6.6	0.932	0.965	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/72-02/13/73	2	0.134	0.134	0.251	0.016	0.028	0.166	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	34.	34.	34.	34.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	8.	8.	8.	8.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/16/73	4	0.05	0.06	0.095	0.045	0.001	0.024	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/23/72-04/16/73	4	0.385	0.433	0.701	0.26	0.037	0.192	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/16/73	4	0.705	0.68	0.93	0.38	0.059	0.242	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/16/73	4	0.05	0.105	0.28	0.04	0.014	0.117	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/23/72-02/13/73	3	1.5	2.217	5.1	0.05	6.761	2.6	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/23/72-02/13/73	3	13.9	17.467	27.1	11.4	71.163	8.436	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-04/16/73	2##	5.5	5.5	10.	1.	40.5	6.364	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	2##	12.75	12.75	23.	2.5	210.125	14.496	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/23/72-04/16/73	3	50.	62.	133.	3.	4333.	65.826	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	127.	127.	230.	24.	21218.	145.664	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	1.871	1.871	2.362	1.38	0.482	0.694	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	44.	44.	68.	20.	1152.	33.941	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	1.567	1.567	1.833	1.301	0.141	0.376	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	0.001	0.001	0.001	0.	0.	0.001	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	3	1.	1.	1.	1.	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/16/73	4	0.095	0.153	0.34	0.08	0.016	0.126	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-02/13/73	2##	0.001	0.001	0.001	0.	0.	0.001	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0009

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00							2	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	1	0	0.00	1	0	0.00						
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	0	0.00				1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	0	0.00				1	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	2.	2	0	0.00				1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0010

NPS Station ID: SHEN0010
 Location: DUPONT CO. WAYNESBORO UPSTREAM
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005027
 RF3 Index: 02070005031500.00
 Description:

LAT/LON: 38.061115/ -78.886116

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 20.740
 RF3 Mile Point: 0.00

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 048 /048 /DUPONT 05 /138-00
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 14.70
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0010

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0011

NPS Station ID: SHEN0011
 Location: SOUTH RIVER AT WAYNESBORO, VA
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005002722.44
 Description:

LAT/LON: 38.061115/ -78.897227

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 22.59

Agency: 112WRD
 FIPS State/County: 51820 VIRGINIA/WAYNESBORO (CITY)
 STORET Station ID(s): 01626500
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.80
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0011

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060	FLOW, STREAM, MEAN DAILY CFS	09/04/30-09/04/30	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	09/04/30-09/04/30	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/04/30-09/04/30	1	128.	128.	128.	128.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	09/04/30-09/04/30	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-09/04/30	1	106.	106.	106.	106.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/04/30-09/04/30	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/04/30-09/04/30	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/04/30-09/04/30	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/04/30-09/04/30	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/04/30-09/04/30	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-09/04/30	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/04/30-09/04/30	1	13.	13.	13.	13.	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/04/30-09/04/30	1	126.	126.	126.	126.	0.	0.	**	**	**	**
71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-09/04/30	1	1.	1.	1.	1.	0.	0.	**	**	**	**
71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/04/30-09/04/30	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-09/04/30	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
71885	IRON (UG/L AS Fe)	09/04/30-09/04/30	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0011

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00940	CHLORIDE, TOTAL IN WATER	860.	1	0	0.00	1	0	0.00									
	Drinking Water					1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	250.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0012

NPS Station ID: SHEN0012
 Location: CROMPTON-SHEN WAYNESBORO OTFL 01
 Station Type: /TYPA/IND/TREATD/OUTFL/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005027
 RF3 Index: 02070006002600.00
 Description:

LAT/LON: 38.061670/ -78.885837

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 20.740
 RF3 Mile Point: 1.33

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 056 /056 /CR-SH 13 /139-01
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0012

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0013

NPS Station ID: SHEN0013
 Location: RT. 684 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080104
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 2-JAMES
 RF1 Index: 02080104
 RF3 Index: 02070007017606.86

LAT/LON: 38.065560/ -78.727226

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 2-LKN005.47
 Within Park Boundary: No

Date Created: 04/10/99

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 6 VALLEY
 RIVER: LICKINGHOLE CREEK SECTION: 10 TOPO MAP #: 174C TOPO MAP NAME: CROZET, VA

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0013

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0014

NPS Station ID: SHEN0014
 Location: JONES HOLLOW
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005011000.00
 Description:

LAT/LON: 38.065560/ -78.883337

Depth of Water: 0
 Elevation: 389

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.00

Agency: 12NSS
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 2B047100L /2BN2B047100L
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 11.90
 Distance from RF3: 0.56

On/Off RF1:
 On/Off RF3:

THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS, AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS. EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988) WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN; (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0014

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/28/86-04/11/86	2	12.7	12.7	13.3	12.1	0.72	0.849	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/28/86-04/11/86	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/28/86-04/11/86	2	12.5	12.5	15.	10.	12.5	3.536	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/28/86-04/11/86	2	101.5	101.5	105.	98.	24.5	4.95	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/28/86-04/11/86	2	11.45	11.45	12.	10.9	0.605	0.778	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/28/86-04/11/86	2	8.35	8.35	8.8	7.9	0.405	0.636	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/28/86-04/11/86	2	8.15	8.15	8.8	7.9	0.485	0.697	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/28/86-04/11/86	2	0.007	0.007	0.013	0.002	0.	0.008	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/28/86-04/11/86	2	343.15	343.15	391.3	295.	4636.845	68.094	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/28/86-04/11/86	2	19.5	19.5	23.	16.	24.5	4.95	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/28/86-04/11/86	2	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/28/86-04/11/86	2	0.95	0.95	1.	0.9	0.005	0.071	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/28/86-04/11/86	2	4.	4.	4.7	3.3	0.98	0.99	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/28/86-04/11/86	2	8.05	8.05	8.4	7.7	0.245	0.495	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/28/86-04/11/86	2	3.1	3.1	3.2	3.	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/28/86-04/11/86	2	5.695	5.695	5.73	5.66	0.002	0.049	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/28/86-04/11/86	2	1.17	1.17	1.22	1.12	0.005	0.071	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/28/86-04/11/86	2	11.	11.	12.	10.	2.	1.414	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/28/86-04/11/86	2	12.35	12.35	13.	11.7	0.845	0.919	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0014

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/28/86-04/11/86	2	0.045	0.045	0.05	0.04	0.	0.007	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/28/86-04/11/86	2	5.25	5.25	5.7	4.8	0.405	0.636	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/28/86-04/11/86	2	7.5	7.5	8.	7.	0.5	0.707	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/28/86-04/11/86	2	24.5	24.5	38.	11.	364.5	19.092	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/28/86-04/11/86	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
71885	IRON (UG/L AS FE)	03/28/86-04/11/86	2	15.99	15.99	31.98	0.	511.36	22.613	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/28/86-04/11/86	2	1275.	1275.	1275.	1275.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/28/86-04/11/86	2	0.95	0.95	1.	0.9	0.005	0.071	**	**	**	**
83509	STREAM, WIDTH METER	03/28/86-04/11/86	2	5.	5.	5.	5.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0014

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00						2	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	0	0.00						2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0015

NPS Station ID: SHEN0015
 Location: SOUTH RIV AT BROAD WAYNESBORO 60
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005027
 RF3 Index: 02070005002720.49
 Description:

LAT/LON: 38.069170/ -78.885004

Depth of Water: 999
 Elevation: 0
 RF1 Mile Point: 20.280
 RF3 Mile Point: 21.00

Agency: 1112A9WQ
 FIPS State/County: 51013 VIRGINIA/ARLINGTON
 STORET Station ID(s): UP-POT-060 /SHEN-060 /060 /S RIV 060
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0015

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/17/73	3	7.7	9.733	15.5	6.	25.663	5.066	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/17/73	4	8.	7.3	12.2	1.	22.1	4.701	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-04/17/73	4	2.8	2.95	5.5	0.7	3.877	1.969	**	**	**
00400	PH (STANDARD UNITS)	05/23/72-02/13/73	2	7.2	7.2	7.8	6.6	0.72	0.849	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/23/72-02/13/73	2	6.874	6.874	7.8	6.6	0.932	0.965	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/72-02/13/73	2	0.134	0.134	0.251	0.016	0.028	0.166	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	37.	37.	37.	37.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	13.	13.	13.	13.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/17/73	4	1.343	1.883	4.2	0.645	2.564	1.601	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/23/72-04/17/73	4	1.936	2.512	5.114	1.06	3.227	1.796	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/17/73	4	0.625	0.535	0.81	0.08	0.122	0.35	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/17/73	4	0.185	3.613	14.	0.08	47.959	6.925	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-04/17/73	3	4.4	6.633	11.4	4.1	17.063	4.131	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/23/72-04/17/73	4	14.	18.05	41.3	2.9	273.63	16.542	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-04/17/73	2	16.5	16.5	23.	10.	84.5	9.192	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-04/17/73	3	32.	5345.667	16000.	5.	85136296.333	9226.933	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/23/72-04/17/73	3	218.	5407.	16000.	3.	84170293.	9174.437	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/17/73	2 ##	1205.	1205.	2400.	10.	2856050.	1689.985	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/17/73	2 ##	2.19	2.19	3.38	1.	2.833	1.683	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/17/73	2 ##	154.919	154.919	2400.	10.	2856050.	1689.985	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-02/13/73	1	790.	790.	790.	790.	0.	0.	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-02/13/73	1	2.898	2.898	2.898	2.898	0.	0.	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-02/13/73	1	790.	790.	790.	790.	0.	0.	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-02/13/73	2	1.	1.	1.	1.	0.	0.	**	**	**
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	04/17/73-04/17/73	1 ##	50.	50.	50.	50.	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/17/73	4	0.29	0.52	1.27	0.23	0.251	0.501	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-02/13/73	2 ##	0.001	0.001	0.001	0.	0.	0.001	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0015

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	1	0.25	1	0	0.00	1	0	0.00	2	1	0.50			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00							2	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	3	1	0.33	1	0	0.00	1	0	0.00	1	1	1.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	1	0.50				1	1	1.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	1	1.00				1	1	1.00						
39370 DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	0&	0	0.00												
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	2.	2	0	0.00				1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0016

NPS Station ID: SHEN0016
 Location: SOUTH R. AT RTE 250 WAYNESBORO,VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: TH ATLANTIC
 Minor Basin: POTOMAC R
 RF1 Index: 02070005027
 RF3 Index: 02070005019000.00
 Description:

LAT/LON: 38.069448/ -78.885004

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 19.180
 RF3 Mile Point: 5.41

Agency: 1112A9WQ
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): ER38
 Within Park Boundary: No

Date Created: 05/31/80

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 28.00
 Distance from RF3: 0.39

On/Off RF1: ON
 On/Off RF3:

Parameter Inventory for Station: SHEN0016

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01002	ARSENIC, TOTAL (UG/L AS AS)	05/01/79-05/01/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	05/01/79-05/01/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/01/79-05/01/79	1	5.	5.	5.	5.	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/01/79-05/01/79	1	64.	64.	64.	64.	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/01/79-05/01/79	1	7.	7.	7.	7.	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/01/79-05/01/79	1##	10.	10.	10.	10.	0.	0.	**	**	**
01059	THALLIUM, TOTAL (UG/L AS TL)	05/01/79-05/01/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	05/01/79-05/01/79	1	130.	130.	130.	130.	0.	0.	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	05/01/79-05/01/79	1##	5.	5.	5.	5.	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/01/79-05/01/79	1	68.	68.	68.	68.	0.	0.	**	**	**
01097	ANTIMONY, TOTAL (UG/L AS SB)	05/01/79-05/01/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	05/01/79-05/01/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34671	PCB - 1016 TOTWUG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	05/01/79-05/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/01/79-05/01/79	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0016

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01002 ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00							1	0	0.00			
	Drinking Water	50.	1	0	0.00							1	0	0.00			
01012 BERYLLIUM, TOTAL	Fresh Acute	130.	1	0	0.00							1	0	0.00			
	Drinking Water	4.	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	1	1.00							1	1	1.00			
	Drinking Water	5.	1	1	1.00							1	1	1.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
	Drinking Water	100.	1	1	1.00							1	1	1.00			
01077 SILVER, TOTAL	Fresh Acute	4.1	0 &	0	0.00												
	Drinking Water	100.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
01097 ANTIMONY, TOTAL	Fresh Acute	88.	1	0	0.00							1	0	0.00			
	Drinking Water	6.	1	0	0.00							1	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00							1	0	0.00			
	Drinking Water	50.	1	0	0.00							1	0	0.00			
34356 ENDOSULFAN, BETA, TOTAL	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
34361 ENDOSULFAN, ALPHA, TOTAL	Fresh Acute	0.22	1	0	0.00							1	0	0.00			
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	1	0	0.00							1	0	0.00			
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	1	0	0.00							1	0	0.00			
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	1	0	0.00							1	0	0.00			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	1	0	0.00							1	0	0.00			
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1	0	0.00							1	0	0.00			
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00							1	0	0.00			
	Drinking Water	3.	1	0	0.00							1	0	0.00			
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.4	1	0	0.00							1	0	0.00			
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0017

NPS Station ID: SHEN0017 LAT/LON: 38.069448/ -78.885281
 Location: ROUTE 250 BYPASS IN WAYNESBORO - AUGUSTA COUNTY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005002715.60 RF3 Mile Point: 16.51
 Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 0067 TOPO MAP NAME: WAYNESBORO WEST, VIRGINIA

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BSTH024.70
 Within Park Boundary: No

Date Created: 06/22/91

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.60
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	99	16.7	16.238	28.9	1.5	49.086	7.006	6.7	10.6	22.2	25.6
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/18/71-07/20/71	4	10.5	10.125	15.	4.5	20.063	4.479	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	97	9.4	9.342	15.	2.5	5.337	2.31	6.6	8.	10.9	11.8
00310	BOD, 5 DAY, 20 DEG C MG/L	12/03/68-09/17/76	12	7.95	8.317	22.	2.	31.662	5.627	2.	4.725	9.375	20.02
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	97	8.	8.167	10.	4.8	0.548	0.74	7.3	7.75	8.75	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	97	8.	6.747	10.	4.8	2.586	1.608	7.3	7.75	8.75	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	97	0.01	0.179	15.849	0.	2.585	1.608	0.001	0.002	0.018	0.05
00403	PH, LAB, STANDARD UNITS SU	12/03/68-09/28/71	8	7.35	7.525	8.9	6.9	0.385	0.62	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/03/68-09/28/71	8	7.347	7.302	8.9	6.9	0.442	0.665	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/03/68-09/28/71	8	0.045	0.05	0.126	0.001	0.002	0.04	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/03/68-09/28/71	8	73.	82.625	178.	48.	1577.696	39.72	**	**	**	**
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	09/28/71-09/28/71	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/03/68-05/29/70	7	259.	257.286	347.	169.	4421.571	66.495	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/03/68-05/29/70	7	78.	91.571	206.	55.	2917.952	54.018	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/03/68-05/29/70	7	177.	165.714	221.	113.	1611.905	40.149	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	26.	28.286	56.	11.	226.571	15.052	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	13.	13.714	28.	7.	50.238	7.088	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	9.	14.571	42.	4.	170.619	13.062	**	**	**	**
00545	RESIDUE, SETTLEABLE (ML/L)	12/03/68-12/03/68	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	65	0.3	0.692	2.599	0.01	0.583	0.763	0.05	0.05	1.199	2.099
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	64	0.015	0.055	0.45	0.005	0.008	0.088	0.005	0.01	0.05	0.175
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	48	1.144	1.364	3.699	0.02	0.792	0.89	0.467	0.748	1.597	3.071
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	65	1.299	1.601	6.	0.1	1.717	1.31	0.3	0.6	2.324	3.219
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	12/03/76-03/01/79	14	2.1	2.771	6.	0.39	3.117	1.765	0.695	1.425	4.125	5.75
00660	PHOSPHATE, ORTHO (MG/L AS P04)	12/03/68-08/03/69	4	0.085	0.09	0.15	0.04	0.002	0.05	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/17/76-09/17/76	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/28/71-09/28/71	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	11 ##	1.5	1.682	2.5	0.5	0.664	0.815	0.6	1.	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	14 ##	5.	5.75	20.	0.5	18.26	4.273	2.75	5.	5.	12.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	23 ##	5.	17.391	100.	5.	595.158	24.396	5.	5.	20.	60.
01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	23 ##	5.	8.696	30.	5.	41.403	6.435	5.	5.	10.	20.
01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	3	300.	366.667	600.	200.	43333.333	208.167	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	20	5.	8.45	30.	1.	42.261	6.501	4.1	5.	10.	19.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	2	70.	70.	90.	50.	800.	28.284	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	13 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-08/29/78	23	10.	33.043	170.	5.	2049.407	45.27	5.	40.	124.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/07/68-09/08/70	13	4600.	28333.077	240000.	430.	4170131056.41	64576.552	1218.	3350.	23000.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/07/68-09/08/70	13	3.663	3.899	5.38	2.633	0.46	0.678	2.932	3.507	4.362
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			7930.561							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	82	200.	1420.732	22000.	50.	9638885.878	3104.656	50.	50.	1025.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	82	2.301	2.479	4.342	1.699	0.576	0.759	1.699	1.699	3.01
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			301.383							
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	06/16/71-06/16/71	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	03/12/76-03/12/76	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	61	0.1	0.108	0.4	0.05	0.006	0.077	0.05	0.05	0.1
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	61	0.06	0.089	0.37	0.005	0.005	0.071	0.04	0.05	0.1
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	24 ##	0.25	0.256	0.5	0.15	0.003	0.056	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0017

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	1	0	0.00			3	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	97	5	0.05	30	5	0.17	43	0	0.00	24	0	0.00		
00400	PH	Fresh Chronic	9.	97	16	0.16	29	6	0.21	44	6	0.14	24	4	0.17		
		Other-Lo Lim.	6.5	97	1	0.01	29	0	0.00	44	1	0.02	24	0	0.00		
00403	PH, LAB	Fresh Chronic	9.	8	0	0.00	2	0	0.00	3	0	0.00	3	0	0.00		
		Other-Lo Lim.	6.5	8	0	0.00	2	0	0.00	3	0	0.00	3	0	0.00		
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	64	0	0.00	18	0	0.00	30	0	0.00	16	0	0.00		
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	48	0	0.00	14	0	0.00	21	0	0.00	13	0	0.00		
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	14	0	0.00	4	0	0.00	8	0	0.00	2	0	0.00		
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00								
		Drinking Water	250.	1	0	0.00	1	0	0.00								
01002	ARSENIC, TOTAL	Fresh Acute	360.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00		
		Drinking Water	50.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00		
01027	CADMIUM, TOTAL	Fresh Acute	3.9	2 &	1	0.50	1	0	0.00	1	0	0.00	1	1	1.00		
		Drinking Water	5.	2 &	1	0.50	1	0	0.00	1	0	0.00	1	1	1.00		
01034	CHROMIUM, TOTAL	Drinking Water	100.	23	1	0.04	7	0	0.00	9	1	0.11	7	0	0.00		
01042	COPPER, TOTAL	Fresh Acute	18.	23	3	0.13	7	0	0.00	9	1	0.11	7	2	0.29		
		Drinking Water	1300.	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00		
01051	LEAD, TOTAL	Fresh Acute	82.	20	0	0.00	7	0	0.00	8	0	0.00	5	0	0.00		
		Drinking Water	15.	20	2	0.10	7	1	0.14	8	1	0.13	5	0	0.00		
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	13	0	0.00	5	0	0.00	4	0	0.00	4	0	0.00		
		Drinking Water	100.	13	0	0.00	5	0	0.00	4	0	0.00	4	0	0.00		
01092	ZINC, TOTAL	Fresh Acute	120.	23	2	0.09	7	1	0.14	9	1	0.11	7	0	0.00		
		Drinking Water	5000.	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00		
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	13	12	0.92	7	6	0.86	2	2	1.00	4	4	1.00		
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	82	45	0.55	22	13	0.59	41	22	0.54	19	10	0.53		
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1	0	0.00							1	0	0.00		
		Drinking Water	2.	1	0	0.00							1	0	0.00		
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00				1	0	0.00					
71900	MERCURY, TOTAL	Fresh Acute	2.4	24	0	0.00	8	0	0.00	9	0	0.00	7	0	0.00		
		Drinking Water	2.	24	0	0.00	8	0	0.00	9	0	0.00	7	0	0.00		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	4	21.15	19.325	27.2	7.8	80.369	8.965	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	4	3.5	4.375	8.	2.5	6.229	2.496	**	**	**	**
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	4	8.3	8.275	8.5	8.	0.049	0.222	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	4	8.289	8.232	8.5	8.	0.052	0.227	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	4	0.005	0.006	0.01	0.003	0.	0.003	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	1.299	1.299	1.299	1.299	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	1	0.44	0.44	0.44	0.44	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	1	2.799	2.799	2.799	2.799	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	3	17.8	17.8	25.6	10.	60.84	7.8	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	3	6.8	6.6	9.2	3.8	7.32	2.706	**	**	**	**
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	3	7.8	7.8	8.3	7.3	0.25	0.5	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	3	7.8	7.626	8.3	7.3	0.295	0.544	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	3	0.016	0.024	0.05	0.005	0.001	0.024	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	1.75	1.286	2.099	0.01	1.252	1.119	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	0.02	0.067	0.17	0.01	0.008	0.09	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	3	0.44	0.487	0.63	0.39	0.016	0.127	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	3	2.479	2.129	3.029	0.88	1.246	1.116	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	9	20.6	18.344	27.8	7.8	58.163	7.626	7.8	11.4	25.3	27.8
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	9	7.8	8.422	12.4	6.2	5.394	2.323	6.2	6.5	10.8	12.4
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	9	8.	8.222	9.2	7.4	0.467	0.683	7.4	7.65	8.9	9.2
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	9	8.	7.875	9.2	7.4	0.603	0.776	7.4	7.65	8.9	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	9	0.01	0.013	0.04	0.001	0.	0.014	0.001	0.002	0.024	0.04
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	1.399	1.533	2.199	1.	0.373	0.611	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	2##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	2	0.645	0.645	0.79	0.5	0.042	0.205	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	3	2.349	2.316	3.099	1.5	0.64	0.8	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2##	375.	375.	700.	50.	211250.	459.619	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2##	2.272	2.272	2.845	1.699	0.657	0.81	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				187.083								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	3	0.1	0.1	0.15	0.05	0.003	0.05	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	3	0.04	0.06	0.1	0.04	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	12	16.4	14.633	23.3	3.3	45.213	6.724	3.99	7.8	20.275	23.15
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	12	9.8	9.658	15.	3.	10.288	3.208	4.14	7.85	11.65	14.58
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	12	7.9	8.017	10.	4.8	1.86	1.364	5.55	7.425	8.65	10.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	12	7.889	5.874	10.	4.8	6.866	2.62	5.55	7.425	8.65	10.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	12	0.013	1.335	15.849	0.	20.89	4.571	0.	0.002	0.038	11.109
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	600.	4737.5	22000.	50.	43486875.	6594.458	95.	300.	8000.	17920.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.772	3.09	4.342	1.699	0.728	0.853	1.88	2.477	3.903	4.217
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			1229.406								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	12	15.3	13.85	20.	5.	26.237	5.122	5.18	10.725	18.175	19.82
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	12	9.4	9.333	11.8	6.6	3.188	1.785	6.6	7.85	10.95	11.8
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	12	7.9	7.875	9.2	6.9	0.624	0.79	6.93	7.05	8.5	9.08
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	12	7.889	7.399	9.2	6.9	0.871	0.933	6.93	7.05	8.5	9.08
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	12	0.013	0.04	0.126	0.001	0.002	0.046	0.001	0.003	0.091	0.118
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	1.039	1.039	1.039	1.039	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	1	0.79	0.79	0.79	0.79	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	1	1.549	1.549	1.549	1.549	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10	1450.	2270.	6000.	100.	6102333.333	2470.29	100.	100.	5100.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10	3.139	2.893	3.778	2.	0.646	0.804	2.	2.	3.705	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			781.857								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	11	16.7	15.964	25.	5.6	45.043	6.711	5.92	7.8	21.1	24.88
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	11	8.7	9.318	12.	6.6	3.158	1.777	6.84	7.8	11.	11.92
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.	8.173	9.	7.3	0.272	0.522	7.34	8.	8.7	8.96
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.	7.907	9.	7.3	0.35	0.592	7.34	8.	8.7	8.96
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	11	0.01	0.012	0.05	0.001	0.	0.015	0.001	0.002	0.01	0.046
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	1.5	1.505	2.599	0.22	0.586	0.766	0.336	1.	2.299	2.559
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.03	0.064	0.31	0.01	0.008	0.088	0.01	0.01	0.08	0.27
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	11	0.85	0.927	1.379	0.69	0.052	0.228	0.7	0.77	1.189	1.347
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	2.599	3.208	6.	0.5	3.377	1.838	0.66	1.799	4.299	6.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	800.	1377.273	6000.	50.	3140181.818	1772.056	50.	50.	2400.	5320.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.903	2.723	3.778	1.699	0.549	0.741	1.699	1.699	3.38	3.706
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			528.023								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.086	0.2	0.05	0.002	0.045	0.05	0.05	0.1	0.18
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.05	0.069	0.1	0.04	0.001	0.025	0.042	0.05	0.1	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	11	20.	17.627	26.7	6.7	47.568	6.897	6.8	12.2	23.9	26.36
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	11	9.4	9.518	11.8	6.6	2.29	1.513	6.84	8.6	11.	11.64

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.	8.055	8.5	7.5	0.135	0.367	7.5	7.8	8.5	8.5
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.	7.916	8.5	7.5	0.156	0.395	7.5	7.8	8.5	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	11	0.01	0.012	0.032	0.003	0.	0.01	0.003	0.003	0.016	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.6	0.936	2.099	0.2	0.496	0.704	0.2	0.3	1.599	2.039
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.01	0.055	0.25	0.005	0.007	0.085	0.005	0.005	0.12	0.234
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	11	1.229	1.076	2.299	0.02	0.446	0.668	0.11	0.6	1.389	2.215
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	1.5	1.618	3.399	0.3	1.143	1.069	0.34	0.5	2.699	3.319
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	100.	640.909	3600.	50.	1089409.091	1043.748	50.	50.	800.	3060.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.	2.327	3.556	1.699	0.485	0.697	1.699	1.699	2.903	3.436
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			212.399								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.118	0.3	0.05	0.009	0.093	0.05	0.05	0.1	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11 ##	0.05	0.091	0.3	0.05	0.007	0.083	0.05	0.05	0.1	0.28

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	12	15.	15.317	26.1	3.3	56.643	7.526	4.65	9.1	23.025	25.59
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	12	10.45	10.433	11.7	9.3	0.45	0.671	9.33	10.05	10.925	11.49
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	12	8.1	8.258	9.	7.5	0.343	0.585	7.5	7.8	8.875	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	12	8.089	7.963	9.	7.5	0.438	0.662	7.5	7.8	8.875	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	12	0.008	0.011	0.032	0.001	0.	0.011	0.001	0.001	0.016	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.1	0.318	1.	0.05	0.121	0.347	0.05	0.05	0.6	0.96
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.01	0.037	0.17	0.005	0.002	0.05	0.005	0.005	0.05	0.15
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	9	1.589	1.694	2.779	0.89	0.512	0.715	0.89	1.025	2.469	2.779
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	0.8	0.8	1.899	0.2	0.262	0.511	0.22	0.3	1.199	1.779
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12 ##	50.	145.833	500.	50.	22026.515	148.413	50.	50.	275.	440.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12 ##	1.699	1.987	2.699	1.699	0.152	0.389	1.699	1.699	2.433	2.632
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			97.107								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.105	0.3	0.05	0.006	0.079	0.05	0.05	0.1	0.28
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.06	0.07	0.12	0.02	0.001	0.032	0.024	0.05	0.1	0.116

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	10	17.5	17.06	28.9	5.6	47.476	6.89	6.04	11.65	22.35	28.29
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	9	9.7	10.444	12.5	9.	1.87	1.368	9.	9.3	12.	12.5
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	10	8.85	8.56	9.2	7.6	0.378	0.615	7.61	7.775	9.	9.18
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	10	8.847	8.155	9.2	7.6	0.56	0.748	7.61	7.775	9.	9.18
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	10	0.001	0.007	0.025	0.001	0.	0.009	0.001	0.001	0.017	0.025
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11 ##	0.05	0.082	0.4	0.05	0.011	0.106	0.05	0.05	0.05	0.33
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.02	0.045	0.18	0.005	0.004	0.061	0.005	0.01	0.03	0.174
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	10	2.629	2.421	3.699	1.099	0.934	0.966	1.131	1.494	3.244	3.667
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	0.8	0.854	1.5	0.3	0.184	0.429	0.32	0.4	1.199	1.46
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	200.	618.182	2500.	50.	912636.364	955.32	50.	50.	800.	2500.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.301	2.325	3.398	1.699	0.433	0.658	1.699	1.699	2.903	3.398
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			211.306								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.1	0.2	0.05	0.002	0.039	0.05	0.1	0.1	0.18
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.07	0.08	0.21	0.02	0.003	0.058	0.022	0.04	0.09	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	6	12.1	14.15	27.	1.5	94.479	9.72	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	6	9.2	10.633	14.4	8.5	6.751	2.598	**	**	**	**
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	6	8.	8.133	9.	7.1	0.511	0.715	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	6	8.	7.708	9.	7.1	0.728	0.853	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	6	0.01	0.02	0.079	0.001	0.001	0.03	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	5	0.2	0.49	1.399	0.05	0.325	0.57	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	5	0.24	0.195	0.45	0.005	0.035	0.186	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	5	1.299	1.619	3.099	0.1	1.291	1.136	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5	200.	460.	1800.	50.	566750.	752.828	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5	2.301	2.251	3.255	1.699	0.406	0.637	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			178.26								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	5	0.1	0.08	0.1	0.05	0.001	0.027	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	5	0.1	0.099	0.19	0.005	0.005	0.071	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	7	21.	21.314	26.5	17.	17.608	4.196	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	7	9.6	9.071	10.4	7.7	1.456	1.207	**	**	**	**
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	5	9.	8.8	9.	8.1	0.155	0.394	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	5	9.	8.613	9.	8.1	0.199	0.446	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	5	0.001	0.002	0.008	0.001	0.	0.003	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	6##	0.05	0.067	0.1	0.05	0.001	0.026	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	6	0.01	0.013	0.04	0.005	0.	0.013	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	6	1.05	1.033	1.5	0.5	0.191	0.437	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6	100.	508.333	2600.	50.	1050416.667	1024.898	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6	2.	2.186	3.415	1.699	0.377	0.614	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			153.341								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	6	0.2	0.208	0.4	0.05	0.016	0.128	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	6	0.21	0.203	0.37	0.04	0.013	0.114	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	2	6.	6.	7.	5.	1.414	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	1	11.5	11.5	11.5	11.5	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	2	7.5	7.5	7.5	7.5	0.	0.	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	2	7.5	7.5	7.5	7.5	0.	0.	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	2	0.032	0.032	0.032	0.032	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	2##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	2	0.4	0.4	0.6	0.2	0.08	0.283	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2##	50.	50.	50.	50.	0.	0.	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2##	1.699	1.699	1.699	1.699	0.	0.	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			50.							
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	2	0.045	0.045	0.07	0.02	0.001	0.035	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	31	23.9	23.11	28.9	16.7	12.199	3.493	17.16	20.	26.1	27.1
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	30	7.9	7.71	12.2	2.5	6.153	2.481	3.08	6.5	9.6	10.36
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	29	8.5	8.486	10.	7.2	0.337	0.58	7.8	8.1	8.9	9.2
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	29	8.5	8.128	10.	7.2	0.47	0.685	7.8	8.1	8.9	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	29	0.003	0.007	0.063	0.	0.	0.013	0.001	0.001	0.008	0.016
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	18	0.65	0.952	2.599	0.05	0.92	0.959	0.05	0.05	1.874	2.419
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	18	0.015	0.057	0.45	0.005	0.011	0.107	0.005	0.01	0.05	0.198
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	14	1.839	1.929	3.379	0.63	0.921	0.96	0.74	1.107	2.852	3.234
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	18	1.6	2.218	6.	0.3	2.962	1.721	0.48	0.875	3.122	6.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	22	250.	1270.455	8000.	50.	5157775.974	2271.074	50.	87.5	975.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	22	2.389	2.526	3.903	1.699	0.526	0.726	1.699	1.925	2.985	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			335.699								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	17	0.1	0.156	0.3	0.05	0.007	0.083	0.09	0.1	0.2	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	17	0.1	0.139	0.3	0.04	0.005	0.074	0.048	0.09	0.195	0.268

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	44	10.	10.173	21.1	1.5	21.035	4.586	5.	6.775	13.025	16.85
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	43	10.7	10.674	15.	7.8	2.909	1.705	8.2	9.3	11.8	13.1
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	44	7.8	7.8	9.	4.8	0.561	0.749	7.05	7.5	8.	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	44	7.8	6.413	9.	4.8	2.529	1.59	7.05	7.5	8.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	44	0.016	0.386	15.849	0.001	5.691	2.386	0.001	0.01	0.032	0.09
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	30	0.21	0.61	2.299	0.05	0.486	0.697	0.05	0.05	1.104	1.599
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	30	0.01	0.045	0.31	0.005	0.006	0.078	0.005	0.005	0.035	0.177
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	21	1.	1.057	2.189	0.02	0.27	0.519	0.44	0.755	1.459	1.821
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	30	1.149	1.432	4.299	0.1	1.436	1.198	0.21	0.4	2.382	3.089
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	41	200.	1454.878	22000.	50.	14019100.61	3744.209	50.	50.	800.	4560.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	41	2.301	2.426	4.342	1.699	0.58	0.762	1.699	1.699	2.903	3.656
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			266.613								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	28 ##	0.075	0.096	0.4	0.05	0.006	0.08	0.05	0.05	0.1	0.21
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	28	0.05	0.075	0.37	0.005	0.005	0.074	0.02	0.04	0.09	0.15

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0017

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	24	17.8	18.483	27.	11.7	14.63	3.825	12.75	16.1	21.8	23.6
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	24	9.05	8.996	11.8	6.6	2.29	1.513	6.7	7.85	10.35	11.1
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	24	8.5	8.454	10.	7.4	0.354	0.595	7.65	8.	8.875	9.1
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	24	8.5	8.123	10.	7.4	0.469	0.685	7.65	8.	8.875	9.1
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	24	0.003	0.008	0.04	0.	0.	0.01	0.001	0.001	0.01	0.024
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	17	0.4	0.562	2.199	0.01	0.367	0.606	0.042	0.075	0.9	1.64
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	16	0.03	0.072	0.25	0.005	0.008	0.088	0.005	0.01	0.158	0.243
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-10/25/76	13	0.77	1.252	3.699	0.39	1.105	1.051	0.422	0.555	1.509	3.499
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	17	1.199	1.245	3.099	0.4	0.502	0.708	0.48	0.7	1.5	2.539
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	19	200.	1521.053	8000.	50.	6163143.275	2482.568	50.	50.	2500.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	19	2.301	2.54	3.903	1.699	0.677	0.823	1.699	1.699	3.398	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			346.556								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	16	0.075	0.078	0.15	0.05	0.001	0.031	0.05	0.05	0.1	0.115
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	16 ##	0.05	0.061	0.13	0.04	0.001	0.026	0.04	0.05	0.068	0.109

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0018

NPS Station ID: SHEN0018
 Location: VAAL521R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.073616/ -78.763310

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_NURE_36 /4087981
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE WAYNESBORO EAST VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0018

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/77-01/17/77	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/77-01/17/77	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/17/77-01/17/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/17/77-01/17/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/17/77-01/17/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/17/77-01/17/77	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/17/77-01/17/77	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/17/77-01/17/77	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/17/77-01/17/77	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/17/77-01/17/77	1	55.	55.	55.	55.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/17/77-01/17/77	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	1	46.	46.	46.	46.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	1	4500.	4500.	4500.	4500.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	1	63.	63.	63.	63.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/17/77-01/17/77	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0018

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0019

NPS Station ID: SHEN0019
 Location: BRIDGE STREET BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005027
 RF3 Index: 02070005002722.44

LAT/LON: 38.078892/ -78.876115

Agency: 21VASWCB
 FIPS State/County: 51820 VIRGINIA/WAYNESBORO (CITY)
 STORET Station ID(s): 1BSTH023.73 /VA1B03-X0088
 Within Park Boundary: No

Date Created: 09/15/78

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 1.00
 Distance from RF3: 0.02

On/Off RF1: ON
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 0067 TOPO MAP NAME: WAYNESBORO WEST, VIRGINIA

Parameter Inventory for Station: SHEN0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/78-08/04/97	10	22.1	19.26	27.2	6.	53.06	7.284	6.2	14.75	24.05	27.2
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/04/97-08/04/97	1	240.	240.	240.	240.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/04/97-08/04/97	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/28/78-03/01/79	7	9.9	9.543	11.4	6.9	2.323	1.524	**	**	**	**
00400	PH (STANDARD UNITS)	06/28/78-08/04/97	10	8.45	8.22	9.	7.3	0.575	0.758	7.3	7.375	8.925	9.
00400	CONVERTED PH (STANDARD UNITS)	06/28/78-08/04/97	10	8.425	7.736	9.	7.3	0.836	0.914	7.3	7.375	8.925	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/78-08/04/97	10	0.004	0.018	0.05	0.001	0.	0.022	0.001	0.001	0.042	0.05
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/23/97-08/04/97	2	146.	146.	149.	143.	18.	4.243	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/23/97-08/04/97	2	13.5	13.5	18.	9.	40.5	6.364	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/23/97-08/04/97	2 ##	2.25	2.25	3.	1.5	1.125	1.061	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/23/97-08/04/97	2	11.	11.	15.	7.	32.	5.657	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/28/78-03/01/79	7 ##	0.05	0.064	0.1	0.05	0.001	0.024	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/28/78-03/01/79	7	0.01	0.015	0.04	0.005	0.	0.013	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/28/78-03/01/79	7	0.9	0.843	1.4	0.1	0.166	0.408	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	7	3.2	2.803	4.52	1.2	1.311	1.145	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/23/97-08/04/97	2	3.5	3.5	4.	3.	0.5	0.707	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/23/97-08/04/97	2	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/29/78-08/29/78	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/23/97-08/04/97	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	08/29/78-08/29/78	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/23/97-08/04/97	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/29/78-08/29/78	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	07/23/97-08/04/97	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	08/29/78-08/29/78	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	08/29/78-08/29/78	1	200.	200.	200.	200.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/23/97-08/04/97	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	07/23/97-08/04/97	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	08/29/78-08/29/78	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/23/97-08/04/97	2	9.95	9.95	10.2	9.7	0.125	0.354	**	**	**	**
01057	THALLIUM, DISSOLVED (UG/L AS TL)	07/23/97-08/04/97	2 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	08/29/78-08/04/97	3	0.2	16.8	50.	0.2	826.68	28.752	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	07/23/97-08/04/97	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	07/23/97-08/04/97	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0019

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01092	ZINC, TOTAL (UG/L AS ZN)	08/29/78-08/29/78	1	30.	30.	30.	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/23/97-08/04/97	2	2.	2.	2.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/23/97-08/04/97	2##	0.25	0.25	0.25	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/28/78-03/01/79	7	200.	614.286	2400.	757261.905	870.208	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/28/78-03/01/79	7	2.301	2.389	3.38	1.699	0.654	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	244.877							
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	06/28/78-03/01/79	7	0.1	0.136	0.3	0.05	0.01	0.099	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/28/78-03/01/79	7	0.08	0.131	0.26	0.02	0.008	0.09	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	07/23/97-08/04/97	2##	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	08/29/78-08/29/78	1##	0.15	0.15	0.15	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0019

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	10	2	0.20	6	1	0.17	3	1	0.33	1	0	0.00			
		Other-Lo Lim.	6.5	10	0	0.00	6	0	0.00	3	0	0.00	1	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	7	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	7	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	2	0	0.00	2	0	0.00									
		Drinking Water	5.	2	0	0.00	2	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	0 &	0	0.00												
		Drinking Water	5.	0 &	0	0.00												
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	2	0	0.00	2	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01040	COPPER, DISSOLVED	Fresh Acute	18.	2	0	0.00	2	0	0.00									
		Drinking Water	1300.	2	0	0.00	2	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01049	LEAD, DISSOLVED	Fresh Acute	82.	2	0	0.00	2	0	0.00									
		Drinking Water	15.	2	0	0.00	2	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	0	0.00	1	0	0.00									
01057	THALLIUM, DISSOLVED	Fresh Acute	1400.	2	0	0.00	2	0	0.00									
		Drinking Water	2.	2	0	0.00	2	0	0.00									
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00	3	0	0.00									
		Drinking Water	100.	3	0	0.00	3	0	0.00									
01075	SILVER, DISSOLVED	Fresh Acute	4.1	2	0	0.00	2	0	0.00									
		Drinking Water	100.	2	0	0.00	2	0	0.00									
01090	ZINC, DISSOLVED	Fresh Acute	120.	2	0	0.00	2	0	0.00									
		Drinking Water	5000.	2	0	0.00	2	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01095	ANTIMONY, DISSOLVED	Fresh Acute	88.	2	0	0.00	2	0	0.00									
		Drinking Water	6.	2	0	0.00	2	0	0.00									
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	50.	2	0	0.00	2	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	7	4	0.57	3	1	0.33	3	2	0.67	1	1	1.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
		Drinking Water	2.	2	0	0.00	2	0	0.00									
71900	MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0020

NPS Station ID: SHEN0020
 Location: 39N 1
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005002720.49
 Description:

LAT/LON: 38.084726/ -78.875005

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 21.00

Agency: 112WRD
 FIPS State/County: 51820 VIRGINIA/WAYNESBORO (CITY)
 STORET Station ID(s): 380512078523001
 Within Park Boundary: No

Date Created: 04/14/78

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0020

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/11/77-03/11/77	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/11/77-03/11/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/11/77-03/11/77	1	369.	369.	369.	369.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/11/77-03/11/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/11/77-03/11/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/11/77-03/11/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	03/11/77-03/11/77	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/11/77-03/11/77	1	160.	160.	160.	160.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/11/77-03/11/77	1	190.	190.	190.	190.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/11/77-03/11/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	03/11/77-03/11/77	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/11/77-03/11/77	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/11/77-03/11/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	03/11/77-03/11/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/11/77-03/11/77	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/11/77-03/11/77	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	03/11/77-03/11/77	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	03/11/77-03/11/77	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	03/11/77-03/11/77	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	03/11/77-03/11/77	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	03/11/77-03/11/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	03/11/77-03/11/77	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/11/77-03/11/77	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	03/11/77-03/11/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/11/77-03/11/77	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/11/77-03/11/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/11/77-03/11/77	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/11/77-03/11/77	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/11/77-03/11/77	1	198.	198.	198.	198.	0.	0.	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/11/77-03/11/77	1	210.	210.	210.	210.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/11/77-03/11/77	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/11/77-03/11/77	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	03/11/77-03/11/77	1	0.	0.	0.	0.	0.	0.	**	**	**	**
72008	DEPTH, TOTAL OF WELL (FT BELOW LAND SURFACE DATUM)	03/11/77-03/11/77	1	505.	505.	505.	505.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0020

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00613	NITRITE NITROGEN, DISSOLVED AS N																	
	Drinking Water	1.	1	0	0.00				1	0	0.00							
00618	NITRATE NITROGEN, DISSOLVED AS N																	
	Drinking Water	10.	1	0	0.00				1	0	0.00							
00631	NITRITE PLUS NITRATE, DISS. 1 DET.																	
	Drinking Water	10.	1	0	0.00				1	0	0.00							
00940	CHLORIDE, TOTAL IN WATER																	
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00945	SULFATE, TOTAL (AS SO4)																	
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00950	FLUORIDE, DISSOLVED AS F																	
	Drinking Water	4.	1	0	0.00				1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	1	0	0.00				1	0	0.00							
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)																	
	Drinking Water	3.3	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0021

NPS Station ID: SHEN0021
 Location: AT HOPEMAN PARKWAY BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005027
 RF3 Index: 02070005002711.17

LAT/LON: 38.089170/ -78.877227

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 18.460
 RF3 Mile Point: 12.25

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BSTH022.19 /VA1B03-X0090/VA1B6X0090
 Within Park Boundary: No

Date Created: 12/31/75

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.23

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 0067 TOPO MAP NAME: WAYNESBORO WEST, VIRGINIA

Parameter Inventory for Station: SHEN0021

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/23/97-08/04/97	2	21.85	21.85	21.9	21.8	0.005	0.071	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/04/97-08/04/97	1	255.	255.	255.	255.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/04/97-08/04/97	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/23/97-08/04/97	2	7.6	7.6	7.7	7.5	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/23/97-08/04/97	2	7.589	7.589	7.7	7.5	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/23/97-08/04/97	2	0.026	0.026	0.032	0.02	0.	0.008	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	07/23/97-08/04/97	2	170.	170.	182.	158.	288.	16.971	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/23/97-08/04/97	2	16.	16.	23.	9.	98.	9.899	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/23/97-08/04/97	2	5.	5.	6.	4.	2.	1.414	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/23/97-08/04/97	2	11.	11.	19.	3.	128.	11.314	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/23/97-08/04/97	2	3.5	3.5	4.	3.	0.5	0.707	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	07/23/97-08/04/97	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	07/23/97-08/04/97	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	07/23/97-08/04/97	2	2.	2.	2.	2.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	07/23/97-08/04/97	2##	9.5	9.5	14.	5.	40.5	6.364	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	07/23/97-08/04/97	2	12.55	12.55	13.2	11.9	0.845	0.919	**	**	**	**
01057	THALLIUM, DISSOLVED (UG/L AS TL)	07/23/97-08/04/97	2##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	07/23/97-08/04/97	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	07/23/97-08/04/97	2	3.5	3.5	4.	3.	0.5	0.707	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	07/23/97-08/04/97	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	07/23/97-08/04/97	2	3.5	3.5	5.	2.	4.5	2.121	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	07/23/97-08/04/97	2##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	07/23/97-08/04/97	2##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0021

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE																	
00400	PH																	
	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00										
	Fresh Chronic	9.	2	0	0.00	2	0	0.00										
	Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00										
01000	ARSENIC, DISSOLVED																	
	Fresh Acute	360.	2	0	0.00	2	0	0.00										
	Drinking Water	50.	2	0	0.00	2	0	0.00										
01025	CADMIUM, DISSOLVED																	
	Fresh Acute	3.9	2	0	0.00	2	0	0.00										
	Drinking Water	5.	2	0	0.00	2	0	0.00										
01030	CHROMIUM, DISSOLVED																	
	Drinking Water	100.	2	0	0.00	2	0	0.00										
01040	COPPER, DISSOLVED																	
	Fresh Acute	18.	2	0	0.00	2	0	0.00										
	Drinking Water	1300.	2	0	0.00	2	0	0.00										
01049	LEAD, DISSOLVED																	
	Fresh Acute	82.	2	0	0.00	2	0	0.00										
	Drinking Water	15.	2	0	0.00	2	0	0.00										
01057	THALLIUM, DISSOLVED																	
	Fresh Acute	1400.	2	0	0.00	2	0	0.00										
	Drinking Water	2.	2	0	0.00	2	0	0.00										
01065	NICKEL, DISSOLVED																	
	Fresh Acute	1400.	2	0	0.00	2	0	0.00										
	Drinking Water	100.	2	0	0.00	2	0	0.00										
01075	SILVER, DISSOLVED																	
	Fresh Acute	4.1	2	0	0.00	2	0	0.00										
	Drinking Water	100.	2	0	0.00	2	0	0.00										
01090	ZINC, DISSOLVED																	
	Fresh Acute	120.	2	0	0.00	2	0	0.00										
	Drinking Water	5000.	2	0	0.00	2	0	0.00										
01095	ANTIMONY, DISSOLVED																	
	Fresh Acute	88.	2	0	0.00	2	0	0.00										
	Drinking Water	6.	2	0	0.00	2	0	0.00										
01145	SELENIUM, DISSOLVED																	
	Fresh Acute	20.	2	0	0.00	2	0	0.00										
	Drinking Water	50.	2	0	0.00	2	0	0.00										
71890	MERCURY, DISSOLVED																	
	Fresh Acute	2.4	2	0	0.00	2	0	0.00										
	Drinking Water	2.	2	0	0.00	2	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0022

NPS Station ID: SHEN0022
 Location: 39NS 3
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005023200.00
 Description:

LAT/LON: 38.090559/ -78.881392

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 0.59

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 380533078531001
 Within Park Boundary: No

Date Created: 04/14/78

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0022

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/11/77-03/11/77	1	13.	13.	13.	13.	0.	0.	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/11/77-03/11/77	1	0.	0.	0.	0.	0.	0.	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/11/77-03/11/77	1	418.	418.	418.	418.	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	03/11/77-03/11/77	1	8.	8.	8.	8.	0.	0.	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/11/77-03/11/77	1	8.	8.	8.	8.	0.	0.	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/11/77-03/11/77	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	03/11/77-03/11/77	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/11/77-03/11/77	1	180.	180.	180.	180.	0.	0.	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/11/77-03/11/77	1	220.	220.	220.	220.	0.	0.	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/11/77-03/11/77	1	0.	0.	0.	0.	0.	0.	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	03/11/77-03/11/77	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/11/77-03/11/77	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/11/77-03/11/77	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	03/11/77-03/11/77	1	0.	0.	0.	0.	0.	0.	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/11/77-03/11/77	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/11/77-03/11/77	1	220.	220.	220.	220.	0.	0.	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	03/11/77-03/11/77	1	40.	40.	40.	40.	0.	0.	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	03/11/77-03/11/77	1	52.	52.	52.	52.	0.	0.	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	03/11/77-03/11/77	1	22.	22.	22.	22.	0.	0.	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	03/11/77-03/11/77	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**
00931	SODIUM ADSORPTION RATIO	03/11/77-03/11/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**
00932	SODIUM, PERCENT	03/11/77-03/11/77	1	3.	3.	3.	3.	0.	0.	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/11/77-03/11/77	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	03/11/77-03/11/77	1	8.	8.	8.	8.	0.	0.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/11/77-03/11/77	1	14.	14.	14.	14.	0.	0.	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/11/77-03/11/77	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/11/77-03/11/77	1	9.	9.	9.	9.	0.	0.	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	03/11/77-03/11/77	1##	5.	5.	5.	5.	0.	0.	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	03/11/77-03/11/77	1	205.	205.	205.	205.	0.	0.	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/11/77-03/11/77	1	232.	232.	232.	232.	0.	0.	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/11/77-03/11/77	1	0.28	0.28	0.28	0.28	0.	0.	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/11/77-03/11/77	1	12.	12.	12.	12.	0.	0.	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	03/11/77-03/11/77	1	0.	0.	0.	0.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0022

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00613	NITRITE NITROGEN, DISSOLVED AS N																	
	Drinking Water	1.	1	0	0.00				1	0	0.00							
00618	NITRATE NITROGEN, DISSOLVED AS N																	
	Drinking Water	10.	1	0	0.00				1	0	0.00							
00631	NITRITE PLUS NITRATE, DISS. 1 DET.																	
	Drinking Water	10.	1	0	0.00				1	0	0.00							
00940	CHLORIDE, TOTAL IN WATER																	
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00945	SULFATE, TOTAL (AS SO4)																	
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00950	FLUORIDE, DISSOLVED AS F																	
	Drinking Water	4.	1	0	0.00				1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	1	0	0.00				1	0	0.00							
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)																	
	Drinking Water	3.3	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0023

NPS Station ID: SHEN0023
 Location: VAAU502R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.092198/ -78.911309

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_NURE_19 /4088102
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE WAYNESBORO WEST VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0023

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/10/77-01/10/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/10/77-01/10/77	1	247.	247.	247.	247.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	01/10/77-01/10/77	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	01/10/77-01/10/77	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/10/77-01/10/77	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	01/10/77-01/10/77	1	125.	125.	125.	125.	0.	0.	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	01/10/77-01/10/77	1	96.	96.	96.	96.	0.	0.	**	**	**	**
01085 VANADIUM, DISSOLVED (UG/L AS V)	01/10/77-01/10/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106 ALUMINUM, DISSOLVED (UG/L AS AL)	01/10/77-01/10/77	1	33.	33.	33.	33.	0.	0.	**	**	**	**
22703 URANIUM, NATURAL, DISSOLVED	01/10/77-01/10/77	1	0.125	0.125	0.125	0.125	0.	0.	**	**	**	**
50761 BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/10/77-01/10/77	1	78.	78.	78.	78.	0.	0.	**	**	**	**
82331 DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/10/77-01/10/77	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0023

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0024

NPS Station ID: SHEN0024
 Location: ROUTE 811 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 2-JAMES
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.095837/ -78.694448

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 2-BVR005.70
 Within Park Boundary: No

Date Created: 07/16/94

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 6 VALLEY
 RIVER: BEAVER CREEK SECTION: 10G TOPO MAP #: 0078 TOPO MAP NAME: CROZET, VA

Parameter Inventory for Station: SHEN0024

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/29/94-07/29/97	5	15.9	15.18	22.6	7.1	46.177	6.795	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11/29/94-07/29/97	4	5.15	6.075	13.1	0.9	26.989	5.195	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/29/94-07/29/97	4	64.	62.75	70.	53.	50.25	7.089	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11/29/94-07/29/97	5	9.2	9.84	11.7	8.3	1.978	1.406	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	11/29/94-07/29/97	4##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
00340	COD, .25N K2CR2O7 MG/L	11/29/94-07/29/97	4	6.	8.125	18.	2.5	46.063	6.787	**	**	**
00400	PH (STANDARD UNITS)	11/29/94-07/29/97	5	7.1	7.18	7.5	7.	0.037	0.192	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/29/94-07/29/97	5	7.1	7.15	7.5	7.	0.038	0.195	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/29/94-07/29/97	5	0.079	0.071	0.1	0.032	0.001	0.025	**	**	**
00403	PH, LAB, STANDARD UNITS SU	11/29/94-07/29/97	4	6.75	6.775	7.	6.6	0.029	0.171	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	11/29/94-07/29/97	4	6.747	6.751	7.	6.6	0.03	0.173	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/29/94-07/29/97	4	0.179	0.177	0.251	0.1	0.004	0.064	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/29/94-07/29/97	4	18.5	18.	23.	12.	20.667	4.546	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/29/94-07/29/97	4	9.	8.125	13.	1.5	25.729	5.072	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/29/94-07/29/97	4##	2.25	2.25	3.	1.5	0.75	0.866	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/29/94-07/29/97	4	6.5	6.125	10.	1.5	13.729	3.705	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/29/94-07/29/97	4##	0.02	0.02	0.02	0.02	0.	0.	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/29/94-07/29/97	4##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/29/94-07/29/97	4	0.345	0.31	0.47	0.08	0.028	0.167	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/29/94-07/29/97	4	0.15	0.2	0.4	0.1	0.02	0.141	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/29/94-07/29/97	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/29/94-03/18/96	2	1.4	1.4	1.5	1.3	0.02	0.141	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/29/94-07/29/97	4	20.5	19.5	23.	14.	19.	4.359	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/29/94-07/29/97	4##	2.75	2.75	3.	2.5	0.083	0.289	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/29/94-07/29/97	4	6.	5.75	6.	5.	0.25	0.5	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/07/96-08/07/96	1	11.	11.	11.	11.	0.	0.	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	08/07/96-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/07/96-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/07/96-08/07/96	1	20.	20.	20.	20.	0.	0.	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/07/96-08/07/96	1	38.	38.	38.	38.	0.	0.	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/07/96-08/07/96	1	64.	64.	64.	64.	0.	0.	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/07/96-08/07/96	1	1010.	1010.	1010.	1010.	0.	0.	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/07/96-08/07/96	1	16.	16.	16.	16.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0024

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	08/07/96-08/07/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/07/96-08/07/96	1	123.	123.	123.	123.	0.	0.	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/07/96-08/07/96	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/07/96-08/07/96	1	20300.	20300.	20300.	20300.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	08/07/96-08/07/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/07/96-08/07/96	1	31500.	31500.	31500.	31500.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/29/94-07/29/97	4	150.	137.5	200.	50.	5625.	75.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/29/94-07/29/97	4	2.151	2.075	2.301	1.699	0.083	0.288	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/29/94-07/29/97	4	118.921	118.921	118.921	118.921	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/07/96-08/07/96	1 ##	55.	55.	55.	55.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
39351	CHLORDANE (TECH MIX&METABS), SEDIMENTS, DRY WGT, UG/KG	08/07/96-08/07/96	1 ##	30.	30.	30.	30.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	1	20.	20.	20.	20.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	1	130.	130.	130.	130.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/07/96-08/07/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/07/96-08/07/96	1 ##	115.	115.	115.	115.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/07/96-08/07/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39526	PCBS TOTAL, IN SEDIMENT, DRY (ISOMER ANALYSES) UG/KG	08/07/96-08/07/96	1 ##	20.	20.	20.	20.	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/29/94-07/29/97	4	0.015	0.018	0.03	0.01	0.	0.01	**	**	**	**
71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/07/96-08/07/96	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	08/07/96-08/07/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	08/07/96-08/07/96	1 ##	55.	55.	55.	55.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0024

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
00400	PH	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
00403	PH, LAB	Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
		Fresh Chronic	9.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Other-Lo Lim.	6.5	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
		Drinking Water	1.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
		Drinking Water	250.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	4	2	0.50	2	1	0.50	2	1	0.50	2	1	0.50			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0025

NPS Station ID: SHEN0025
 Location: SAWMILL RUN NEAR DOOMS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005018800.00
 Description:

LAT/LON: 38.096115/ -78.810559

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.00

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 01626900
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 10.10
 Distance from RF3: 0.05

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0025

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-06/24/82	6	13.75	11.917	17.	1.	35.742	5.978	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-06/24/82	6	1.	2.033	7.	0.2	6.247	2.499	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-06/24/82	5	6.5	6.5	6.8	6.1	0.075	0.274	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-06/24/82	5	6.5	6.428	6.8	6.1	0.081	0.285	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-06/24/82	5	0.316	0.373	0.794	0.158	0.064	0.254	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-06/24/82	6	6.5	6.5	6.7	6.3	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-06/24/82	6	6.5	6.481	6.7	6.3	0.02	0.143	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-06/24/82	6	0.316	0.33	0.501	0.2	0.012	0.107	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/19/81-06/24/82	6##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-06/24/82	6	0.015	0.016	0.03	0.005	0.	0.009	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/19/81-06/24/82	6	6.	6.167	8.	5.	1.367	1.169	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/19/81-06/24/82	6	1.2	1.2	1.5	1.	0.036	0.19	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-06/24/82	6	0.8	0.817	1.	0.7	0.014	0.117	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-06/24/82	6	0.95	0.983	1.1	0.9	0.01	0.098	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-06/24/82	6	0.2	0.2	0.2	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-06/24/82	6	22.5	21.833	23.	20.	2.167	1.472	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-06/24/82	6	0.95	0.967	1.2	0.8	0.027	0.163	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/19/81-06/24/82	6	1.	0.967	1.	0.8	0.007	0.082	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-06/24/82	6	4.	4.	5.	3.	0.4	0.632	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/19/81-06/24/82	6	6.35	6.483	8.2	4.8	1.618	1.272	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0025

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	3	0.60	2	2	1.00	1	0	0.00	2	1	0.50			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	4	0.67	2	1	0.50	2	2	1.00	2	1	0.50			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0025

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0026

NPS Station ID: SHEN0026
 Location: DOWNSTREAM HOPEMAN PARKWAY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH-ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070005001002.58

LAT/LON: 38.096115/ -78.877227

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 3.87

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BSTH021.72
 Within Park Boundary: No

Date Created: 04/08/89

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 0067 TOPO MAP NAME: WAYNESBORO WEST, VIRGINIA

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.50
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0026

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0027

NPS Station ID: SHEN0027
 Location: SAWMILL RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080201
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080201
 RF3 Index: 02070007017606.86

LAT/LON: 38.096893/ -78.808115

Depth of Water: 0
 Elevation: 1520
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51017 VIRGINIA/BATH
 STORET Station ID(s): SHEN_VTSSS_AU12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB01 IS LOCATED ON THE WAYNESBORO EAST VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT SAWMILL RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.18 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0027

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	5.78	5.78	5.78	5.78	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	5.78	5.78	5.78	5.78	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	1.66	1.66	1.66	1.66	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	1.25	1.25	1.25	1.25	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0027

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0028

NPS Station ID: SHEN0028
 Location: Sawmill Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.097281/ -78.807753

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_FISH_3F143
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Waynesboro East VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0028

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/94-09/16/97	8	16.	14.775	17.4	4.3	18.808	4.337	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/12/95-09/16/97	4	13.	13.5	16.	12.	3.	1.732	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/14/94-09/16/97	7	8.	8.957	13.2	7.4	3.886	1.971	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/14/94-09/16/97	7	5.79	6.326	7.61	5.29	1.109	1.053	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/14/94-09/16/97	7	5.79	5.69	7.61	5.29	1.581	1.257	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/14/94-09/16/97	7	1.622	2.04	5.129	0.025	4.937	2.222	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/12/95-09/16/97	3	9.	9.	10.	8.	1.	1.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/18/96-06/18/96	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	06/18/96-06/18/96	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/18/96-06/18/96	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0028

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	0	0.00	1	0	0.00	1	0	0.00	5	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	7	0	0.00	1	0	0.00	1	0	0.00	5	0	0.00			
	Other-Lo Lim.	6.5	7	4	0.57	1	1	1.00	1	1	1.00	5	2	0.40			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0029

NPS Station ID: SHEN0029
 Location: Sawmill Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.099143/ -78.804587

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_FISH_3F144
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Waynesboro East VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0029

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/18/96-06/18/96	1	15.9	15.9	15.9	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/18/96-06/18/96	1	14.	14.	14.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/18/96-06/18/96	1	9.2	9.2	9.2	0.	0.	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/18/96-06/18/96	1	5.5	5.5	5.5	0.	0.	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/18/96-06/18/96	1	5.5	5.5	5.5	0.	0.	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/18/96-06/18/96	1	3.162	3.162	3.162	0.	0.	**	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/18/96-06/18/96	1	3.	3.	3.	0.	0.	**	**	**	**
83509	STREAM, WIDTH METER	06/18/96-06/18/96	1	3.8	3.8	3.8	0.	0.	**	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/18/96-06/18/96	1	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0029

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00						1	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	1	0	0.00						1	0	0.00			
		Other-Lo Lim.	6.5	1	1	1.00						1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0030

NPS Station ID: SHEN0030
 Location: SOUTH R. RTE 611 BR DOOMS
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070005002720.49
 Description:

LAT/LON: 38.107226/ -78.862504

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 16.520
 RF3 Mile Point: 20.96

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 008 /008 /SOUTH S-3
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.00

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0030

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	9	24.	24.167	26.	23.	1.	1.	23.	23.25	25.	26.
00300 OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	10	2.25	2.52	5.1	1.3	1.357	1.165	1.31	1.625	3.35	4.94
00310 BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	10	11.4	10.42	14.1	5.5	8.124	2.85	5.68	8.05	12.3	14.1
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	2100.	2052.	3480.	490.	1626270.	1275.253	**	**	**	**
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	3.322	3.217	3.542	2.69	0.125	0.354	**	**	**	**
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			1646.48								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	330.	370.	790.	40.	78650.	280.446	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	2.519	2.409	2.898	1.602	0.242	0.492	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			256.175								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0030

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	10	9	0.90							10	9	0.90			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	4	0.80							5	4	0.80			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	4	0.80							5	4	0.80			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0031

NPS Station ID: SHEN0031
 Location: SOUTH R. RTE 611 BR COINERS MILL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070005002720.49
 Description:

LAT/LON: 38.107226/ -78.862504

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 16.520
 RF3 Mile Point: 20.96

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 061 /061 /SOUTH-S3
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.00

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0031

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	24.75	24.75	26.5	23.	6.125	2.475	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	13.25	13.25	20.	6.5	91.125	9.546	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	7.85	7.85	9.2	6.5	3.645	1.909	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	1.845	1.845	2.66	1.03	1.328	1.153	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	1.339	1.339	2.26	0.418	1.696	1.302	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.345	1.345	1.91	0.78	0.638	0.799	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	9450.	9450.	14100.	4800.	43245000.	6576.093	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	3.915	3.915	4.149	3.681	0.11	0.331	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			8226.786								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	1	1700.	1700.	1700.	1700.	0.	0.	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	1	3.23	3.23	3.23	3.23	0.	0.	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			1700.								
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	6.75	6.75	9.	4.5	10.125	3.182	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	1.045	1.045	1.37	0.72	0.211	0.46	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0031

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00								
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	2	1.00	2	2	1.00								
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00								
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00								
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	1	1	1.00	1	1	1.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0032

NPS Station ID: SHEN0032
 Location: SOUTH RIV RT 611 DOOMS
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005027
 RF3 Index: 02070005002719.48
 Description:

LAT/LON: 38.107226/ -78.863060

Depth of Water: 999
 Elevation: 0
 RF1 Mile Point: 16.520
 RF3 Mile Point: 19.96

Agency: 1112A9WQ
 FIPS State/County: 51013 VIRGINIA/ARLINGTON
 STORET Station ID(s): UP-POT-061 /SHEN-061 /061 /S RIV 061
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.08

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0032

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/16/73	4	15.75	14.875	22.	6.	43.729	6.613	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/16/73	4	9.45	9.1	12.	5.5	8.247	2.872	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-04/16/73	4	3.15	3.35	5.1	2.	2.03	1.425	**	**	**
00400	PH (STANDARD UNITS)	05/23/72-02/13/73	2	7.2	7.8	7.8	6.6	0.72	0.849	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/23/72-02/13/73	2	6.874	6.874	7.8	6.6	0.932	0.965	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/72-02/13/73	2	0.134	0.134	0.251	0.016	0.028	0.166	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	32.	32.	32.	32.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	10.	10.	10.	10.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/16/73	4	1.048	1.344	2.95	0.33	1.262	1.123	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/23/72-04/16/73	4	1.467	1.795	3.678	0.57	1.754	1.325	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/16/73	4	0.84	0.908	1.4	0.55	0.13	0.36	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/16/73	4	0.3	0.41	0.83	0.21	0.083	0.287	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/23/72-02/13/73	3	4.1	3.933	5.3	2.4	2.123	1.457	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/23/72-02/13/73	3	15.9	20.633	34.	12.	137.803	11.739	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-05/23/72	1	12.	12.	12.	12.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/23/72-05/23/72	1	3.	3.	3.	3.	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	19500.	19500.	26000.	13000.	84500000.	9192.388	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	4.264	4.264	4.415	4.114	0.045	0.213	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	18384.776	18384.776	3500.	780.	3699200.	1923.33	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	2140.	2140.	3500.	780.	3699200.	1923.33	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	3.218	3.218	3.544	2.892	0.213	0.461	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	1652.271	1652.271	3500.	780.	3699200.	1923.33	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/16/73	4	0.44	0.645	1.33	0.37	0.21	0.458	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-05/23/72	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0032

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	2	1.00				1	1	1.00	1	1	1.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	2	1.00				1	1	1.00	1	1	1.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0033

NPS Station ID: SHEN0033 LAT/LON: 38.111115/ -78.862781

Location: ROUTE 611 BRIDGE, NEAR DOOMS - AUGUSTA COUNTY

Station Type: /TYPA/AMBNT/STREAM

RMI-Indexes:

RMI-Miles:

HUC: 02070005

Major Basin: 02-NORTH ATLANTIC

Minor Basin: 1-POTOMAC-SHENANDOAH

RF1 Index: 02070005

RF3 Index: 02070005029900.00

Description:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY

RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 0066 TOPO MAP NAME: WAYNESBORO WEST, VIRGINIA

Agency: 21VASWCB

FIPS State/County: 51015 VIRGINIA/AUGUSTA

STORET Station ID(s): 1BSTH019.26

Within Park Boundary: No

Date Created: 06/22/91

Depth of Water: 0

Elevation: 0

Aquifer:

Water Body ID:

ECO Region:

Distance from RF1: 1.60

Distance from RF3: 0.04

On/Off RF1:

On/Off RF3:

Parameter Inventory for Station: SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	100	15.6	15.411	26.1	1.5	44.248	6.652	5.6	10.15	21.7	23.9
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	99	8.	8.137	14.	2.4	6.824	2.612	4.8	6.4	10.	11.6
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	41	3.	2.983	6.3	0.5	2.201	1.484	1.	2.	4.4	5.16
00315	BOD, 7 DAY, 20 DEG C MG/L	11/24/75-11/24/75	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	101	7.6	7.761	9.2	6.7	0.282	0.531	7.22	7.5	8.	8.66
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	101	7.6	7.524	9.2	6.7	0.338	0.582	7.22	7.5	8.	8.66
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	101	0.025	0.03	0.2	0.001	0.001	0.031	0.002	0.01	0.032	0.061
00403	PH, LAB, STANDARD UNITS SU	09/20/67-05/29/70	8	7.2	7.212	7.6	6.6	0.098	0.314	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-05/29/70	8	7.189	7.1	7.6	6.6	0.113	0.336	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-05/29/70	8	0.065	0.08	0.251	0.025	0.005	0.073	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-05/29/70	8	79.	80.75	115.	50.	425.929	20.638	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/03/68-05/29/70	7	226.	226.143	281.	157.	1992.476	44.637	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/03/68-05/29/70	7	66.	69.	156.	24.	1852.333	43.039	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/03/68-05/29/70	7	128.	127.714	207.	23.	4767.905	69.05	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	13.	17.857	53.	3.	272.476	16.507	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	6.	8.429	27.	2.	70.286	8.384	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	8.	9.429	26.	1.	78.952	8.886	**	**	**	**
00545	RESIDUE, SETTLEABLE (ML/L)	12/03/68-12/03/68	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	65	0.5	0.733	2.849	0.05	0.545	0.739	0.08	0.2	1.	2.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	63	0.06	0.097	0.6	0.005	0.011	0.103	0.005	0.03	0.13	0.238
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	56	1.299	1.645	4.5	0.28	0.985	0.993	0.676	0.9	2.117	3.334
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	65	1.399	1.635	5.5	0.2	1.346	1.16	0.5	0.8	2.149	3.299
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	06/28/78-03/01/79	8	3.15	2.975	4.2	1.1	1.068	1.033	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	12/03/68-08/03/69	4	0.66	0.648	0.9	0.37	0.048	0.218	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-03/01/79	29	8.	8.69	15.	3.	9.579	3.095	4.	7.	11.	14.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-09/20/67	1	146.	146.	146.	146.	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	10 ##	1.25	1.6	2.5	0.5	0.656	0.81	0.55	1.	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	14 ##	5.	4.679	5.	0.5	1.446	1.203	2.75	5.	5.	5.
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	23	10.	26.522	250.	5.	2548.715	50.485	5.	5.	30.	46.
01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	23 ##	5.	10.	30.	5.	65.909	8.118	5.	5.	10.	26.
01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	3	300.	300.	400.	200.	10000.	100.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	20 ##	5.	8.1	40.	1.	92.411	9.613	2.1	5.	6.5	28.1
01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	2	65.	65.	80.	50.	450.	21.213	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	13 ##	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-08/29/78	24	10.	25.208	110.	896.694	29.945	5.	5.	35.	90.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-09/08/70	14	17000.	37650.	240000.	4600.3916344230.769	62580.702	4600.	9300.	28000.	166500.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-09/08/70	14	4.202	4.267	5.38	3.663	0.231	0.48	3.663	3.968	4.43
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-09/08/70			18507.364							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	83	1000.	2612.651	24000.	18943161.181	4352.374	50.	200.	3400.	6000.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	83	3.	2.907	4.38	1.699	0.575	1.699	2.301	3.531	3.778
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79			807.692							
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	61	0.2	0.216	0.6	0.05	0.02	0.142	0.05	0.1	0.3
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	61	0.12	0.18	0.6	0.03	0.018	0.135	0.05	0.1	0.235
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	23 ##	0.25	0.246	0.25	0.15	0.	0.021	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0033

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	99	6	0.06	31	6	0.19	43	0	0.00	25	0	0.00			
00400	PH	Fresh Chronic	9.	101	4	0.04	32	0	0.00	44	2	0.05	25	2	0.08			
		Other-Lo Lim.	6.5	101	0	0.00	32	0	0.00	44	0	0.00	25	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	8	0	0.00	2	0	0.00	3	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	8	0	0.00	2	0	0.00	3	0	0.00	3	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	63	0	0.00	17	0	0.00	30	0	0.00	16	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	56	0	0.00	15	0	0.00	26	0	0.00	15	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	8	0	0.00	3	0	0.00	4	0	0.00	1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	5	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	50.	10	0	0.00	5	0	0.00	3	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00									
		Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	23	1	0.04	7	1	0.14	9	0	0.00	7	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	23	5	0.22	7	1	0.14	9	2	0.22	7	2	0.29			
		Drinking Water	1300.	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	20	0	0.00	7	0	0.00	9	0	0.00	4	0	0.00			
		Drinking Water	15.	20	2	0.10	7	1	0.14	9	1	0.11	4	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	13	0	0.00	5	0	0.00	4	0	0.00	4	0	0.00			
		Drinking Water	100.	13	0	0.00	5	0	0.00	4	0	0.00	4	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	24	0	0.00	8	0	0.00	9	0	0.00	7	0	0.00			
		Drinking Water	5000.	24	0	0.00	8	0	0.00	9	0	0.00	7	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	14	14	1.00	8	8	1.00	2	2	1.00	4	4	1.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	83	65	0.78	23	16	0.70	41	35	0.85	19	14	0.74			
71900	MERCURY, TOTAL	Fresh Acute	2.4	23	0	0.00	8	0	0.00	9	0	0.00	6	0	0.00			
		Drinking Water	2.	23	0	0.00	8	0	0.00	9	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1967 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	1	21.7	21.7	21.7	21.7	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	4	20.	18.875	24.4	11.1	38.429	6.199	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	4	3.9	4.025	5.8	2.5	1.843	1.357	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	4	7.9	8.	8.5	7.7	0.127	0.356	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	4	7.889	7.912	8.5	7.7	0.137	0.37	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	4	0.013	0.012	0.02	0.003	0.	0.007	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	1	0.72	0.72	0.72	0.72	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	1	2.699	2.699	2.699	2.699	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	3	15.6	15.567	23.3	7.8	60.063	7.75	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	3	4.8	5.2	8.4	2.4	9.12	3.02	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	3	7.4	7.5	7.7	7.4	0.03	0.173	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	3	7.4	7.479	7.7	7.4	0.031	0.175	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	3	0.04	0.033	0.04	0.02	0.	0.011	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	2.449	2.029	2.849	0.79	1.192	1.092	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	0.05	0.073	0.15	0.02	0.005	0.068	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	3	0.46	0.407	0.48	0.28	0.012	0.11	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	3	3.549	3.113	4.	1.789	1.365	1.168	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	9	18.9	16.678	24.4	7.2	48.467	6.962	7.2	10.3	23.35	24.4
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	9	6.2	7.3	10.7	4.4	5.225	2.286	4.4	5.4	9.5	10.7
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	9	7.5	7.733	8.7	7.2	0.287	0.536	7.2	7.3	8.25	8.7
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	9	7.5	7.526	8.7	7.2	0.336	0.58	7.2	7.3	8.25	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	9	0.032	0.03	0.063	0.002	0.001	0.023	0.002	0.006	0.05	0.063
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	1.399	1.599	2.599	0.8	0.839	0.916	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	2	0.68	0.68	0.77	0.59	0.016	0.127	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	3	2.25	2.316	3.299	1.399	0.906	0.952	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	22750.	22750.	24000.	21500.	3125000.	1767.767	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	4.356	4.356	4.38	4.332	0.001	0.034	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			22715.633								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	3	0.15	0.2	0.35	0.1	0.017	0.132	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	3	0.1	0.137	0.25	0.06	0.01	0.1	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	13	15.6	14.854	24.4	5.6	39.181	6.259	5.6	8.65	20.3	23.52
00300 OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	13	8.4	8.985	14.	4.2	9.763	3.125	4.28	6.7	11.4	13.6
00400 PH (STANDARD UNITS)	09/20/67-03/01/79	13	7.5	7.808	9.2	7.3	0.361	0.601	7.3	7.45	8.15	9.
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	13	7.5	7.591	9.2	7.3	0.412	0.642	7.3	7.45	8.15	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	13	0.032	0.026	0.05	0.001	0.	0.017	0.001	0.01	0.036	0.05
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	12	5250.	5937.5	20000.	50.	28677784.091	5355.164	275.	1375.	8000.	16400.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	12	3.72	3.5	4.301	1.699	0.479	0.692	2.06	3.099	3.903	4.182
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			3159.958								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	12	15.6	13.558	20.	3.9	29.279	5.411	4.23	9.825	18.025	19.82
00300 OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	12	8.2	8.683	12.2	6.	4.054	2.014	6.12	6.95	10.6	11.96
00400 PH (STANDARD UNITS)	09/20/67-03/01/79	12	7.5	7.583	8.3	6.9	0.194	0.441	6.93	7.225	8.	8.21
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	12	7.5	7.394	8.3	6.9	0.234	0.483	6.93	7.225	8.	8.21
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	12	0.032	0.04	0.126	0.005	0.001	0.039	0.007	0.01	0.06	0.118
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.78	0.78	0.78	0.78	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	1	1.079	1.079	1.079	1.079	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	1	1.199	1.199	1.199	1.199	0.	0.	**	**	**	**
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	12	1100.	2166.667	6000.	50.	5445606.061	2333.582	50.	250.	4525.	6000.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	12	2.991	2.927	3.778	1.699	0.568	0.754	1.699	2.376	3.651	3.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			844.951								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	11	16.7	15.136	23.9	4.4	45.281	6.729	4.96	7.8	21.1	23.78
00300 OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	11	8.9	8.418	12.8	3.	9.31	3.051	3.4	5.4	11.4	12.56
00400 PH (STANDARD UNITS)	09/20/67-03/01/79	11	7.6	7.655	8.3	7.	0.123	0.35	7.08	7.5	8.	8.24
00400 CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	11	7.6	7.53	8.3	7.	0.14	0.374	7.08	7.5	8.	8.24
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	11	0.025	0.03	0.1	0.005	0.001	0.026	0.006	0.01	0.032	0.088
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	1.199	1.336	2.5	0.5	0.442	0.665	0.51	0.75	2.	2.4
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.1	0.1	0.26	0.005	0.006	0.075	0.008	0.04	0.12	0.246
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	11	1.039	1.041	1.399	0.83	0.025	0.157	0.836	0.9	1.109	1.347
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	2.799	2.89	5.5	1.	2.321	1.524	1.08	1.699	4.599	5.36
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	10	1450.	2360.	6000.	100.	4456000.	2110.924	120.	675.	3950.	5960.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	10	3.161	3.138	3.778	2.	0.318	0.564	2.048	2.797	3.586	3.775

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
	GEOMETRIC MEAN =			1373.834									
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.205	0.6	0.05	0.04	0.199	0.05	0.05	0.4	0.58
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.196	0.6	0.04	0.036	0.191	0.042	0.07	0.3	0.58

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	10	16.1	15.47	23.	5.6	38.751	6.225	5.76	10.575	20.7	22.98
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	11	7.2	8.109	12.3	5.	5.381	2.32	5.24	6.6	9.7	12.16
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	11	7.5	7.4	7.6	6.7	0.064	0.253	6.8	7.4	7.5	7.58
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	11	7.5	7.302	7.6	6.7	0.075	0.273	6.8	7.4	7.5	7.58
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	11	0.032	0.05	0.2	0.025	0.003	0.051	0.026	0.032	0.04	0.172
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.8	0.936	2.099	0.2	0.46	0.678	0.22	0.3	1.699	2.039
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.06	0.085	0.28	0.005	0.007	0.085	0.005	0.03	0.09	0.266
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	11	1.199	1.418	3.319	0.62	0.631	0.794	0.646	0.8	1.719	3.083
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	1.399	1.672	3.199	0.5	0.914	0.956	0.56	0.8	2.5	3.179
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	1400.	1681.818	3800.	200.	1579636.364	1256.836	220.	400.	2700.	3720.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	3.146	3.065	3.58	2.301	0.194	0.44	2.336	2.602	3.431	3.57
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			1161.204								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.255	0.5	0.1	0.015	0.121	0.1	0.2	0.3	0.48
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.173	0.5	0.05	0.025	0.159	0.05	0.05	0.3	0.48

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	12	14.4	14.767	25.6	4.4	53.621	7.323	5.24	8.075	21.925	25.09
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	12	9.5	9.208	12.3	6.4	3.599	1.897	6.58	7.225	10.825	12.06
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	12	7.7	7.883	9.	7.	0.349	0.591	7.12	7.5	8.35	8.91
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	12	7.689	7.604	9.	7.	0.434	0.659	7.12	7.5	8.35	8.91
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	12	0.02	0.025	0.1	0.001	0.001	0.027	0.001	0.005	0.032	0.082
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.3	0.341	1.	0.05	0.077	0.278	0.06	0.1	0.5	0.92
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.05	0.07	0.28	0.005	0.007	0.081	0.005	0.005	0.08	0.254
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	11	1.75	1.94	3.319	0.85	0.632	0.795	0.9	1.199	2.75	3.207
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	0.8	0.809	1.899	0.2	0.197	0.443	0.26	0.5	0.9	1.759
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	600.	729.167	2100.	50.	524299.242	724.085	50.	62.5	1450.	1980.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.772	2.545	3.322	1.699	0.402	0.634	1.699	1.774	3.153	3.295
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			351.014								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.164	0.4	0.05	0.012	0.11	0.05	0.1	0.2	0.38
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.116	0.22	0.05	0.004	0.064	0.05	0.05	0.2	0.218

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	11	15.6	15.055	26.1	3.3	56.079	7.489	3.42	10.	22.2	25.44
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	10	9.35	9.09	11.9	4.8	4.672	2.162	5.07	7.65	10.95	11.85
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	11	7.8	7.964	9.	7.2	0.341	0.584	7.26	7.5	8.5	8.98
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	11	7.8	7.715	9.	7.2	0.408	0.639	7.26	7.5	8.5	8.98

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	11	0.016	0.019	0.063	0.001	0.	0.018	0.001	0.003	0.032	0.057
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.2	0.191	0.6	0.05	0.022	0.15	0.05	0.1	0.2	0.52
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.06	0.089	0.25	0.01	0.006	0.075	0.012	0.03	0.13	0.238
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	11	2.049	2.349	3.399	1.569	0.46	0.678	1.595	1.729	3.099	3.393
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	0.8	0.927	1.5	0.4	0.2	0.447	0.4	0.5	1.5	1.5
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	200.	622.727	1800.	50.	495181.818	703.692	50.	50.	1400.	1780.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.301	2.426	3.255	1.699	0.417	0.646	1.699	1.699	3.146	3.25
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			266.519								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.177	0.3	0.05	0.005	0.068	0.06	0.1	0.2	0.28
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.18	0.169	0.33	0.08	0.006	0.077	0.084	0.11	0.2	0.318

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	5	14.5	14.56	23.	1.5	77.768	8.819	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	5	6.8	7.24	11.3	5.5	5.613	2.369	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	5	7.5	7.72	8.5	7.5	0.192	0.438	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	5	7.5	7.609	8.5	7.5	0.208	0.456	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	5	0.032	0.025	0.032	0.003	0.	0.012	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	5	0.5	0.48	1.	0.1	0.127	0.356	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	4	0.185	0.213	0.36	0.12	0.011	0.107	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	5	3.699	2.7	4.5	0.7	3.119	1.766	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	5	1.699	1.799	2.299	1.299	0.16	0.4	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5	100.	420.	1700.	50.	515750.	718.157	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5	2.	2.186	3.23	1.699	0.403	0.635	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			153.421								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	5	0.3	0.26	0.4	0.1	0.013	0.114	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	5	0.3	0.268	0.4	0.17	0.01	0.098	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	7	21.	20.571	26.	14.	24.619	4.962	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	7	7.4	7.6	9.6	5.5	1.597	1.264	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	7	8.5	8.4	9.	7.5	0.333	0.577	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	7	8.5	8.079	9.	7.5	0.453	0.673	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	7	0.003	0.008	0.032	0.001	0.	0.011	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	6	0.2	0.183	0.3	0.05	0.013	0.113	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	6	0.095	0.098	0.17	0.03	0.002	0.049	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	6	1.05	1.15	1.6	0.8	0.107	0.327	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6	1550.	2291.667	5500.	50.	5624416.667	2371.585	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6	3.113	2.971	3.74	1.699	0.628	0.793	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			934.331								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	6	0.45	0.367	0.5	0.1	0.031	0.175	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	6	0.285	0.293	0.46	0.15	0.025	0.158	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	2	5.25	5.25	6.5	4.	3.125	1.768	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	1	11.6	11.6	11.6	11.6	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	2	7.65	7.65	8.	7.3	0.245	0.495	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	2	7.522	7.522	8.	7.3	0.278	0.527	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	2	0.03	0.03	0.05	0.01	0.001	0.028	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	2	0.45	0.45	0.7	0.2	0.125	0.354	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2 ##	275.	275.	500.	50.	101250.	318.198	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2 ##	2.199	2.199	2.699	1.699	0.5	0.707	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			158.114								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	2	0.085	0.085	0.14	0.03	0.006	0.078	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	31	22.8	21.994	26.1	14.4	8.981	2.997	16.76	20.	23.9	25.92
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	31	6.	5.871	9.6	2.4	3.765	1.94	3.	4.4	7.4	8.36
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	16	2.	2.769	6.3	0.5	3.093	1.759	0.85	1.25	4.475	5.67
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	32	7.8	7.894	8.9	6.7	0.344	0.586	7.23	7.5	8.5	8.7
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	32	7.8	7.546	8.9	6.7	0.469	0.685	7.23	7.5	8.5	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	32	0.016	0.028	0.2	0.001	0.002	0.043	0.002	0.003	0.032	0.059
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	18	0.55	0.911	2.5	0.05	0.779	0.882	0.05	0.175	1.724	2.454
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	17	0.09	0.114	0.28	0.02	0.006	0.076	0.028	0.06	0.16	0.264
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	15	1.719	1.953	3.369	0.28	1.025	1.012	0.532	1.109	2.759	3.339
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	18	1.5	2.063	5.5	0.4	2.02	1.421	0.49	0.975	3.099	4.689
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	23	700.	1793.478	8000.	50.	5255069.17	2292.394	50.	100.	2300.	5560.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	23	2.845	2.75	3.903	1.699	0.616	0.785	1.699	2.	3.362	3.745
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			561.74								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	17	0.3	0.324	0.6	0.2	0.014	0.12	0.2	0.2	0.4	0.52
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	17	0.27	0.285	0.5	0.1	0.014	0.117	0.14	0.2	0.4	0.468

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	44	9.2	9.505	19.4	1.5	18.531	4.305	3.95	5.825	13.3	15.6
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	43	10.2	9.988	14.	5.	4.351	2.086	6.88	8.4	11.6	12.3
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	17	2.7	2.918	5.7	1.	1.847	1.359	1.	2.	4.2	5.14
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	44	7.5	7.664	9.	6.9	0.258	0.508	7.1	7.4	7.95	8.45
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	44	7.5	7.467	9.	6.9	0.297	0.545	7.1	7.4	7.95	8.45
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	44	0.032	0.034	0.126	0.001	0.001	0.028	0.004	0.011	0.04	0.082
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	30	0.45	0.689	2.849	0.05	0.512	0.716	0.055	0.175	1.05	1.96
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	30	0.045	0.078	0.6	0.005	0.014	0.117	0.005	0.009	0.103	0.213
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	26	1.149	1.483	4.5	0.48	0.82	0.906	0.755	0.89	1.787	2.607
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	30	1.15	1.515	4.799	0.2	1.363	1.167	0.41	0.675	2.137	3.289
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	41	1200.	3280.488	24000.	50.	32121359.756	5667.571	60.	350.	3300.	7600.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	41	3.079	3.01	4.38	1.699	0.532	0.73	1.759	2.54	3.518	3.878
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			1022.938								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	28	0.1	0.184	0.5	0.05	0.022	0.148	0.05	0.1	0.2	0.5
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	28	0.1	0.156	0.6	0.03	0.02	0.142	0.049	0.083	0.165	0.437

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	25	17.2	17.644	24.	10.	12.975	3.602	12.	15.6	20.55	22.88
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	25	7.4	7.764	11.	4.8	2.627	1.621	5.72	6.6	9.2	10.22
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	8	3.	3.55	5.2	2.	1.246	1.116	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	25	7.6	7.764	9.2	7.2	0.227	0.477	7.36	7.5	7.95	8.58
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	25	7.6	7.614	9.2	7.2	0.251	0.501	7.36	7.5	7.95	8.58
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	25	0.025	0.024	0.063	0.001	0.	0.015	0.003	0.011	0.032	0.044
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	17	0.4	0.623	2.599	0.1	0.374	0.612	0.18	0.2	0.95	1.32
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	16	0.085	0.115	0.36	0.005	0.01	0.101	0.009	0.05	0.18	0.304
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	15	1.039	1.617	3.699	0.46	1.228	1.108	0.538	0.75	2.5	3.519
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	17	1.199	1.393	3.299	0.5	0.471	0.686	0.74	0.8	1.744	2.419
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	19	1400.	2163.158	8000.	50.	6406345.029	2531.076	50.	100.	3400.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	19	3.146	2.877	3.903	1.699	0.627	0.792	1.699	2.	3.531	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			752.923								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0033

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	16	0.15	0.159	0.35	0.05	0.007	0.086	0.05	0.1	0.2	0.315
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	16	0.1	0.111	0.25	0.05	0.004	0.063	0.05	0.05	0.165	0.215

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0034

NPS Station ID: SHEN0034
 Location: VAAL518R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.119503/ -78.711116

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_NURE_35 /4087978
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE CROZET VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0034

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/15/77-01/15/77	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/15/77-01/15/77	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/15/77-01/15/77	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/15/77-01/15/77	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/15/77-01/15/77	1	0.794	0.794	0.794	0.794	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/15/77-01/15/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/15/77-01/15/77	1	2.08	2.08	2.08	2.08	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/15/77-01/15/77	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/15/77-01/15/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/15/77-01/15/77	1	29.	29.	29.	29.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/15/77-01/15/77	1	0.021	0.021	0.021	0.021	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/15/77-01/15/77	1	55.	55.	55.	55.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/15/77-01/15/77	1	4800.	4800.	4800.	4800.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/15/77-01/15/77	1	57.	57.	57.	57.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/15/77-01/15/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0034

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00						
	Drinking Water	20.	1	0	0.00				1	0	0.00						
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0035

NPS Station ID: SHEN0035
 Location: MILES W OF RT 29 OVER MOORMANS R
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: JAMES RIVER
 Minor Basin: RIVANNA RIVER RT 614 BR 14
 RF1 Index: 02080204021
 RF3 Index: 02080204001100.00
 Description:
 THESE SAMPLES WERE TAKEN TO

LAT/LON: 38.128060/ -78.691670

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 2.080
 RF3 Mile Point: 1.60

Agency: 1113VABD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): MRM 001 /MOORMANS R
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.07

On/Off RF1: OFF
 On/Off RF3:

COMPARE METAL DETERMINATIONS OF TWO MACHINES

Parameter Inventory for Station: SHEN0035

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0036

NPS Station ID: SHEN0036
 Location: VAAU504R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.128503/ -78.837198

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_NURE_18 /4088104
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE CRIMORA VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0036

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/10/77-01/10/77	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/10/77-01/10/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/10/77-01/10/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/10/77-01/10/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/10/77-01/10/77	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/10/77-01/10/77	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/10/77-01/10/77	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/10/77-01/10/77	1	0.64	0.64	0.64	0.64	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/10/77-01/10/77	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/10/77-01/10/77	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/10/77-01/10/77	1	81.	81.	81.	81.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/10/77-01/10/77	1	0.024	0.024	0.024	0.024	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/10/77-01/10/77	1	4300.	4300.	4300.	4300.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/10/77-01/10/77	1	45.	45.	45.	45.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/10/77-01/10/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0036

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
	Drinking Water	20.	1	0	0.00				1	0	0.00						
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0037

NPS Station ID: SHEN0037 LAT/LON: 38.129170/ -78.724170
 Location: MOORMANS RIVER AT RT 614 NEAR WHITEHALL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02080204 RF1 Mile Point: 0.000
 RF3 Index: 02080204026600.00 RF3 Mile Point: 0.26
 Description:

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02032100
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.20
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0037

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/23/82	6	17.5	14.583	22.	2.5	55.942	7.479	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/23/82	6	4.	13.267	58.	0.2	503.435	22.437	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/23/82	6	6.9	6.917	7.1	6.7	0.026	0.16	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/23/82	6	6.9	6.892	7.1	6.7	0.026	0.162	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/23/82	6	0.126	0.128	0.2	0.079	0.002	0.046	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/23/82	6	6.9	6.95	7.1	6.8	0.015	0.122	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/23/82	6	6.9	6.936	7.1	6.8	0.015	0.123	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/23/82	6	0.126	0.116	0.158	0.079	0.001	0.031	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/23/82	6 ##	0.005	0.012	0.04	0.005	0.	0.014	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/23/82	6	0.035	0.039	0.08	0.005	0.001	0.029	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/23/82	6	11.5	12.5	16.	10.	7.9	2.811	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/23/82	6	2.5	2.617	3.3	2.	0.326	0.571	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/23/82	6	1.35	1.483	2.	1.1	0.142	0.376	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/23/82	6	1.7	1.8	2.4	1.4	0.176	0.42	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/23/82	6	0.2	0.217	0.3	0.2	0.002	0.041	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/23/82	6	23.	22.833	24.	22.	0.567	0.753	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/23/82	6	0.5	0.517	0.7	0.4	0.014	0.117	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/23/82	6	1.	1.167	2.	1.	0.167	0.408	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/23/82	6	4.5	4.5	5.	4.	0.3	0.548	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/23/82	6	10.05	9.817	11.9	8.2	1.862	1.364	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/22/81-05/19/82	2	0.03	0.03	0.05	0.01	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0037

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0037

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0038

NPS Station ID: SHEN0038
 Location: PORTERFIELD RUN NEAR CRIMORA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.131670/ -78.875005

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 01626950
 Within Park Boundary: No

Date Created: 11/20/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0038

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/13/93-09/13/93	1	25.	25.	25.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/13/93-09/13/93	1	26.5	26.5	26.5	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	09/13/93-09/13/93	1	737.	737.	737.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/13/93-09/13/93	1	0.3	0.3	0.3	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/13/93-09/13/93	1	347.	347.	347.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/13/93-09/13/93	1	10.	10.	10.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/13/93-09/13/93	1	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/13/93-09/13/93	1	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/13/93-09/13/93	1	0.003	0.003	0.003	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/13/93-09/13/93	1	8.7	8.7	8.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/13/93-09/13/93	1	8.7	8.7	8.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/13/93-09/13/93	1	0.002	0.002	0.002	0.	0.	**	**	**	**
00452	CARBONATE, WATER, DISS, INCR TIT, FIELD, AS CO3, MG/L	09/13/93-09/13/93	1	5.	5.	5.	0.	0.	**	**	**	**
00453	BICARBONATE, WATER, DISS, INCR TIT, FIELD, AS HCO3, MG/L	09/13/93-09/13/93	1	167.	167.	167.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	1	0.02	0.02	0.02	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	1	0.05	0.05	0.05	0.	0.	**	**	**	**
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	1	0.3	0.3	0.3	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/13/93-09/13/93	1	0.3	0.3	0.3	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS, 1 DET. (MG/L AS N)	09/13/93-09/13/93	1	2.3	2.3	2.3	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/13/93-09/13/93	1	0.02	0.02	0.02	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/13/93-09/13/93	1	37.	37.	37.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/13/93-09/13/93	1	19.	19.	19.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/13/93-09/13/93	1	3.4	3.4	3.4	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/13/93-09/13/93	1	2.5	2.5	2.5	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/13/93-09/13/93	1	9.	9.	9.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/13/93-09/13/93	1	8.	8.	8.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/13/93-09/13/93	1	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/13/93-09/13/93	1	6.9	6.9	6.9	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/13/93-09/13/93	1	12.	12.	12.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/13/93-09/13/93	1	7.	7.	7.	0.	0.	**	**	**	**
04024	PROPACHLOR, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1##	0.008	0.008	0.008	0.	0.	**	**	**	**
04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1##	0.004	0.004	0.004	0.	0.	**	**	**	**
04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1	0.03	0.03	0.03	0.	0.	**	**	**	**
04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1	0.007	0.007	0.007	0.	0.	**	**	**	**
04040	DEETHYL ATRAZINE, DISSOLVED, WATER, TOT REC UG/L	09/13/93-09/13/93	1	0.077	0.077	0.077	0.	0.	**	**	**	**
04041	CYANAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1##	0.007	0.007	0.007	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0038

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	1 ##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
34253	A-BHC-ALPHA DISSUG/L	1 ##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
34653	P,P'-DDE DISSUG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
38933	CHLORPYRIFOS,DISSOLVED UG/L	1 ##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
39086	ALKALINITY, WATER, DISS, INCR TIT, FIELD, AS CaCO3, MG/L	1	145.	145.	145.	145.	0.	0.	**	**	**	**
39341	GAMMA-BHC(LINDANE),DISSOLVED,UG/L	1 ##	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39415	METOLACHLOR, WATER, DISSOLVED UG/L	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	1 ##	0.011	0.011	0.011	0.011	0.	0.	**	**	**	**
39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	1 ##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
39632	ATRAZINE DISSOLVED IN WATER PPB	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	1	183.	183.	183.	183.	0.	0.	**	**	**	**
82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82660	DIETHYLANILINE, 2, 6,-0.7UM FILT,TOT RECV, WTR UG/L	1 ##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	1	0.	0.	0.	0.	0.	0.	**	**	**	**
82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	1 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0038

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00								
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00								
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00								
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00								
		Drinking Water	250.	1	0	0.00	1	0	0.00								
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0038

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Obs			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00950	FLUORIDE, DISSOLVED AS F		4.	1	0	0.00	1	0	0.00									
04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVER		4.	1	0	0.00	1	0	0.00									
34653	P,P'-DDE, DISSOLVED		1050.	1	0	0.00	1	0	0.00									
38933	CHLORPYRIFOS, DISSOLVED		0.083	1	0	0.00	1	0	0.00									
39341	GAMMA-BHC(LINDANE), DISSOLVED		2.	1	0	0.00	1	0	0.00									
			0.2	1	0	0.00	1	0	0.00									
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE		2.5	1	0	0.00	1	0	0.00									
39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE		0.065	1	0	0.00	1	0	0.00									
39632	ATRAZINE DISSOLVED IN WATER		3.	1	0	0.00	1	0	0.00									
46342	ALACHLOR (LASSO), WATER, DISSOLVED		2.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0039

NPS Station ID: SHEN0039
 Location: SOUTH FORK OF MOORMANS RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.131892/ -78.757198

Depth of Water: 0
 Elevation: 1100

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_VTSSS_AB08
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB08 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE SOUTH FORK OF MOORMANS RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0039

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/24/87-04/24/87	1	7.18	7.18	7.18	7.18	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/24/87-04/24/87	1	7.18	7.18	7.18	7.18	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/87-04/24/87	1	0.066	0.066	0.066	0.066	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/24/87-04/24/87	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/24/87-04/24/87	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/24/87-04/24/87	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/24/87-04/24/87	1	1.47	1.47	1.47	1.47	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/24/87-04/24/87	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/24/87-04/24/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/24/87-04/24/87	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/24/87-04/24/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0039

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0040

NPS Station ID: SHEN0040
 Location: MOORMANS RIVER NEAR WHITEHALL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204002200.00
 Description:

LAT/LON: 38.134726/ -78.736115

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 6.83

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02032000
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.50
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0040

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	08/02/45-08/02/45	1	2.	2.	2.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	08/02/45-08/02/45	1	6.	6.	6.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/02/45-08/02/45	1	6.7	6.7	6.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/02/45-08/02/45	1	6.7	6.7	6.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/02/45-08/02/45	1	0.2	0.2	0.2	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	08/02/45-08/02/45	1	15.	15.	15.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/02/45-08/02/45	1	11.	11.	11.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/02/45-08/02/45	1	2.7	2.7	2.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	08/02/45-08/02/45	1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	08/02/45-08/02/45	1	2.	2.	2.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/02/45-08/02/45	1	0.8	0.8	0.8	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/02/45-08/02/45	1	2.	2.	2.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	08/02/45-08/02/45	1	0.	0.	0.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/02/45-08/02/45	1	12.	12.	12.	0.	0.	**	**	**	**
60050	ALGAE, TOTAL (CELLS/ML)	04/27/79-04/27/79	1	840.	840.	840.	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	08/02/45-08/02/45	1	31.	31.	31.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/02/45-08/02/45	1	0.	0.	0.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	08/02/45-08/02/45	1	30.	30.	30.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0040

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	9.	1	0	0.00	1	0	0.00									
	Fresh Chronic																	6.5	1	0	0.00	1	0	0.00
00940	CHLORIDE, TOTAL IN WATER	860.	1	0	0.00	1	0	0.00									
	Other-Lo Lim.																	250.	1	0	0.00	1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	250.	1	0	0.00	1	0	0.00									
	Drinking Water																	4.	1	0	0.00	1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	4.	1	0	0.00	1	0	0.00									
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0041

NPS Station ID: SHEN0041 LAT/LON: 38.136670/ -78.740004
 Location: SUGAR HOLLOW RESERVOIR 50 FT. UPSTREAM OF DAM
 Station Type: /TYPA/AMBNT/LAKE
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 2-JAMES
 RF1 Index: 02080204 RF1 Mile Point: 0.000
 RF3 Index: 02080203001100.00 RF3 Mile Point: 0.85
 Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2- JAMES REGION: 6 VALLEY
 RIVER: MOORMANS RIVER SECTION: 101 TOPO MAP #: 0065 TOPO MAP NAME: BROWNS COVE, VA
 LAKE STATION

Agency: 21VASWCB
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 2-MNR014.50
 Within Park Boundary: No

Date Created: 10/10/92

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 2.60
 Distance from RF3: 0.05

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0041

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0042

NPS Station ID: SHEN0042
 Location: S F MOORMANS RIVER NEAR WHITEHALL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204002106.91
 Description:

LAT/LON: 38.136949/ -78.749726
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 18.69

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02031800
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.60
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0042

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/23/82	6	15.5	13.467	17.8	5.5	22.447	4.738	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/23/82	6	3.	5.4	18.	0.4	41.44	6.437	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/23/82	6	7.1	7.117	7.3	6.9	0.03	0.172	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/23/82	6	7.089	7.089	7.3	6.9	0.031	0.175	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/23/82	6	0.082	0.082	0.126	0.05	0.001	0.032	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/23/82	6	7.25	7.183	7.3	7.	0.022	0.147	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/23/82	6	7.247	7.162	7.3	7.	0.022	0.149	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/23/82	6	0.057	0.069	0.1	0.05	0.001	0.025	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/23/82	6##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/23/82	6	0.06	0.063	0.09	0.04	0.	0.02	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/23/82	6	10.5	11.333	14.	10.	3.067	1.751	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/23/82	6	2.2	2.2	2.5	1.9	0.068	0.261	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/23/82	6	1.25	1.383	1.8	1.2	0.066	0.256	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/23/82	6	1.6	1.683	2.3	1.4	0.118	0.343	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/23/82	6	0.2	0.217	0.3	0.2	0.002	0.041	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/23/82	6	23.5	23.833	26.	22.	2.167	1.472	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/23/82	6	0.4	0.483	0.7	0.4	0.018	0.133	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/23/82	6	1.	0.983	1.	0.9	0.002	0.041	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/23/82	6	4.	3.833	5.	3.	0.567	0.753	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/23/82	6	11.05	11.15	13.7	8.7	4.027	2.007	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/22/81-05/19/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0042

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0042

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0043

NPS Station ID: SHEN0043 LAT/LON: 38.137503/ -78.742226
 Location: SUGAR HOLLOW RESERVOIR-LAKE CENTER-ALBERMARLE CO
 Station Type: /TYPA/AMBNT/LAKE
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204 Depth of Water: 0
 Major Basin: 02-NORTH-ATLANTIC Elevation: 0
 Minor Basin: 2-JAMES
 RF1 Index: 02080204 RF1 Mile Point: 0.000
 RF3 Index: 02070005016400.00 RF3 Mile Point: 4.85

Agency: 21VASWCB
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 2-MNR014.68
 Within Park Boundary: No

Date Created: 04/07/90

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 1.50
 Distance from RF3: 0.06

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 2 JAMES REGION: 6 VALLEY
 RIVER: MOORMANS RIVER SECTION: 101 TOPO MAP #: 0077 TOPO MAP NAME: BROWNS COVE, VA

Parameter Inventory for Station: SHEN0043

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/15/77-10/06/80	57	18.7	17.726	29.	2.	62.634	7.914	7.56	10.	25.1	28.34
00078	TRANSPARENCY, SECCHI DISC (METERS)	04/10/80-08/17/89	9	1.6	1.667	2.4	1.	0.288	0.536	1.	1.1	2.15	2.4
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/15/77-08/17/89	31	36.	41.032	83.	4.	295.232	17.182	25.6	32.	50.	68.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/15/77-09/03/78	21	8.4	9.148	14.2	6.	4.727	2.174	6.64	7.95	9.8	13.68
00300	OXYGEN, DISSOLVED MG/L	09/18/77-08/17/89	38	8.35	7.463	13.4	0.	19.038	4.363	0.39	3.85	11.3	11.88
00310	BOD, 5 DAY, 20 DEG C MG/L	08/07/77-08/07/77	1	5.	5.	5.	0.	0.	**	**	**	**	**
00400	PH (STANDARD UNITS)	05/15/77-08/17/89	35	7.	7.197	9.95	6.5	0.514	0.717	6.5	6.9	7.3	7.9
00400	CONVERTED PH (STANDARD UNITS)	05/15/77-08/17/89	35	7.	6.94	9.95	6.5	0.583	0.763	6.5	6.9	7.3	7.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/15/77-08/17/89	35	0.1	0.115	0.316	0.	0.009	0.096	0.02	0.05	0.126	0.316
00403	PH, LAB, STANDARD UNITS SU	05/15/77-10/06/80	54	6.5	6.576	7.8	5.9	0.138	0.371	6.2	6.3	6.8	7.1
00403	CONVERTED PH, LAB, STANDARD UNITS	05/15/77-10/06/80	54	6.5	6.459	7.8	5.9	0.152	0.389	6.2	6.3	6.8	7.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/15/77-10/06/80	54	0.316	0.347	1.259	0.016	0.055	0.234	0.079	0.158	0.501	0.631
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/15/77-08/17/89	31	15.	23.613	136.	7.	748.512	27.359	8.	12.	19.	43.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/10/80-10/06/80	7 ##	2.5	3.	6.	2.5	1.75	1.323	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/10/80-10/06/80	7 ##	2.5	2.714	4.	2.5	0.321	0.567	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/10/80-10/06/80	7 ##	2.5	2.429	2.5	2.	0.036	0.189	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/15/77-08/17/89	31 ##	0.05	0.288	2.3	0.04	0.246	0.496	0.05	0.05	0.2	0.98
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/15/77-08/17/89	27 ##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.006
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/15/77-08/17/89	24 ##	0.025	0.045	0.17	0.025	0.001	0.034	0.025	0.025	0.06	0.085
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/15/77-08/17/89	31	0.3	0.469	2.6	0.05	0.274	0.524	0.05	0.1	0.6	1.14
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/10/80-08/17/89	9	0.05	0.804	3.42	0.025	2.202	1.484	0.025	0.025	1.81	3.42
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/15/77-08/17/89	31	0.04	0.038	0.1	0.005	0.001	0.027	0.01	0.02	0.05	0.09
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/15/77-08/17/89	31 ##	0.005	0.012	0.05	0.005	0.	0.012	0.005	0.005	0.02	0.03
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/15/77-09/03/78	21	5.	5.905	14.	1.	11.39	3.375	2.2	3.	8.5	11.4
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/14/80-08/14/80	1	13.6	13.6	13.6	13.6	0.	0.	**	**	**	**
01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/14/80-08/14/80	1 ##	0.085	0.085	0.085	0.085	0.	0.	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/14/80-08/14/80	1	34.	34.	34.	34.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/14/80-08/14/80	1	59.6	59.6	59.6	59.6	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/10/80-08/17/89	9	0.2	57.958	260.	0.02	13121.127	114.547	0.02	0.05	130.45	260.
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/14/80-08/14/80	1	22.1	22.1	22.1	22.1	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/10/80-08/17/89	9 ##	0.02	5.589	25.	0.005	121.108	11.005	0.005	0.005	12.6	25.
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/14/80-08/14/80	1	111.	111.	111.	111.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/14/80-08/14/80	1	17.	17.	17.	17.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0043

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/12/80-08/17/89	5 ##	50.	50.	50.	0.	0.	**	**	**	**	
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/12/80-08/17/89	5 ##	1.699	1.699	1.699	0.	0.	**	**	**	**	
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/12/80-08/17/89	5 ##	1.699	1.699	1.699	0.	0.	**	**	**	**	
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	04/10/80-08/17/89	9	9.95	17.028	43.4	3.8	239.071	15.462	3.8	6.6	29.95	43.4
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34671	PCB - 1016 TOTWUG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/17/89-08/17/89	2 ##	12.513	12.513	25.	0.025	311.875	17.66	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE), WHOLE WATER, UG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS), SEDIMENTS, DRY WGT, UG/KG	08/17/89-08/17/89	2 ##	250.25	250.25	500.	0.5	124750.125	353.2	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	2 ##	25.025	25.025	50.	0.05	1247.501	35.32	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	2 ##	25.025	25.025	50.	0.05	1247.501	35.32	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	2 ##	25.025	25.025	50.	0.05	1247.501	35.32	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/17/89-08/17/89	2 ##	25.025	25.025	50.	0.05	1247.501	35.32	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/17/89-08/17/89	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	08/17/89-08/17/89	2 ##	0.125	0.125	0.2	0.05	0.011	0.106	**	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	08/17/89-08/17/89	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39526	PCBS TOTAL, IN SEDIMENT, DRY (ISOMER ANALYSES) UG/KG	08/17/89-08/17/89	2 ##	250.25	250.25	500.	0.5	124750.125	353.2	**	**	**	**
71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/14/80-08/14/80	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	08/17/89-08/17/89	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0043

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----				
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	21	0	0.00	10	0	0.00	4	0	0.00	7	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	38	9	0.24	22	8	0.36				16	1	0.06			
00400	PH	Fresh Chronic	9.	35	2	0.06	21	2	0.10	4	0	0.00	10	0	0.00			
00403	PH, LAB	Other-Lo Lim.	6.5	35	5	0.14	21	5	0.24	4	0	0.00	10	0	0.00			
		Fresh Chronic	9.	54	0	0.00	26	0	0.00	4	0	0.00	24	0	0.00			
		Other-Lo Lim.	6.5	54	29	0.54	26	10	0.38	4	2	0.50	24	17	0.71			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	27	0	0.00	15	0	0.00	4	0	0.00	8	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	24	0	0.00	13	0	0.00	4	0	0.00	7	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	9	0	0.00	6	0	0.00				3	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	5	0	0.00	4	0	0.00				1	0	0.00			
34356	ENDOSULFAN, BETA, TOTAL	Fresh Acute	0.22	2	0	0.00	2	0	0.00									
34361	ENDOSULFAN, ALPHA, TOTAL	Fresh Acute	0.22	2	0	0.00	2	0	0.00									
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	2	0	0.00	2	0	0.00									
		Drinking Water	1.	2	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0043

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
39300	P,P' DDT IN WHOLE WATER SAMPLE	1.1	2	0	0	0.00	2	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	0.6	2	0	0	0.00	2	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	1050.	2	0	0	0.00	2	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	3.	2	0	0	0.00	2	0	0.00									
39340	GAMMA-BHC(LINDANE), WHOLE WATER	2.	2	0	0	0.00	2	0	0.00									
	Drinking Water	0.2	2	0	0	0.00	2	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.5	2	0	0	0.00	2	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	0.18	2	0	0	0.00	2	0	0.00									
	Drinking Water	2.	2	0	0	0.00	2	0	0.00									
39400	TOXAPHENE IN WHOLE WATER SAMPLE	0.73	2	0	0	0.00	2	0	0.00									
	Drinking Water	3.	2	0	0	0.00	2	0	0.00									
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	0.52	2	0	0	0.00	2	0	0.00									
	Drinking Water	0.4	2	0	0	0.00	2	0	0.00									
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	0.52	2	0	0	0.00	2	0	0.00									
	Drinking Water	0.2	1 &	0	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0043

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/15/77-08/17/89	17	41.	46.647	75.	12.	257.868	16.058	30.4	35.	61.5	70.2
00400	PH (STANDARD UNITS)	05/15/77-08/17/89	21	7.	7.21	9.95	6.5	0.849	0.921	6.5	6.58	7.3	9.092
00400	CONVERTED PH (STANDARD UNITS)	05/15/77-08/17/89	21	7.	6.844	9.95	6.5	0.989	0.995	6.5	6.58	7.3	9.092
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/15/77-08/17/89	21	0.1	0.143	0.316	0.	0.013	0.115	0.001	0.05	0.268	0.316
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/15/77-08/17/89	17	17.	26.765	136.	13.	856.066	29.259	13.	15.	29.	60.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/15/77-08/17/89	17	0.1	0.396	2.3	0.04	0.368	0.607	0.04	0.05	0.55	1.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/15/77-08/17/89	15 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/15/77-08/17/89	17	0.5	0.644	2.6	0.05	0.336	0.58	0.17	0.3	0.75	1.48
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/15/77-08/17/89	17	0.05	0.046	0.1	0.005	0.001	0.03	0.017	0.02	0.05	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/15/77-08/17/89	17 ##	0.005	0.016	0.05	0.005	0.	0.014	0.005	0.005	0.025	0.042

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0043

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/15/77-08/17/89	4	32.	44.	83.	29.	678.667	26.051	**	**	**	**
00400	PH (STANDARD UNITS)	05/15/77-08/17/89	4	7.	7.125	7.5	7.	0.063	0.25	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/15/77-08/17/89	4	7.	7.081	7.5	7.	0.065	0.255	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/15/77-08/17/89	4	0.1	0.083	0.1	0.032	0.001	0.034	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/15/77-08/17/89	4	10.5	18.25	44.	8.	300.25	17.328	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/15/77-08/17/89	4 ##	0.325	0.425	1.	0.05	0.214	0.463	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/15/77-08/17/89	4 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/15/77-08/17/89	4	0.35	0.538	1.4	0.05	0.392	0.626	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/15/77-08/17/89	4 ##	0.035	0.035	0.05	0.02	0.	0.017	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/15/77-08/17/89	4 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0043

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/15/77-08/17/89	10	32.5	30.3	41.	4.	108.011	10.393	6.1	27.25	36.75	40.8
00400	PH (STANDARD UNITS)	05/15/77-08/17/89	10	7.3	7.2	7.5	7.	0.033	0.183	7.	7.	7.3	7.48
00400	CONVERTED PH (STANDARD UNITS)	05/15/77-08/17/89	10	7.3	7.166	7.5	7.	0.035	0.186	7.	7.	7.3	7.48
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/15/77-08/17/89	10	0.05	0.068	0.1	0.032	0.001	0.028	0.033	0.05	0.1	0.1
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/15/77-08/17/89	10	12.	20.4	102.	7.	830.044	28.81	7.1	9.5	14.	93.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/15/77-08/17/89	10 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/15/77-08/17/89	8 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/15/77-08/17/89	10	0.1	0.145	0.3	0.05	0.01	0.098	0.05	0.05	0.225	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/15/77-08/17/89	10 ##	0.01	0.026	0.05	0.005	0.	0.021	0.006	0.01	0.05	0.05
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/15/77-08/17/89	10 ##	0.005	0.009	0.02	0.005	0.	0.006	0.005	0.005	0.013	0.02

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0044

NPS Station ID: SHEN0044 LAT/LON: 38.140281/ -78.751392
 Location: N F MOORMANS RIVER NEAR WHITE HALL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02080204 RF1 Mile Point: 0.000
 RF3 Index: 02070008001802.17 RF3 Mile Point: 2.17
 Description:

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02031500
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0044

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-06/23/82	7	16.	14.429	21.	4.5	35.536	5.961	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	11/03/52-11/03/52	1	1.	1.	1.	0.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/23/82	6	6.5	11.317	41.	0.9	224.682	14.989	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	11/03/52-07/16/68	3	5.	4.333	5.	3.	1.333	1.155	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/03/52-07/16/68	3	38.	40.	52.	30.	124.	11.136	**	**	**	**
00400	PH (STANDARD UNITS)	11/03/52-06/23/82	9	7.1	7.067	7.4	6.6	0.055	0.235	6.6	6.95	7.25	7.4
00400	CONVERTED PH (STANDARD UNITS)	11/03/52-06/23/82	9	7.1	7.005	7.4	6.6	0.059	0.243	6.6	6.95	7.25	7.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/03/52-06/23/82	9	0.079	0.099	0.251	0.04	0.004	0.063	0.04	0.057	0.113	0.251
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/23/82	6	7.15	7.067	7.3	6.8	0.047	0.216	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/23/82	6	7.147	7.02	7.3	6.8	0.049	0.222	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/23/82	6	0.071	0.095	0.158	0.05	0.002	0.05	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/16/68-07/16/68	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	11/03/52-07/16/68	3	18.	20.	26.	16.	28.	5.292	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	07/16/68-07/16/68	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/23/82	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/23/82	6	0.075	0.068	0.1	0.04	0.001	0.024	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	07/16/68-07/16/68	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/03/52-06/23/82	9	10.	11.111	19.	8.	12.611	3.551	8.	8.5	13.	19.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	11/03/52-07/16/68	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	11/03/52-06/23/82	9	1.8	2.289	3.6	1.6	0.629	0.793	1.6	1.75	3.05	3.6
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	11/03/52-06/23/82	9	1.2	1.322	2.4	1.	0.187	0.432	1.	1.05	1.4	2.4
00930	SODIUM, DISSOLVED (MG/L AS Na)	11/03/52-06/23/82	9	1.5	1.667	3.	1.1	0.298	0.545	1.1	1.35	1.75	3.
00931	SODIUM ADSORPTION RATIO	07/16/68-06/23/82	7	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	07/16/68-06/23/82	7	24.	22.857	27.	17.	10.476	3.237	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/03/52-06/23/82	9	0.6	0.7	1.4	0.4	0.087	0.296	0.4	0.5	0.8	1.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/03/52-06/23/82	9	1.	1.078	2.	0.8	0.124	0.353	0.8	0.95	1.	2.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/03/52-06/23/82	9	3.	3.444	6.	1.	2.278	1.509	1.	2.5	4.5	6.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	11/03/52-07/16/68	3	0.	0.033	0.1	0.	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	11/03/52-06/23/82	9	9.9	9.978	12.2	7.5	2.259	1.503	7.5	9.	11.2	12.2
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	11/03/52-07/16/68	3	35.	32.333	36.	26.	30.333	5.508	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	07/16/68-07/16/68	1	29.	29.	29.	29.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	07/16/68-07/16/68	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-06/23/82	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/03/52-07/16/68	3	0.3	0.333	0.5	0.2	0.023	0.153	**	**	**	**
71885	IRON (UG/L AS FE)	11/03/52-07/16/68	3	20.	20.	30.	10.	100.	10.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0044

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
	Drinking Water	250.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	3	0	0.00	2	0	0.00	1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	3	0	0.00	2	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0045

NPS Station ID: SHEN0045
 Location: POND RIDGE BRANCH OF MOORMANS RIVER
 Station Type: /TYP/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.140309/ -78.751892
 Depth of Water: 0
 Elevation: 1040
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_VTSSS_AB09
 Within Park Boundary: Yes
 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99
 On/Off RF1:
 On/Off RF3:

STATION AB09 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE POND RIDGE BRANCH OF MOORMANS RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.96 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0045

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/28/87-04/28/87	1	6.66	6.66	6.66	6.66	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/28/87-04/28/87	1	6.66	6.66	6.66	6.66	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/28/87-04/28/87	1	0.219	0.219	0.219	0.219	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/28/87-04/28/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/28/87-04/28/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/28/87-04/28/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/28/87-04/28/87	1	0.81	0.81	0.81	0.81	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/28/87-04/28/87	1	0.74	0.74	0.74	0.74	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/28/87-04/28/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/28/87-04/28/87	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/28/87-04/28/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0045

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0046

NPS Station ID: SHEN0046
 Location: NORTH FORK OF MOORMANS RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.142199/ -78.749698

Depth of Water: 0
 Elevation: 1040

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_VTSSS_AB01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB01 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NORTH FORK OF MOORMANS RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 26.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0046

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/28/87-04/28/87	1	7.12	7.12	7.12	7.12	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/28/87-04/28/87	1	7.12	7.12	7.12	7.12	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/28/87-04/28/87	1	0.076	0.076	0.076	0.076	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/28/87-04/28/87	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/28/87-04/28/87	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/28/87-04/28/87	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/28/87-04/28/87	1	1.26	1.26	1.26	1.26	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/28/87-04/28/87	1	0.59	0.59	0.59	0.59	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/28/87-04/28/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/28/87-04/28/87	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/28/87-04/28/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0046

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0047

NPS Station ID: SHEN0047
 Location: North Fork Moormans River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.142282/ -78.749642

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F046
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Browns Cove VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0047

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/95-06/19/95	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/19/95-06/19/95	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/19/95-06/19/95	1	9.3	9.3	9.3	9.3	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/19/95-06/19/95	1	6.84	6.84	6.84	6.84	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/19/95-06/19/95	1	6.84	6.84	6.84	6.84	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/95-06/19/95	1	0.145	0.145	0.145	0.145	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/19/95-06/19/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0047

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00									1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00									1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00									1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0048

NPS Station ID: SHEN0048
 Location: MINE BRANCH NEAR CRIMORA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005029200.90
 Description:

LAT/LON: 38.143337/ -78.815004

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 5.86

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 01627000
 Within Park Boundary: No

Date Created: 04/09/83

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 25.50
 Distance from RF3: 0.11

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0048

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	4	10.	8.875	14.	1.5	33.729	5.808	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	4	0.3	0.45	1.	0.2	0.137	0.37	**	**	**	**
00400	PH (STANDARD UNITS)	3	5.8	5.8	6.2	5.4	0.16	0.4	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	3	5.8	5.685	6.2	5.4	0.18	0.424	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	1.585	2.066	3.981	0.631	2.979	1.726	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	4	5.95	5.925	6.2	5.6	0.076	0.275	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	4	5.925	5.86	6.2	5.6	0.081	0.285	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	1.19	1.381	2.512	0.631	0.742	0.862	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	4##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	4	0.01	0.011	0.02	0.005	0.	0.006	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	4	3.	3.	3.	3.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	4	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	4	0.5	0.475	0.5	0.4	0.002	0.05	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	4	0.55	0.55	0.6	0.5	0.003	0.058	**	**	**	**
00931	SODIUM ADSORPTION RATIO	4	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	4	23.	22.25	23.	20.	2.25	1.5	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	4	1.	0.975	1.1	0.8	0.016	0.126	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	4	0.95	0.95	1.	0.9	0.003	0.058	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	4	3.	3.	3.	3.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	4	4.4	4.325	4.5	4.	0.056	0.236	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	1	0.01	0.01	0.01	0.01	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0048

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00403	Fresh Chronic	9.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	2	2	1.00	2	2	1.00			
00631	Drinking Water	10.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0048

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	2	0	0.00	2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0049

NPS Station ID: SHEN0049
 Location: North Fork Moormans River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.148171/ -78.748643

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F084
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Browns Cove VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0049

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/15/95-06/09/98	7	15.7	16.329	20.6	12.5	6.942	2.635	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/15/95-06/09/98	7	32.	30.857	35.	27.	13.81	3.716	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/15/95-06/09/98	7	9.7	9.414	10.4	8.4	0.555	0.745	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/15/95-06/09/98	7	6.9	6.884	7.15	6.59	0.05	0.224	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/15/95-06/09/98	7	6.9	6.835	7.15	6.59	0.053	0.23	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/15/95-06/09/98	7	0.126	0.146	0.257	0.071	0.006	0.074	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/15/95-06/09/98	5	20.	19.4	20.	17.	1.8	1.342	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/16/96-06/09/98	3	4.1	3.943	4.55	3.18	0.488	0.698	**	**	**	**
83509 STREAM, WIDTH METER	07/16/96-06/09/98	3	7.4	7.567	9.4	5.9	3.083	1.756	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/16/96-06/09/98	3	0.07	0.167	0.37	0.06	0.031	0.176	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0049

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Obs		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	7	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	7	7	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00					
	Other-Lo Lim.	6.5	7	7	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0050

NPS Station ID: SHEN0050
 Location: SOUTH RIV NEAR CRIMORA RT 612
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005027
 RF3 Index: 02070005002715.60
 Description:

LAT/LON: 38.156115/ -78.854171

Depth of Water: 999
 Elevation: 0
 RF1 Mile Point: 12.340
 RF3 Mile Point: 16.56

Agency: 1112A9WQ
 FIPS State/County: 51013 VIRGINIA/ARLINGTON
 STORET Station ID(s): UP-POT-062 /SHEN-062 /062 /S RIV 062
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0050

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/16/73	4	15.25	14.625	23.	5.	54.563	7.387	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/16/73	4	9.6	9.575	12.3	6.8	7.709	2.777	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-05/23/72	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	05/23/72-02/13/73	2	7.2	7.2	7.8	6.6	0.72	0.849	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/23/72-02/13/73	2	6.874	6.874	7.8	6.6	0.932	0.965	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/72-02/13/73	2	0.134	0.134	0.251	0.016	0.028	0.166	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	32.	32.	32.	32.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	11.	11.	11.	11.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/16/73	4	0.53	0.545	0.885	0.235	0.094	0.306	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/23/72-04/16/73	4	1.027	1.13	1.877	0.59	0.352	0.594	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/16/73	4	0.865	1.155	2.35	0.54	0.662	0.814	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/16/73	4	0.23	0.335	0.73	0.15	0.073	0.27	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/23/72-02/13/73	3	2.8	3.967	6.3	2.8	4.083	2.021	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/23/72-02/13/73	3	15.7	19.333	29.6	12.7	81.303	9.017	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-05/23/72	1	1.	1.	1.	1.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/23/72-05/23/72	1	6.	6.	6.	6.	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/16/73	4	0.355	0.518	1.12	0.24	0.169	0.411	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-05/23/72	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0050

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400	PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0050

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00						1	0	0.00				
	Drinking Water	5.	1	0	0.00						1	0	0.00				
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00						1	0	0.00				
	Drinking Water	1300.	1	0	0.00						1	0	0.00				
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00						1	0	0.00				
	Drinking Water	15.	1	0	0.00						1	0	0.00				
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00						1	0	0.00				
	Drinking Water	5000.	1	0	0.00						1	0	0.00				
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00						1	0	0.00				
	Drinking Water	2.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0051

NPS Station ID: SHEN0051
 Location: RT. 612 BRIDGE AT CRIMORA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005027
 RF3 Index: 02070005002704.73

LAT/LON: 38.156115/ -78.860337

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 12.590
 RF3 Mile Point: 7.61

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BSTH014.49 /VA1B03-X0077/VA1B6X0077
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 0064 TOPO MAP NAME: CRIMORA, VA

Parameter Inventory for Station: SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	93	15.6	15.357	27.2	2.8	47.957	6.925	5.24	9.7	21.4	23.96
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	90	8.4	8.441	14.	3.	6.206	2.491	5.4	6.6	10.05	11.58
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-06/10/75	12	3.3	3.467	5.3	2.	1.21	1.1	2.06	2.475	4.15	5.27
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	93	7.5	7.733	9.	6.9	0.269	0.519	7.3	7.4	8.	8.62
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	93	7.5	7.526	9.	6.9	0.312	0.559	7.3	7.4	8.	8.62
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	93	0.032	0.03	0.126	0.001	0.001	0.025	0.002	0.01	0.04	0.05
00403	PH, LAB, STANDARD UNITS SU	03/02/70-05/29/70	3	7.1	7.233	7.6	7.	0.103	0.321	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/02/70-05/29/70	3	7.1	7.166	7.6	7.	0.11	0.332	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-05/29/70	3	0.079	0.068	0.1	0.025	0.001	0.039	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/02/70-05/29/70	3	68.	69.333	89.	51.	362.333	19.035	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	03/02/70-11/02/77	5	235.	240.6	317.	161.	5108.8	71.476	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-11/02/77	5	60.	63.6	80.	49.	169.3	13.012	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-11/02/77	5	175.	177.	237.	112.	3448.5	58.724	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-11/02/77	5	9.	11.1	24.	0.5	75.3	8.678	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-11/02/77	5	4.	3.7	6.	0.5	3.95	1.987	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-11/02/77	5	5.	7.5	20.	0.5	62.	7.874	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	60	0.2	0.374	1.5	0.05	0.136	0.368	0.05	0.1	0.6	0.89
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	58	0.065	0.105	0.9	0.005	0.018	0.135	0.01	0.02	0.143	0.261
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	51	1.729	1.925	4.899	0.21	1.059	1.029	0.868	1.039	2.809	3.463
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	60	1.	1.393	13.	0.1	2.888	1.699	0.41	0.7	1.574	2.589
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	8	2.95	2.843	4.04	1.2	1.033	1.017	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/77-11/02/77	2	11.	11.	12.	10.	2.	1.414	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	9 ##	1.5	1.667	2.5	0.5	0.688	0.829	0.5	1.	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	13 ##	5.	4.692	5.	1.	1.231	1.109	2.6	5.	5.	5.
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	22	10.	17.045	60.	5.	253.95	15.936	5.	5.	22.5	47.
01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	22 ##	7.5	9.318	20.	5.	31.656	5.626	5.	5.	10.	20.
01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	3	300.	266.667	400.	100.	23333.333	152.753	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	19 ##	5.	7.211	30.	2.	34.953	5.912	5.	5.	8.	10.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	2	94.95	94.95	119.9	70.	1245.005	35.285	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	12 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-08/29/78	22	10.	19.773	130.	5.	748.755	27.363	5.	5.	30.	40.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/08/70-09/08/70	6	3500.	7035.	23000.	280.	76183190.	8728.298	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	04/08/70-09/08/70	6	3.521	3.477	4.362	2.447	0.493	0.702	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =		2998.852									
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	82	350.	1515.854	29000.	50.	13154807.287	3626.956	50.	100.	1225.	3940.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	82	2.54	2.615	4.462	1.699	0.47	0.685	1.699	2.	3.088	3.595
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		411.763									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	60	0.2	0.212	0.5	0.05	0.016	0.127	0.05	0.1	0.3	0.4
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	60	0.19	0.194	0.5	0.03	0.015	0.121	0.05	0.1	0.3	0.399
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	22 ##	0.25	0.277	0.7	0.15	0.012	0.111	0.25	0.25	0.25	0.425

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0051

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	90	5	0.06	26	3	0.12	42	0	0.00	22	2	0.09			
00400	PH	Fresh Chronic	9.	93	6	0.06	27	1	0.04	43	4	0.09	23	1	0.04			
		Other-Lo Lim.	6.5	93	0	0.00	27	0	0.00	43	0	0.00	23	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	58	0	0.00	15	0	0.00	28	0	0.00	15	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	51	0	0.00	13	0	0.00	24	0	0.00	14	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	8	0	0.00	3	0	0.00	4	0	0.00	1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	9	0	0.00	5	0	0.00	2	0	0.00	2	0	0.00			
		Drinking Water	50.	9	0	0.00	5	0	0.00	2	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00									
		Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	22	4	0.18	7	0	0.00	8	2	0.25	7	2	0.29			
		Drinking Water	1300.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	19	0	0.00	7	0	0.00	8	0	0.00	4	0	0.00			
		Drinking Water	15.	19	1	0.05	7	1	0.14	8	0	0.00	4	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	12	0	0.00	5	0	0.00	3	0	0.00	4	0	0.00			
		Drinking Water	100.	12	0	0.00	5	0	0.00	3	0	0.00	4	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	22	1	0.05	7	1	0.14	8	0	0.00	7	0	0.00			
		Drinking Water	5000.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	6	4	0.67	3	2	0.67				3	2	0.67			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	82	56	0.68	22	15	0.68	40	28	0.70	20	13	0.65			
71900	MERCURY, TOTAL	Fresh Acute	2.4	22	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00			
		Drinking Water	2.	22	0	0.00	8	0	0.00	8	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1970 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	9	19.4	16.9	26.1	7.2	52.378	7.237	7.2	10.	23.05	26.1
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	9	7.8	7.744	11.4	4.4	4.493	2.12	4.4	5.95	9.1	11.4
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	9	7.5	7.656	8.5	7.3	0.183	0.428	7.3	7.35	8.	8.5
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	9	7.5	7.525	8.5	7.3	0.202	0.449	7.3	7.35	8.	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	9	0.032	0.03	0.05	0.003	0.	0.018	0.003	0.011	0.045	0.05
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	3	1.199	1.133	1.5	0.7	0.163	0.404	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	2	0.03	0.03	0.04	0.02	0.	0.014	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	2	0.755	0.755	0.86	0.65	0.022	0.148	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	3	2.	1.933	2.5	1.299	0.364	0.603	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	18250.	18250.	29000.	7500.	231125000.	15202.796	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	4.169	4.169	4.462	3.875	0.172	0.415	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			14747.881								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	3	0.2	0.217	0.35	0.1	0.016	0.126	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	3	0.2	0.183	0.3	0.05	0.016	0.126	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	12	15.85	14.458	24.4	5.6	44.354	6.66	5.6	6.55	20.55	23.59
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	12	7.6	8.667	13.8	3.6	10.606	3.257	3.9	6.75	11.8	13.56
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	12	7.5	7.583	8.3	7.2	0.111	0.333	7.23	7.3	7.8	8.21
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	12	7.5	7.49	8.3	7.2	0.12	0.347	7.23	7.3	7.8	8.21
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	12	0.032	0.032	0.063	0.005	0.	0.019	0.007	0.016	0.05	0.059
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2450.	3329.167	8200.	50.	11824753.788	3438.714	65.	200.	7500.	8140.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	3.311	3.042	3.914	1.699	0.699	0.836	1.789	2.301	3.872	3.911
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			1100.595								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	12	15.6	13.8	20.	3.3	31.778	5.637	3.81	10.6	18.75	19.82
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	12	8.6	8.125	11.4	4.	6.195	2.489	4.18	6.3	10.65	11.34
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	12	7.5	7.492	8.2	6.9	0.15	0.387	6.93	7.225	7.775	8.14
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	12	7.5	7.35	8.2	6.9	0.172	0.415	6.93	7.225	7.775	8.14
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	12	0.032	0.045	0.126	0.006	0.001	0.037	0.007	0.017	0.06	0.118
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	1	0.98	0.98	0.98	0.98	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	900.	1233.333	4500.	50.	1800151.515	1341.697	50.	150.	1975.	3930.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.929	2.745	3.653	1.699	0.453	0.673	1.699	2.119	3.295	3.582
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			555.549								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	11	16.7	15.1	23.9	4.4	47.554	6.896	4.96	7.8	21.1	23.78
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	11	7.6	8.045	12.8	3.	9.679	3.111	3.2	6.5	11.	12.56
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	11	7.5	7.691	9.	7.	0.331	0.575	7.06	7.3	7.8	8.9
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	11	7.5	7.477	9.	7.	0.381	0.617	7.06	7.3	7.8	8.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	11	0.032	0.033	0.1	0.001	0.001	0.027	0.001	0.016	0.05	0.09
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.7	0.802	1.5	0.48	0.098	0.313	0.484	0.6	1.	1.44
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.15	0.214	0.9	0.02	0.062	0.249	0.02	0.06	0.27	0.784
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.429	1.586	2.829	0.92	0.314	0.561	0.942	1.199	1.739	2.715
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	11	2.599	3.19	13.	0.9	11.328	3.366	0.96	1.199	3.	11.12
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10	350.	490.	1800.	50.	276000.	525.357	50.	87.5	700.	1690.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10	2.54	2.45	3.255	1.699	0.272	0.521	1.699	1.925	2.845	3.214
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			281.953								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.218	0.4	0.05	0.015	0.123	0.05	0.1	0.3	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.195	0.4	0.07	0.013	0.114	0.072	0.1	0.3	0.38

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	11	17.8	16.464	25.	5.	47.037	6.858	5.56	11.1	22.8	25.
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	11	8.4	8.164	12.5	5.4	5.123	2.263	5.46	6.	9.9	12.
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	11	7.5	7.445	8.	7.	0.075	0.273	7.	7.4	7.5	7.92
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	11	7.5	7.367	8.	7.	0.082	0.286	7.	7.4	7.5	7.92
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	11	0.032	0.043	0.1	0.01	0.001	0.029	0.013	0.032	0.04	0.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.3	0.355	0.9	0.1	0.045	0.211	0.12	0.2	0.4	0.82
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.06	0.077	0.21	0.005	0.004	0.063	0.006	0.03	0.11	0.198
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.799	1.89	3.989	0.59	1.388	1.178	0.63	0.9	2.849	3.901
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	11	1.	1.109	2.199	0.6	0.264	0.514	0.62	0.7	1.299	2.139
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	200.	531.818	1800.	50.	321136.364	566.689	60.	100.	900.	1680.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.301	2.468	3.255	1.699	0.273	0.522	1.759	2.	2.954	3.22
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			293.644								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.236	0.4	0.05	0.014	0.119	0.05	0.2	0.3	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.182	0.4	0.05	0.019	0.137	0.05	0.05	0.3	0.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	12	14.7	14.958	25.6	4.4	56.395	7.51	5.42	8.075	22.75	25.09
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	12	9.55	8.958	12.6	3.9	5.315	2.306	4.71	7.55	10.675	12.12
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	12	7.75	7.908	9.	7.1	0.35	0.592	7.19	7.5	8.425	8.91
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	12	7.682	7.635	9.	7.1	0.432	0.657	7.19	7.5	8.425	8.91
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	12	0.021	0.023	0.079	0.001	0.001	0.023	0.001	0.004	0.032	0.068
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	10	0.2	0.23	0.6	0.05	0.033	0.181	0.05	0.088	0.4	0.58
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	10	0.05	0.083	0.33	0.005	0.011	0.106	0.005	0.005	0.118	0.317
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	10	1.729	1.898	3.369	0.9	0.763	0.874	0.909	1.072	2.857	3.332
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	10	0.65	0.69	1.399	0.2	0.105	0.324	0.22	0.475	0.825	1.349
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	400.	613.636	3700.	50.	1094545.455	1046.205	50.	500.	3100.	
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.602	2.42	3.568	1.699	0.345	0.587	1.699	1.699	2.699	3.424
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			262.885								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	10	0.1	0.16	0.4	0.05	0.013	0.115	0.05	0.088	0.225	0.39
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	10	0.1	0.134	0.3	0.05	0.008	0.088	0.05	0.05	0.21	0.294

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	11	15.6	15.109	27.2	2.8	60.041	7.749	3.02	10.6	22.2	26.32
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	10	9.2	9.25	11.6	6.7	3.169	1.78	6.73	7.525	11.175	11.58
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	11	7.7	8.009	9.	7.5	0.355	0.596	7.5	7.5	8.7	9.
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	11	7.7	7.775	9.	7.5	0.415	0.644	7.5	7.5	8.7	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	11	0.02	0.017	0.032	0.001	0.	0.012	0.001	0.002	0.032	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.1	0.155	0.6	0.05	0.026	0.16	0.05	0.05	0.2	0.52
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.06	0.08	0.26	0.02	0.006	0.075	0.02	0.02	0.14	0.238
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.979	2.278	3.479	1.369	0.561	0.749	1.401	1.699	3.029	3.463
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	11	0.8	0.791	1.799	0.2	0.237	0.486	0.22	0.3	1.099	1.699
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	300.	827.273	2600.	50.	955681.818	977.59	50.	100.	1600.	2560.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.477	2.536	3.415	1.699	0.43	0.656	1.699	2.	3.204	3.408
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			343.227								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.177	0.3	0.05	0.007	0.082	0.06	0.1	0.2	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.17	0.178	0.35	0.07	0.006	0.075	0.078	0.12	0.21	0.328

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	6	14.85	15.267	24.	4.5	57.287	7.569	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	5	7.	9.08	14.	6.2	11.852	3.443	**	**	**	**
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	6	7.7	7.867	9.	7.5	0.323	0.568	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	6	7.7	7.699	9.	7.5	0.356	0.597	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	6	0.02	0.02	0.032	0.001	0.	0.011	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	5	0.1	0.22	0.8	0.05	0.106	0.325	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	4	0.12	0.148	0.27	0.08	0.007	0.084	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	5	3.399	2.681	4.899	0.21	3.573	1.89	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	5	1.5	1.399	1.899	0.8	0.175	0.418	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5	100.	730.	3200.	50.	1909500.	1381.847	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5	2.	2.301	3.505	1.699	0.498	0.706	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			200.								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	5	0.3	0.26	0.4	0.1	0.013	0.114	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	5	0.26	0.26	0.37	0.13	0.008	0.088	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	7	22.	20.214	26.5	8.	43.571	6.601	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	7	8.3	7.629	9.8	5.4	2.549	1.597	**	**	**	**
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	7	8.5	8.271	9.	7.5	0.302	0.55	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	7	8.5	7.994	9.	7.5	0.392	0.626	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	7	0.003	0.01	0.032	0.001	0.	0.012	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	6 ##	0.05	0.083	0.2	0.05	0.004	0.061	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	6	0.08	0.087	0.15	0.03	0.003	0.05	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	6	1.05	1.033	1.4	0.7	0.067	0.258	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6	250.	433.333	1100.	100.	150666.667	388.158	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6	2.389	2.494	3.041	2.	0.148	0.385	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			312.089								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	6	0.4	0.333	0.5	0.1	0.035	0.186	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	6	0.415	0.353	0.5	0.16	0.02	0.143	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	2	5.5	5.5	7.	4.	4.5	2.121	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	1	11.4	11.4	11.4	11.4	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	2	7.4	7.4	7.5	7.3	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	2	7.389	7.389	7.5	7.3	0.02	0.142	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	2	0.041	0.041	0.05	0.032	0.	0.013	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	2 ##	0.125	0.125	0.2	0.05	0.011	0.106	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	2	0.4	0.4	0.7	0.1	0.18	0.424	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	100.	100.	100.	100.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	2.	2.	2.	2.	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			100.								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	2	0.085	0.085	0.14	0.03	0.006	0.078	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	27	23.3	22.185	27.2	8.	16.292	4.036	18.	20.	25.	26.5
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	26	6.9	6.692	9.4	3.	3.438	1.854	3.88	5.2	8.325	8.86
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	27	7.7	7.9	9.	7.3	0.248	0.498	7.38	7.5	8.3	8.7
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	27	7.7	7.697	9.	7.3	0.291	0.539	7.38	7.5	8.3	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	27	0.02	0.02	0.05	0.001	0.	0.015	0.002	0.005	0.032	0.042
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	16	0.1	0.275	1.	0.05	0.096	0.309	0.05	0.05	0.45	0.86
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	15	0.11	0.13	0.32	0.02	0.008	0.09	0.032	0.06	0.2	0.29
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	13	2.809	2.52	3.989	0.21	0.87	0.933	0.818	2.029	3.015	3.785
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	16	1.099	1.325	3.	0.2	0.59	0.768	0.48	0.825	1.724	2.929
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	22	300.	956.818	8000.	50.	3425546.537	1850.823	50.	100.	750.	3720.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	22	2.477	2.524	3.903	1.699	0.372	0.61	1.699	2.	2.872	3.541
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			334.095								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	16	0.3	0.306	0.5	0.1	0.011	0.106	0.1	0.3	0.4	0.43
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	16	0.3	0.29	0.44	0.19	0.006	0.077	0.19	0.21	0.338	0.412

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	43	9.4	9.691	20.6	2.8	21.057	4.589	4.16	5.6	12.8	15.6
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	42	10.1	10.038	14.	6.	4.621	2.15	6.53	8.6	11.4	12.74
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	43	7.5	7.705	9.	6.9	0.322	0.567	7.14	7.3	7.8	8.88
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	43	7.5	7.475	9.	6.9	0.376	0.613	7.14	7.3	7.8	8.88
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	43	0.032	0.034	0.126	0.001	0.001	0.028	0.001	0.016	0.05	0.073
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	28	0.4	0.437	1.5	0.05	0.161	0.401	0.05	0.063	0.63	1.199
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	28	0.04	0.086	0.9	0.005	0.029	0.169	0.01	0.02	0.08	0.161
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	24	1.479	1.681	4.899	0.79	0.949	0.974	0.88	1.	1.799	3.474
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	28	0.85	1.182	3.599	0.1	0.737	0.859	0.29	0.6	1.824	2.619
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	40	400.	1956.25	29000.	50.	22869126.603	4782.168	50.	100.	1900.	3980.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	40	2.602	2.689	4.462	1.699	0.516	0.718	1.699	2.	3.277	3.6
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			488.583								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	28	0.2	0.184	0.5	0.05	0.017	0.132	0.05	0.063	0.2	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	28	0.115	0.168	0.5	0.03	0.018	0.132	0.05	0.073	0.2	0.404

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0051

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	23	17.8	17.935	24.	10.	14.17	3.764	11.54	15.6	21.1	22.92
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	22	7.15	7.459	11.2	3.9	3.291	1.814	4.45	6.55	9.2	9.81
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	23	7.5	7.591	9.	7.	0.161	0.401	7.12	7.4	7.7	8.
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	23	7.5	7.467	9.	7.	0.177	0.421	7.12	7.4	7.7	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	23	0.032	0.034	0.1	0.001	0.001	0.025	0.01	0.02	0.04	0.08
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	16	0.2	0.363	1.5	0.1	0.131	0.361	0.1	0.125	0.475	0.94
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	15	0.09	0.117	0.33	0.005	0.01	0.099	0.005	0.03	0.18	0.294
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	14	1.549	1.792	3.599	0.59	1.107	1.052	0.62	0.938	2.792	3.499
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	16	1.05	1.831	13.	0.4	9.151	3.025	0.47	0.725	1.374	5.65
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	20	250.	1250.	8000.	50.	4508421.053	2123.304	50.	100.	1675.	5660.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	20	2.389	2.566	3.903	1.699	0.51	0.714	1.699	2.	3.22	3.742
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			368.061								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	16	0.2	0.166	0.35	0.05	0.007	0.085	0.05	0.1	0.2	0.315
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	16	0.155	0.144	0.3	0.05	0.007	0.081	0.05	0.05	0.2	0.258

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0052

NPS Station ID: SHEN0052
 Location: N F MOORMANS RIVER BL BIG BR NR WHITEHALL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02070005016400.00
 Description:

LAT/LON: 38.156393/ -78.748892
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 6.29

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02031440
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.70
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0052

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	4	14.5	13.875	15.5	11.	4.063	2.016	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	4	8.5	11.	26.	1.	114.	10.677	**	**	**
00400	PH (STANDARD UNITS)	09/21/81-06/23/82	4	6.95	7.	7.3	6.8	0.047	0.216	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/21/81-06/23/82	4	6.947	6.964	7.3	6.8	0.048	0.22	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.113	0.109	0.158	0.05	0.002	0.046	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	4	7.1	7.075	7.2	6.9	0.016	0.126	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/21/81-06/23/82	4	7.1	7.061	7.2	6.9	0.016	0.127	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.079	0.087	0.126	0.063	0.001	0.027	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	4##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	4	0.085	0.1	0.2	0.03	0.005	0.072	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	4	9.5	9.25	10.	8.	0.917	0.957	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/21/81-06/23/82	4	1.9	1.85	2.	1.6	0.03	0.173	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	4	1.15	1.15	1.3	1.	0.017	0.129	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/21/81-06/23/82	4	1.55	1.525	1.7	1.3	0.029	0.171	**	**	**
00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	4	0.2	0.2	0.2	0.	0.	0.	**	**	**
00932	SODIUM, PERCENT	09/21/81-06/23/82	4	25.	24.75	26.	23.	2.25	1.5	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	4	0.6	0.575	0.6	0.5	0.002	0.05	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	4	0.9	0.925	1.	0.9	0.002	0.05	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	4	3.	3.25	4.	3.	0.25	0.5	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/21/81-06/23/82	4	9.4	9.45	10.7	8.3	1.203	1.097	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0052

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
00631	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
	Fresh Acute	860.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
00940	Drinking Water	250.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0052

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0053

NPS Station ID: SHEN0053
 Location: MEADOW RUN NEAR CRIMORA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005009000.82
 Description:

LAT/LON: 38.158059/ -78.810559

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.89

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 01627100
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0053

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-06/24/82	6	13.75	11.333	17.	1.	37.367	6.113	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-06/24/82	6	2.	2.398	8.	0.09	8.317	2.884	**	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-06/24/82	4	5.7	5.675	5.9	5.4	0.049	0.222	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-06/24/82	4	5.689	5.632	5.9	5.4	0.052	0.227	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-06/24/82	4	2.048	2.334	3.981	1.259	1.487	1.219	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-06/24/82	6	5.75	5.7	5.8	5.5	0.016	0.126	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-06/24/82	6	5.747	5.684	5.8	5.5	0.016	0.128	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-06/24/82	6	1.79	2.071	3.162	1.585	0.42	0.648	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/19/81-06/24/82	6##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-06/24/82	6	0.02	0.023	0.05	0.005	0.	0.017	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/19/81-06/24/82	6	3.	2.833	4.	2.	0.567	0.753	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/19/81-06/24/82	6	0.5	0.45	0.6	0.3	0.015	0.122	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-06/24/82	6	0.5	0.483	0.6	0.4	0.006	0.075	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-06/24/82	6	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-06/24/82	6	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/19/81-06/24/82	6	19.	20.167	24.	17.	7.367	2.714	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-06/24/82	6	1.	0.983	1.1	0.8	0.01	0.098	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/19/81-06/24/82	6	0.85	0.867	1.	0.8	0.007	0.082	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-06/24/82	6	4.	3.833	4.	3.	0.167	0.408	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/19/81-06/24/82	6	4.6	4.883	6.	4.1	0.682	0.826	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-06/24/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0053

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	6	1.00	2	2	1.00	2	2	1.00	2	2	1.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0053

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0054

NPS Station ID: SHEN0054
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.158531/ -78.811365

Depth of Water: 0
 Elevation: 1510
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR01 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.86 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0054

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-08/28/93	4	11.75	12.125	20.5	4.5	64.896	8.056	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-08/28/93	4	17.5	18.	21.	16.	4.667	2.16	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-08/28/93	4	5.415	5.358	5.44	5.16	0.018	0.134	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-08/28/93	4	5.414	5.341	5.44	5.16	0.018	0.135	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-08/28/93	4	3.852	4.563	6.918	3.631	2.508	1.584	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-08/28/93	4	16.5	17.	20.	15.	4.667	2.16	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-08/28/93	4	0.7	4.025	11.9	-2.2	34.149	5.844	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-08/28/93	4	0.55	0.525	0.6	0.4	0.009	0.096	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-08/28/93	4	0.55	0.525	0.6	0.4	0.009	0.096	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-08/28/93	4	0.5	0.498	0.51	0.48	0.	0.013	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-08/28/93	4	1.12	1.115	1.13	1.09	0.	0.019	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-08/28/93	4	0.8	0.825	0.9	0.8	0.002	0.05	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-08/28/93	4	4.15	4.15	4.9	3.4	0.457	0.676	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-08/28/93	4	5.	5.35	6.9	4.5	1.23	1.109	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-08/28/93	4	0.5	0.55	0.8	0.4	0.03	0.173	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-08/28/93	4	3.885	4.57	6.89	3.62	2.442	1.563	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0054

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	4	4	1.00	2	2	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0055

NPS Station ID: SHEN0055
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.158531/ -78.811365

Depth of Water: 0
 Elevation: 1480

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_VT36
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION VT36 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.86 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0055

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-07/30/97	29	9.5	10.566	19.	2.	28.937	5.379	3.5	6.5	16.25	18.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/87-07/30/97	41	16.	17.024	22.	14.	3.674	1.917	15.	16.	18.	20.
00400	PH (STANDARD UNITS)	08/16/87-07/30/97	41	5.44	5.402	5.69	4.97	0.033	0.181	5.136	5.26	5.53	5.628
00400	CONVERTED PH (STANDARD UNITS)	08/16/87-07/30/97	41	5.44	5.363	5.69	4.97	0.034	0.185	5.136	5.26	5.53	5.628
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/16/87-07/30/97	41	3.631	4.331	10.715	2.042	3.946	1.986	2.355	2.954	5.497	7.314
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/16/87-07/30/97	41	17.	16.683	21.	14.	3.772	1.942	14.2	15.	17.5	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/16/87-07/30/97	41	-4.7	82.334	430.9	-11.4	15172.962	123.179	5.32	-1.15	161.6	285.26
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/16/87-07/30/97	41	0.5	0.478	0.6	0.4	0.004	0.065	0.4	0.4	0.5	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/16/87-07/30/97	41	0.5	0.483	0.6	0.4	0.005	0.07	0.4	0.4	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/16/87-07/30/97	41	0.5	0.497	0.53	0.46	0.	0.018	0.47	0.48	0.51	0.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/16/87-07/30/97	41	1.09	1.103	1.38	0.95	0.006	0.077	1.	1.06	1.15	1.19
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/16/87-07/30/97	41	0.8	0.844	1.	0.8	0.004	0.063	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/16/87-07/30/97	41	4.2	4.154	5.2	3.4	0.275	0.524	3.5	3.7	4.5	4.88
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/16/87-07/30/97	41	5.3	5.383	6.9	3.8	0.756	0.87	4.4	4.6	6.25	6.68
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/29/96	8	18.819	20.85	33.814	11.473	64.153	8.01	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-07/30/97	15	34.607	40.067	82.148	18.999	453.65	21.299	20.216	23.46	53.998	80.376
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/16/87-07/30/97	41	0.05	0.226	1.	0.	0.072	0.268	0.	0.006	0.4	0.6
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/16/87-07/30/97	41	3.66	4.365	10.8	2.06	3.995	1.999	2.372	2.975	5.54	7.37

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0055

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
	Other-Lo Lim.	6.5	41	41	1.00	11	11	1.00	20	20	1.00	10	10	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	41	35	0.85	11	11	1.00	20	14	0.70	10	10	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0055

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	16.	16.636	22.	15.	3.855	1.963	15.	16.	17.	21.2
00400	PH (STANDARD UNITS)	11	5.41	5.368	5.59	4.97	0.033	0.181	5.014	5.22	5.47	5.59
00400	CONVERTED PH (STANDARD UNITS)	11	5.41	5.33	5.59	4.97	0.034	0.186	5.014	5.22	5.47	5.59
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	3.89	4.678	10.715	2.57	5.473	2.339	2.57	3.388	6.026	9.863
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11	16.	16.455	21.	15.	3.073	1.753	15.	15.	17.	20.2
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11	-5.6	55.764	166.6	-11.4	6839.129	82.699	-0.6	-1.	157.	166.52
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11	0.4	0.436	0.6	0.4	0.005	0.067	0.4	0.4	0.5	0.58
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11	0.4	0.427	0.6	0.4	0.004	0.065	0.4	0.4	0.4	0.58
00930	SODIUM, DISSOLVED (MG/L AS NA)	11	0.51	0.508	0.53	0.48	0.	0.015	0.482	0.5	0.52	0.53
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11	1.11	1.138	1.38	1.05	0.008	0.089	1.056	1.08	1.16	1.34
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11	0.8	0.827	0.9	0.8	0.002	0.047	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11	3.6	3.782	5.1	3.4	0.222	0.471	3.42	3.5	3.9	4.86
00955	SILICA, DISSOLVED (MG/L AS SI02)	11	6.3	6.173	6.9	5.1	0.314	0.561	5.18	5.7	6.6	6.86
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11	0.4	0.312	0.7	0.	0.075	0.274	0.	0.01	0.6	0.68
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11	3.97	4.72	10.8	2.59	5.551	2.356	2.59	3.42	6.07	9.942

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0055

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	20	17.	17.2	21.	14.	4.168	2.042	15.	15.25	18.75	20.
00400	PH (STANDARD UNITS)	20	5.44	5.419	5.69	5.04	0.037	0.193	5.133	5.268	5.587	5.669
00400	CONVERTED PH (STANDARD UNITS)	20	5.44	5.377	5.69	5.04	0.039	0.198	5.133	5.267	5.587	5.669
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	20	3.631	4.202	9.12	2.042	4.013	2.003	2.143	2.589	5.414	7.364
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	20	17.	16.8	21.	14.	4.8	2.191	14.	15.	18.75	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	20	-4.85	114.245	430.9	-6.3	24138.324	155.365	2.24	5.9	242.525	386.79
00915	CALCIUM, DISSOLVED (MG/L AS CA)	20	0.5	0.49	0.6	0.4	0.004	0.064	0.4	0.425	0.5	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	20	0.5	0.495	0.6	0.4	0.005	0.069	0.4	0.425	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	20	0.495	0.492	0.51	0.46	0.	0.016	0.461	0.48	0.508	0.51
00935	POTASSIUM, DISSOLVED (MG/L AS K)	20	1.095	1.095	1.2	0.95	0.006	0.079	0.973	1.025	1.178	1.19
00941	CHLORIDE, DISSOLVED IN WATER MG/L	20	0.85	0.865	1.	0.8	0.006	0.075	0.8	0.8	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	20	4.3	4.26	5.2	3.4	0.311	0.558	3.41	3.8	4.75	5.08
00955	SILICA, DISSOLVED (MG/L AS SI02)	20	5.35	5.43	6.7	4.4	0.54	0.735	4.6	4.9	6.075	6.69
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	20	0.015	0.181	1.	0.	0.085	0.292	0.	0.003	0.375	0.69
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	20	3.66	4.232	9.19	2.06	4.05	2.013	2.165	2.615	5.458	7.42

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0055

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	17.	17.1	20.	14.	2.989	1.729	14.2	16.	18.25	19.9
00400	PH (STANDARD UNITS)	10	5.455	5.405	5.63	5.13	0.028	0.166	5.138	5.255	5.525	5.627
00400	CONVERTED PH (STANDARD UNITS)	10	5.455	5.376	5.63	5.13	0.028	0.169	5.138	5.255	5.525	5.627
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	3.51	4.208	7.413	2.344	2.783	1.668	2.361	3.	5.569	7.288
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10	16.5	16.7	20.	14.	3.122	1.767	14.1	15.75	17.5	19.9
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10	-4.7	47.74	147.9	-4.7	4422.169	66.499	0.14	-1.975	117.15	146.88
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10	0.5	0.5	0.6	0.4	0.002	0.047	0.41	0.5	0.5	0.59
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10	0.5	0.52	0.6	0.5	0.002	0.042	0.5	0.5	0.525	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	10	0.5	0.494	0.52	0.46	0.	0.021	0.461	0.478	0.513	0.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10	1.09	1.081	1.15	1.	0.002	0.048	1.002	1.043	1.118	1.149
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10	0.8	0.82	0.9	0.8	0.002	0.042	0.8	0.8	0.825	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10	4.3	4.35	4.8	3.9	0.083	0.288	3.92	4.175	4.575	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	10	4.5	4.42	4.8	3.8	0.075	0.274	3.84	4.275	4.6	4.78

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0055

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/16/87-07/30/97	10	0.3	0.222	0.6	0.	0.043	0.208	0.	0.005	0.325	0.58
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/16/87-07/30/97	10	3.54	4.242	7.47	2.36	2.826	1.681	2.377	3.025	5.613	7.345

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0056

NPS Station ID: SHEN0056
 Location: Meadow Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.158531 / -78.811365

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_VTS36
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0056

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-10/29/97	6	10.15	10.467	17.5	4.9	19.451	4.41	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-10/29/97	6	14.5	15.	19.	12.	5.6	2.366	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/26/95-10/29/97	6	10.25	10.25	12.1	7.9	2.011	1.418	**	**	**	**
00301 OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/30/96-10/30/96	1	92.2	92.2	92.2	92.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/26/95-10/29/97	6	5.045	5.018	5.27	4.64	0.047	0.218	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/26/95-10/29/97	6	5.04	4.968	5.27	4.64	0.05	0.225	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/95-10/29/97	6	9.117	10.759	22.909	5.37	39.859	6.313	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-10/29/97	6	9.	9.333	12.	7.	2.667	1.633	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0056

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	6	1.00	1	1	1.00	3	3	1.00	2	2	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0057

NPS Station ID: SHEN0057
 Location: Meadow Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.158726/ -78.811699

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_FISH_3F107
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0057

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/94-06/15/98	10	18.2	16.75	20.7	4.3	23.521	4.85	5.23	15.775	19.625	20.63
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/17/96-06/15/98	6	14.5	14.5	15.	14.	0.3	0.548	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/22/94-06/15/98	9	9.1	9.233	12.9	6.6	3.378	1.838	6.6	7.9	10.	12.9
00406 PH, FIELD, STANDARD UNITS SU	06/22/94-06/15/98	9	5.06	5.721	7.09	4.81	0.958	0.979	4.81	4.915	6.86	7.09
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/22/94-06/15/98	9	5.06	5.177	7.09	4.81	1.291	1.136	4.81	4.915	6.86	7.09
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/94-06/15/98	9	8.71	6.647	15.488	0.081	39.963	6.322	0.081	0.151	12.298	15.488
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	02/06/97-06/15/98	4	9.	9.25	10.	9.	0.25	0.5	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/17/96-06/15/98	3	3.82	3.823	4.25	3.4	0.181	0.425	**	**	**	**
83509 STREAM, WIDTH METER	06/17/96-06/15/98	3	6.2	5.833	6.5	4.8	0.823	0.907	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/17/96-06/15/98	3	0.07	0.07	0.1	0.04	0.001	0.03	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0057

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	9	0	0.00	1	0	0.00	1	0	0.00	7	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	9	0	0.00	1	0	0.00	1	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	9	6	0.67	1	1	1.00	1	1	1.00	7	4	0.57			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0058

NPS Station ID: SHEN0058
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.158892/ -78.811893

Depth of Water: 0
 Elevation: 1480

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_VTSSS_AU02
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION AU02 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN OUTSIDE SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.95 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0058

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	5.75	5.75	5.75	5.75	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	5.75	5.75	5.75	5.75	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	1.778	1.778	1.778	1.778	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	0.48	0.48	0.48	0.48	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	1.21	1.21	1.21	1.21	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0058

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00					1	0	0.00	
	Other-Lo Lim.	6.5	1	1	1.00					1	1	1.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0058

Parameter	Std. Type	Std. Value	Total			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0059

NPS Station ID: SHEN0059
 Location: MEADOW RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.159531/ -78.791281

Depth of Water: 0
 Elevation: 1800
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR16
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR16 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.00 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0059

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	13.	11.8	17.5	5.5	33.575	5.794	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	19.	19.	21.	17.	2.5	1.581	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.66	5.7	5.92	5.53	0.032	0.178	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.66	5.672	5.92	5.53	0.033	0.181	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	2.188	2.128	2.951	1.202	0.655	0.81	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	18.	18.2	20.	17.	1.7	1.304	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	82.8	77.26	98.7	40.4	582.503	24.135	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.7	0.68	0.7	0.6	0.002	0.045	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.51	0.494	0.52	0.46	0.001	0.027	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.54	1.474	1.63	1.07	0.053	0.23	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.8	0.84	1.	0.7	0.013	0.114	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	4.	4.04	5.	2.6	1.028	1.014	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.6	5.56	6.8	4.8	0.688	0.829	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.4	0.422	0.8	0.009	0.11	0.332	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	2.21	2.144	2.97	1.21	0.667	0.817	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0059

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0060

NPS Station ID: SHEN0060
 Location: MEADOW RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.159615/ -78.784642

Depth of Water: 0
 Elevation: 2050
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR15
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR15 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.51 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0060

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	11.6	18.	6.	28.425	5.332	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	21.	20.6	22.	19.	1.3	1.14	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.78	5.756	5.86	5.63	0.012	0.111	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.78	5.745	5.86	5.63	0.012	0.112	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	1.66	1.801	2.344	1.38	0.215	0.464	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	20.	20.	22.	18.	2.5	1.581	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	-3.1	14.78	77.	-7.2	1239.852	35.212	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.7	0.72	0.8	0.7	0.002	0.045	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.51	0.52	0.55	0.5	0.	0.02	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.76	1.794	1.92	1.69	0.008	0.091	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.88	1.	0.8	0.007	0.084	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	4.5	4.38	4.6	4.1	0.047	0.217	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.5	5.42	6.5	4.7	0.527	0.726	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.8	0.582	1.2	0.009	0.259	0.509	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	1.67	1.814	2.36	1.39	0.219	0.468	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0060

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0061

NPS Station ID: SHEN0061
 Location: Meadow Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.160337/ -78.802976

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_FISH_3F108
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0061

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/94-06/22/94	1	18.	18.	18.	18.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0062

NPS Station ID: SHEN0062
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.160476/ -78.802893

 Depth of Water: 0
 Elevation: 1880

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR18
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR18 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.51 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0062

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	12.	20.5	4.5	47.375	6.883	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	18.	17.6	21.	14.	7.3	2.702	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.48	5.426	5.71	5.17	0.046	0.214	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.48	5.385	5.71	5.17	0.048	0.219	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	3.311	4.122	6.761	1.95	3.822	1.955	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	17.	17.	20.	14.	5.	2.236	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	50.3	48.96	67.8	26.1	233.228	15.272	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.5	0.5	0.6	0.4	0.01	0.1	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.5	0.5	0.6	0.4	0.01	0.1	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.51	0.496	0.53	0.44	0.001	0.036	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.14	1.19	1.4	1.13	0.014	0.117	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.88	0.9	0.8	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.9	3.92	4.9	3.1	0.622	0.789	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.8	5.54	7.	4.5	1.123	1.06	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.5	0.462	0.9	0.008	0.101	0.318	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	3.34	4.154	6.81	1.97	3.874	1.968	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0062

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0063

NPS Station ID: SHEN0063
 Location: MEADOW RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.162448/ -78.797253

Depth of Water: 0
 Elevation: 1640

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR12 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.41 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0063

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	13.	12.1	20.	4.5	45.55	6.749	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	18.	17.8	20.	16.	3.2	1.789	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.78	5.688	5.89	5.43	0.047	0.217	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.78	5.644	5.89	5.43	0.05	0.223	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	1.66	2.271	3.715	1.288	1.325	1.151	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	17.	17.	19.	15.	2.5	1.581	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	15.3	17.8	30.3	6.2	132.905	11.528	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.6	0.54	0.6	0.4	0.008	0.089	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.6	0.54	0.6	0.4	0.008	0.089	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.49	0.492	0.52	0.45	0.001	0.027	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.37	1.426	1.56	1.33	0.011	0.106	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.8	0.84	0.9	0.8	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.7	3.9	4.9	2.9	0.76	0.872	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.7	5.74	7.3	4.7	1.153	1.074	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.3	0.322	0.6	0.009	0.056	0.236	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	1.67	2.288	3.74	1.3	1.345	1.16	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0063

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0064

NPS Station ID: SHEN0064
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.162670/ -78.798198

Depth of Water: 0
 Elevation: 1600
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR17
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR17 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.11 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0064

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	13.	12.2	20.	5.	43.7	6.611	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	18.	17.6	20.	15.	6.3	2.51	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.51	5.458	5.69	5.24	0.04	0.2	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.51	5.421	5.69	5.24	0.042	0.205	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	3.09	3.79	5.754	2.042	2.95	1.718	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	17.	16.8	19.	14.	5.2	2.28	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	60.3	52.96	76.2	28.7	445.123	21.098	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.5	0.5	0.6	0.4	0.01	0.1	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.5	0.5	0.6	0.4	0.01	0.1	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.5	0.488	0.51	0.44	0.001	0.029	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.2	1.22	1.47	1.09	0.022	0.148	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.86	0.9	0.8	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.8	3.86	4.8	3.	0.688	0.829	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.8	5.56	7.	4.5	1.073	1.036	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.5	0.442	0.8	0.008	0.081	0.285	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	3.11	3.82	5.8	2.06	2.998	1.732	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0064

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0065

NPS Station ID: SHEN0065
 Location: MEADOW RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.162781/ -78.782559

Depth of Water: 0
 Elevation: 2150
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR14
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR14 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.64 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA, WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0065

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	11.3	17.	6.	20.7	4.55	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	19.	19.4	22.	17.	4.3	2.074	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.7	5.672	5.73	5.57	0.004	0.062	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.7	5.668	5.73	5.57	0.004	0.062	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	1.995	2.146	2.692	1.862	0.106	0.326	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	20.	19.2	22.	17.	4.7	2.168	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	-1.3	-0.18	7.8	-4.7	22.027	4.693	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.6	0.62	0.7	0.6	0.002	0.045	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.6	0.58	0.7	0.5	0.007	0.084	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.52	0.522	0.53	0.52	0.	0.004	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.69	1.736	1.95	1.61	0.02	0.141	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	1.	0.96	1.	0.9	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.7	3.92	4.6	3.1	0.437	0.661	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.5	5.36	6.2	4.7	0.383	0.619	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	1.1	1.08	1.7	0.2	0.377	0.614	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	2.01	2.164	2.71	1.88	0.107	0.327	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0065

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0066

NPS Station ID: SHEN0066
 Location: MEADOW RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.162892/ -78.789142

Depth of Water: 0
 Elevation: 1950
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR13
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR13 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.03 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA, WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0066

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	11.3	17.	4.5	34.95	5.912	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	19.	20.	22.	19.	2.	1.414	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.46	5.374	5.49	5.09	0.029	0.17	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.46	5.344	5.49	5.09	0.03	0.174	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	3.467	4.528	8.128	3.236	4.357	2.087	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	20.	19.6	21.	18.	1.3	1.14	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	17.8	17.44	41.9	-0.6	310.523	17.622	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.6	0.56	0.6	0.5	0.003	0.055	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.6	0.58	0.6	0.5	0.002	0.045	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.54	0.53	0.55	0.5	0.	0.02	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.58	1.588	1.69	1.49	0.006	0.079	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.92	1.	0.9	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.9	4.16	4.9	3.5	0.418	0.647	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.7	5.66	7.	4.7	0.853	0.924	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	1.2	1.04	1.3	0.6	0.083	0.288	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	3.49	4.562	8.19	3.26	4.426	2.104	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0066

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0067

NPS Station ID: SHEN0067
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.163503/ -78.797531

Depth of Water: 0
 Elevation: 1640
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR11 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.67 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0067

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	13.5	12.3	20.	5.	43.95	6.629	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	18.	17.6	21.	15.	6.8	2.608	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.31	5.298	5.56	5.11	0.035	0.186	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.31	5.268	5.56	5.11	0.036	0.19	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	4.898	5.399	7.762	2.754	4.601	2.145	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	17.	16.8	20.	14.	5.7	2.387	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	15.3	14.62	24.4	2.8	94.467	9.719	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.5	0.48	0.6	0.3	0.017	0.13	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.5	0.5	0.6	0.4	0.01	0.1	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.5	0.492	0.52	0.46	0.001	0.026	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.09	1.14	1.41	1.05	0.023	0.152	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.86	0.9	0.8	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.9	3.84	4.8	3.	0.623	0.789	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.8	5.52	6.9	4.5	1.052	1.026	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.5	0.522	1.	0.01	0.124	0.353	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	4.94	5.442	7.82	2.78	4.662	2.159	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0067

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0068

NPS Station ID: SHEN0068
 Location: North Fork Moormans River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.164587/ -78.744448

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F045
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Browns Cove VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0068

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/15/95-06/11/98	4	15.65	16.375	21.1	13.1	11.369	3.372	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/15/95-06/11/98	4	26.5	27.75	34.	24.	18.917	4.349	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/15/95-06/11/98	4	9.8	9.375	10.	7.9	0.982	0.991	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/15/95-06/11/98	4	6.86	6.86	7.13	6.59	0.066	0.256	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/15/95-06/11/98	4	6.831	6.805	7.13	6.59	0.07	0.264	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/15/95-06/11/98	4	0.148	0.157	0.257	0.074	0.007	0.087	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/15/95-06/11/98	2	13.5	13.5	17.	10.	24.5	4.95	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/17/96-06/11/98	3	6.4	6.357	6.82	5.85	0.237	0.486	**	**	**	**
83509 STREAM, WIDTH METER	07/17/96-06/11/98	3	5.8	6.	8.	4.2	3.64	1.908	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/17/96-06/11/98	3	0.08	0.127	0.25	0.05	0.012	0.108	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0068

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Obs			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	4	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	4	4	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	4	4	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0069

NPS Station ID: SHEN0069
 Location: MEADOW RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.164976/ -78.795031

Depth of Water: 0
 Elevation: 1700
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR10 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.29 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0069

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	11.5	11.3	19.5	3.5	50.075	7.076	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	21.	20.	22.	18.	3.5	1.871	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.34	5.286	5.39	5.14	0.011	0.106	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.34	5.275	5.39	5.14	0.011	0.107	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	4.571	5.304	7.244	4.074	1.815	1.347	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	20.	19.4	21.	17.	2.3	1.517	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	5.3	4.16	11.2	-3.8	28.623	5.35	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.5	0.5	0.6	0.4	0.01	0.1	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.5	0.54	0.7	0.4	0.013	0.114	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.53	0.516	0.54	0.47	0.001	0.03	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.44	1.486	1.68	1.38	0.016	0.126	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.92	1.	0.9	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	4.1	4.36	5.2	3.7	0.428	0.654	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.2	5.46	6.7	4.7	0.703	0.838	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.7	0.62	1.1	0.1	0.132	0.363	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	4.61	5.348	7.3	4.11	1.842	1.357	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0069

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0070

NPS Station ID: SHEN0070
 Location: NORTH FORK MOORMANS RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02080204001500.99

LAT/LON: 38.165003/ -78.744448

Depth of Water: 0
 Elevation: 427

RF1 Mile Point: 0.000
 RF3 Mile Point: 4.10

Agency: 12NSS
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 2B047089L /2BN2B047089L
 Within Park Boundary: Yes

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.40
 Distance from RF3: 0.08

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND
 AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS,
 AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS
 IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL.1: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS.
 EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988)
 WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO
 SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN;
 (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0070

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/01/86-04/15/86	2	10.95	10.95	12.	9.9	2.205	1.485	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	04/01/86-04/15/86	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	04/01/86-04/15/86	2	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/01/86-04/15/86	2	24.5	24.5	25.	24.	0.5	0.707	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/01/86-04/15/86	2	10.25	10.25	10.5	10.	0.125	0.354	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/01/86-04/15/86	2	7.25	7.25	7.3	7.2	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/01/86-04/15/86	2	7.247	7.247	7.3	7.2	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/01/86-04/15/86	2	0.057	0.057	0.063	0.05	0.	0.009	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/01/86-04/15/86	2	166.8	166.8	180.	153.6	348.48	18.668	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/01/86-04/15/86	2	10.5	10.5	11.	10.	0.5	0.707	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/01/86-04/15/86	2	0.017	0.017	0.026	0.007	0.	0.013	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	04/01/86-04/15/86	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	04/01/86-04/15/86	2	2.25	2.25	2.4	2.1	0.045	0.212	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/01/86-04/15/86	2	1.75	1.75	1.8	1.7	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/01/86-04/15/86	2	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/01/86-04/15/86	2	1.575	1.575	1.59	1.56	0.	0.021	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/01/86-04/15/86	2	0.5	0.5	0.51	0.49	0.	0.014	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/01/86-04/15/86	2	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/01/86-04/15/86	2	3.3	3.3	3.4	3.2	0.02	0.141	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0070

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/01/86-04/15/86	2	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/01/86-04/15/86	2	9.4	9.4	9.9	8.9	0.5	0.707	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/01/86-04/15/86	2	7.	7.	8.	6.	2.	1.414	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	04/01/86-04/15/86	2	21.	21.	24.	18.	18.	4.243	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/01/86-04/15/86	2	0.2	0.2	0.3	0.1	0.02	0.141	**	**	**	**
71885	IRON (UG/L AS FE)	04/01/86-04/15/86	2	46.965	46.965	93.93	0.	4411.422	66.419	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	04/01/86-04/15/86	2	1400.	1400.	1400.	1400.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	04/01/86-04/15/86	2	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
83509	STREAM, WIDTH METER	04/01/86-04/15/86	2	7.	7.	7.	7.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0070

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00						2	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0071

NPS Station ID: SHEN0071
 Location: Meadow Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.165448/ -78.795920

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_FISH_3F109
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0071

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/94-06/15/98	7	14.7	14.743	17.	13.1	1.743	1.32	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/17/96-06/15/98	6	14.	13.833	15.	12.	1.367	1.169	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/17/96-06/15/98	6	9.5	9.333	9.8	8.6	0.231	0.48	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/17/96-06/15/98	6	4.875	4.863	5.04	4.75	0.011	0.105	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/17/96-06/15/98	6	4.875	4.853	5.04	4.75	0.011	0.106	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/96-06/15/98	6	13.336	14.023	17.783	9.12	10.226	3.198	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/08/97-06/15/98	3	8.	8.667	10.	8.	1.333	1.155	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/16/97-06/15/98	2	4.61	4.61	5.67	3.55	2.247	1.499	**	**	**	**
83509 STREAM, WIDTH METER	06/17/96-06/15/98	3	3.9	3.867	4.1	3.6	0.063	0.252	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/17/96-06/15/98	3	0.06	0.06	0.09	0.03	0.001	0.03	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0071

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	1	0	0.00				5	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	6	0	0.00	1	0	0.00				5	0	0.00			
	Other-Lo Lim.	6.5	6	6	1.00	1	1	1.00				5	5	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0072

NPS Station ID: SHEN0072
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.165726/ -78.795504

Depth of Water: 0
 Elevation: 1700

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR09 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.23 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0072

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.5	12.1	20.	4.5	46.675	6.832	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	18.	17.	20.	14.	8.	2.828	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.28	5.338	5.66	5.1	0.064	0.253	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.28	5.284	5.66	5.1	0.068	0.26	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	5.248	5.205	7.943	2.188	7.133	2.671	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	17.	16.4	20.	13.	8.3	2.881	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	16.9	11.1	18.7	-0.6	92.295	9.607	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.5	0.46	0.6	0.3	0.013	0.114	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.5	0.44	0.6	0.3	0.018	0.134	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.49	0.48	0.51	0.45	0.001	0.024	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.01	1.062	1.33	0.98	0.023	0.151	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.86	0.9	0.8	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.7	3.62	4.6	2.7	0.667	0.817	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.9	5.54	7.1	4.4	1.323	1.15	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.5	0.502	0.9	0.01	0.103	0.32	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	5.29	5.248	8.01	2.21	7.235	2.69	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0072

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0073

NPS Station ID: SHEN0073
 Location: Big Branch
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.165753/ -78.746199

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F078
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Browns Cove VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0073

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/95-06/19/95	1	15.9	15.9	15.9	15.9	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/19/95-06/19/95	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/19/95-06/19/95	1	9.1	9.1	9.1	9.1	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/19/95-06/19/95	1	6.45	6.45	6.45	6.45	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/19/95-06/19/95	1	6.45	6.45	6.45	6.45	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/19/95-06/19/95	1	0.355	0.355	0.355	0.355	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/19/95-06/19/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0073

Parameter	Std. Type	Std. Value	Total			Prop.			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.		
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0		0.00						1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0		0.00						1	0	0.00						
	Other-Lo Lim.	6.5	1	1		1.00						1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0074

NPS Station ID: SHEN0074
 Location: BIG BRANCH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.166115/ -78.746393

Depth of Water: 0
 Elevation: 1460

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_VTSSS_AB05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB05 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE BIG BRANCH OF MOORMANS RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.64 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0074

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/24/87-04/24/87	1	6.71	6.71	6.71	6.71	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/24/87-04/24/87	1	6.71	6.71	6.71	6.71	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/87-04/24/87	1	0.195	0.195	0.195	0.195	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/24/87-04/24/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/24/87-04/24/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/24/87-04/24/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/24/87-04/24/87	1	0.69	0.69	0.69	0.69	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/24/87-04/24/87	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/24/87-04/24/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/24/87-04/24/87	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/24/87-04/24/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0074

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0075

NPS Station ID: SHEN0075
 Location: Big Branch
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.166420/ -78.747810

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F079
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Browns Cove VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0075

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/95-06/11/98	4	15.25	15.775	19.3	13.3	6.849	2.617	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/20/95-06/11/98	4	19.	20.25	25.	18.	10.917	3.304	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/20/95-06/11/98	4	9.3	8.975	9.8	7.5	1.049	1.024	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/20/95-06/11/98	4	6.34	6.355	6.59	6.15	0.033	0.181	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/20/95-06/11/98	4	6.34	6.328	6.59	6.15	0.034	0.183	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/20/95-06/11/98	4	0.457	0.47	0.708	0.257	0.034	0.185	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/20/95-06/11/98	2	11.5	11.5	13.	10.	4.5	2.121	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/17/96-06/11/98	3	13.43	12.393	13.5	10.25	3.447	1.857	**	**	**	**
83509 STREAM, WIDTH METER	07/17/96-06/11/98	3	4.7	4.267	6.5	1.6	6.143	2.479	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/17/96-06/11/98	3	0.01	0.017	0.03	0.01	0.	0.012	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0075

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00				3	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	4	0	0.00	1	0	0.00				3	0	0.00			
	Other-Lo Lim.	6.5	4	3	0.75	1	0	0.00				3	3	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0076

NPS Station ID: SHEN0076
 Location: N F MOORMANS RIVER AB BIG BR NR BROWNS COVE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02070005016800.00
 Description:

LAT/LON: 38.170004/ -78.741670
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 3.30

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02031430
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 7.30
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0076

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	4	14.5	13.75	15.	3.583	1.893	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	4	5.5	8.725	23.	96.769	9.837	**	**	**	**
00400	PH (STANDARD UNITS)	09/21/81-06/23/82	4	7.	7.	7.1	0.007	0.082	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/21/81-06/23/82	4	7.	6.994	7.1	0.007	0.082	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.1	0.101	0.126	0.079	0.019	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	4	7.2	7.15	7.3	0.03	0.173	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/21/81-06/23/82	4	7.2	7.122	7.3	0.031	0.176	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.063	0.076	0.126	0.05	0.034	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	4##	0.005	0.009	0.02	0.005	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	4	0.09	0.103	0.2	0.03	0.071	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	4	10.	9.75	11.	8.	1.583	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/21/81-06/23/82	4	2.	1.9	2.	1.6	0.04	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	4	1.15	1.175	1.4	1.	0.029	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/21/81-06/23/82	4	1.75	1.7	1.9	1.4	0.06	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	4	0.25	0.25	0.3	0.2	0.003	**	**	**	**
00932	SODIUM, PERCENT	09/21/81-06/23/82	4	26.5	26.75	28.	26.	0.917	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	4	0.5	0.5	0.6	0.4	0.007	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	4	0.9	0.925	1.	0.9	0.002	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	4	3.	3.25	4.	3.	0.25	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/21/81-06/23/82	4	9.9	10.125	12.	8.7	2.049	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	1	0.03	0.03	0.03	0.03	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0076

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00631	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Fresh Acute	860.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00940	Drinking Water	250.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0076

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0		0.00	1	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0077

NPS Station ID: SHEN0077
 Location: Big Branch
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.170504/ -78.754670

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F080
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0077

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/95-06/20/95	1	14.3	14.3	14.3	14.3	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/20/95-06/20/95	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/20/95-06/20/95	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/20/95-06/20/95	1	5.95	5.95	5.95	5.95	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/20/95-06/20/95	1	5.95	5.95	5.95	5.95	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/20/95-06/20/95	1	1.122	1.122	1.122	1.122	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/20/95-06/20/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0077

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00						1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00						1	1	1.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0078

NPS Station ID: SHEN0078
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.172115/ -78.792170

Depth of Water: 0
 Elevation: 1920
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR08 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.49 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0078

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	11.5	11.4	19.5	4.	48.175	6.941	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	19.	17.6	20.	14.	8.3	2.881	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.18	5.222	5.44	5.	0.04	0.201	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.18	5.186	5.44	5.	0.042	0.204	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	6.607	6.51	10.	3.631	7.955	2.82	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	18.	17.	20.	14.	8.	2.828	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	-3.8	-0.98	6.2	-7.2	32.012	5.658	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.4	0.42	0.5	0.3	0.007	0.084	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.5	0.44	0.5	0.3	0.008	0.089	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.48	0.476	0.5	0.45	0.	0.021	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.03	1.068	1.28	0.99	0.014	0.12	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.86	0.9	0.8	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.8	3.72	4.5	2.8	0.517	0.719	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.5	5.28	6.8	4.2	1.147	1.071	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.5	0.542	1.	0.008	0.131	0.362	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	6.66	6.562	10.08	3.66	8.086	2.844	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0078

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0079

NPS Station ID: SHEN0079
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.172170/ -78.790949

Depth of Water: 0
 Elevation: 1960
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR06 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.12 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0079

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	11.7	20.	2.5	56.45	7.513	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	18.	17.2	19.	15.	2.7	1.643	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.43	5.392	5.61	5.2	0.027	0.164	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.43	5.368	5.61	5.2	0.028	0.166	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	3.715	4.288	6.31	2.455	2.477	1.574	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	17.	16.8	19.	15.	2.2	1.483	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	-3.1	-1.74	5.3	-5.6	19.093	4.37	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.5	0.46	0.5	0.4	0.003	0.055	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.5	0.48	0.6	0.4	0.007	0.084	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.48	0.484	0.5	0.46	0.	0.017	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.25	1.286	1.47	1.2	0.012	0.108	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.88	1.	0.8	0.007	0.084	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.5	3.52	4.1	2.9	0.242	0.492	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.3	5.14	6.6	4.1	0.953	0.976	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.8	0.762	1.3	0.008	0.22	0.469	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	3.74	4.32	6.36	2.47	2.524	1.589	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0079

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0080

NPS Station ID: SHEN0080
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.172309/ -78.782309

Depth of Water: 0
 Elevation: 2060
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR05 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.66 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0080

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-08/28/93	4	12.	11.875	19.	4.5	59.063	7.685	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-08/28/93	4	17.5	17.5	18.	17.	0.333	0.577	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-08/28/93	4	5.49	5.448	5.61	5.2	0.034	0.184	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-08/28/93	4	5.484	5.417	5.61	5.2	0.035	0.187	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-08/28/93	4	3.278	3.83	6.31	2.455	3.066	1.751	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-08/28/93	4	17.	17.	18.	16.	0.667	0.816	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-08/28/93	4	-3.45	-3.05	0.3	-5.6	6.097	2.469	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-08/28/93	4	0.5	0.475	0.5	0.4	0.002	0.05	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-08/28/93	4	0.5	0.475	0.5	0.4	0.002	0.05	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-08/28/93	4	0.49	0.485	0.51	0.45	0.001	0.026	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-08/28/93	4	1.35	1.348	1.39	1.3	0.001	0.037	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-08/28/93	4	0.85	0.85	0.9	0.8	0.003	0.058	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-08/28/93	4	3.5	3.45	3.6	3.2	0.037	0.191	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-08/28/93	4	4.75	4.975	6.4	4.	1.163	1.078	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-08/28/93	4	1.1	1.1	1.5	0.7	0.107	0.327	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-08/28/93	4	3.305	3.86	6.36	2.47	3.116	1.765	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0080

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	4	4	1.00	2	2	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0081

NPS Station ID: SHEN0081
 Location: MEADOW RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.173504/ -78.791059

Depth of Water: 0
 Elevation: 1960

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR07 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.24 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0081

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	11.2	17.	4.	31.7	5.63	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	19.	18.8	23.	13.	19.2	4.382	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	4.79	4.878	5.08	4.77	0.021	0.143	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	4.79	4.86	5.08	4.77	0.021	0.145	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	16.218	13.794	16.982	8.318	16.81	4.1	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	18.	18.2	23.	13.	18.7	4.324	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	-3.8	-3.88	-1.3	-5.6	3.297	1.816	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.3	0.32	0.4	0.2	0.007	0.084	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.4	0.38	0.5	0.2	0.017	0.13	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.46	0.46	0.5	0.42	0.001	0.032	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	0.44	0.508	0.82	0.4	0.031	0.175	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.86	0.9	0.8	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	4.2	4.16	5.6	2.4	1.803	1.343	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.8	5.46	7.1	4.1	1.423	1.193	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.01	0.013	0.02	0.008	0.	0.006	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	16.35	13.904	17.12	8.38	17.108	4.136	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0081

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0082

NPS Station ID: SHEN0082
 Location: MEADOW RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.174615/ -78.776060

Depth of Water: 0
 Elevation: 2175

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR03 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0082

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	12.7	19.5	6.	30.95	5.563	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	20.	20.	21.	19.	0.5	0.707	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.66	5.642	5.72	5.53	0.007	0.081	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.66	5.636	5.72	5.53	0.007	0.081	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	2.188	2.313	2.951	1.905	0.197	0.444	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	20.	19.4	20.	18.	0.8	0.894	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	-5.6	-7.74	4.4	-18.1	88.523	9.409	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.6	0.56	0.6	0.5	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.47	0.478	0.51	0.46	0.	0.019	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.74	1.738	1.91	1.59	0.017	0.132	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.8	0.86	1.	0.8	0.008	0.089	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.6	3.64	3.9	3.3	0.053	0.23	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	4.9	4.92	6.	4.1	0.592	0.769	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	1.8	1.44	1.9	0.4	0.423	0.65	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	2.21	2.332	2.97	1.92	0.197	0.444	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0082

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0083

NPS Station ID: SHEN0083
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.174753/ -78.777087

Depth of Water: 0
 Elevation: 2160
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR04 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.90 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA, WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0083

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	12.7	20.	5.5	38.95	6.241	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	17.	17.4	19.	16.	2.3	1.517	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.61	5.524	5.67	5.27	0.028	0.167	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.61	5.497	5.67	5.27	0.029	0.17	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	2.455	3.188	5.37	2.138	1.828	1.352	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	16.	16.6	18.	15.	1.8	1.342	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	-9.7	-10.08	-6.3	-15.6	13.262	3.642	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.5	0.48	0.6	0.4	0.007	0.084	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.5	0.46	0.5	0.4	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.48	0.48	0.5	0.45	0.	0.019	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.41	1.428	1.57	1.36	0.007	0.084	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.9	1.	0.8	0.005	0.071	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.2	3.24	3.6	2.9	0.093	0.305	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.1	5.04	6.2	4.2	0.683	0.826	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	0.8	0.94	1.7	0.2	0.368	0.607	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	2.47	3.212	5.41	2.16	1.854	1.362	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0083

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0084

NPS Station ID: SHEN0084
 Location: MEADOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.175588/ -78.775977

Depth of Water: 0
 Elevation: 2175
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_MR02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MR02 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MEADOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.27 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0084

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/92-11/01/94	5	12.	12.4	20.	5.	43.3	6.58	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/92-11/01/94	5	17.	16.6	18.	15.	1.3	1.14	**	**	**	**
00400	PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.42	5.43	5.53	5.32	0.008	0.09	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/12/92-11/01/94	5	5.42	5.423	5.53	5.32	0.008	0.09	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/92-11/01/94	5	3.802	3.779	4.786	2.951	0.603	0.776	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/92-11/01/94	5	16.	15.8	17.	15.	0.7	0.837	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/92-11/01/94	5	7.8	1.62	7.8	-3.1	17.867	4.227	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/92-11/01/94	5	0.4	0.38	0.5	0.3	0.007	0.084	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/92-11/01/94	5	0.4	0.44	0.5	0.4	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/92-11/01/94	5	0.49	0.488	0.51	0.45	0.001	0.025	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/92-11/01/94	5	1.27	1.298	1.51	1.19	0.015	0.124	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/92-11/01/94	5	0.9	0.9	1.	0.8	0.005	0.071	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/92-11/01/94	5	3.	3.04	3.4	2.8	0.068	0.261	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/92-11/01/94	5	5.3	5.1	6.3	4.2	0.755	0.869	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/92-11/01/94	5	1.	0.94	1.5	0.1	0.293	0.541	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/92-11/01/94	5	3.83	3.806	4.82	2.97	0.614	0.784	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0084

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	3	3	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	3	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	3	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0085

NPS Station ID: SHEN0085
 Location: NORTH FORK MOORMANS RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005016400.00

LAT/LON: 38.177781/ -78.739726

Depth of Water: 0
 Elevation: 485
 RF1 Mile Point: 0.000
 RF3 Mile Point: 1.21

Agency: 12NSS
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 2B047089U /2BN2B047089U
 Within Park Boundary: Yes

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.30
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND
 AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS,
 AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS
 IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS.
 EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988)
 WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO
 SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN;
 (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0085

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/01/86-04/15/86	2	10.2	10.2	10.6	9.8	0.32	0.566	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	04/01/86-04/15/86	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	04/01/86-04/15/86	2	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/01/86-04/15/86	2	24.5	24.5	25.	24.	0.5	0.707	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	04/01/86-04/15/86	2	10.65	10.65	10.9	10.4	0.125	0.354	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/01/86-04/15/86	2	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/01/86-04/15/86	2	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/01/86-04/15/86	2	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/01/86-04/15/86	2	152.6	152.6	161.8	143.4	169.28	13.011	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	04/01/86-04/15/86	2	10.	10.	10.	10.	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	04/01/86-04/15/86	2	0.01	0.01	0.018	0.002	0.	0.011	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	04/01/86-04/15/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	04/01/86-04/15/86	2	2.1	2.1	2.2	2.	0.02	0.141	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/01/86-04/15/86	2	1.65	1.65	1.7	1.6	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/01/86-04/15/86	2	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/01/86-04/15/86	2	1.555	1.555	1.57	1.54	0.	0.021	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/01/86-04/15/86	2	0.555	0.555	0.56	0.55	0.	0.007	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/01/86-04/15/86	2	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/01/86-04/15/86	2	3.45	3.45	3.5	3.4	0.005	0.071	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0085

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	04/01/86-04/15/86	2	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/01/86-04/15/86	2	9.2	9.2	9.7	8.7	0.5	0.707	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/01/86-04/15/86	2	5.	5.	10.	0.	50.	7.071	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	04/01/86-04/15/86	2	16.	16.	25.	7.	162.	12.728	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/01/86-04/15/86	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	04/01/86-04/15/86	2	8.99	8.99	8.99	8.99	0.	0.	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	04/01/86-04/15/86	2	1590.	1590.	1590.	1590.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	04/01/86-04/15/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
83509	STREAM, WIDTH METER	04/01/86-04/15/86	2	7.	7.	7.	7.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0085

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00						2	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0086

NPS Station ID: SHEN0086
 Location: North Fork Moormans River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.183198/ -78.738504

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F044
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Browns Cove VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0086

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/95-06/10/98	6	13.4	14.983	19.8	13.2	7.51	2.74	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/14/95-06/10/98	6	28.5	30.	36.	27.	13.6	3.688	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/14/95-06/10/98	6	9.55	9.083	10.	7.4	1.09	1.044	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/14/95-06/10/98	6	6.735	6.86	7.22	6.61	0.079	0.281	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/14/95-06/10/98	6	6.732	6.795	7.22	6.61	0.084	0.29	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/14/95-06/10/98	6	0.186	0.16	0.245	0.06	0.007	0.082	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/14/95-06/10/98	4	20.	20.25	23.	18.	4.25	2.062	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	07/17/96-06/10/98	3	3.45	3.183	3.6	2.5	0.356	0.597	**	**	**
83509	STREAM, WIDTH METER	07/17/96-06/10/98	3	7.5	7.233	8.8	5.4	2.943	1.716	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	07/17/96-06/10/98	3	0.05	0.073	0.13	0.04	0.002	0.049	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0086

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	2	0	0.00	4	0	0.00	4	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	6	0	0.00	2	0	0.00	4	0	0.00	4	0	0.00			
		Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	4	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0087

NPS Station ID: SHEN0087
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.191227/ -78.764254

Depth of Water: 0
 Elevation: 1780
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR20
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR20 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0087

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	6	9.75	12.	19.	7.	23.1	4.806	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	6	23.	23.667	27.	22.	3.067	1.751	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	6	5.49	5.5	5.77	5.32	0.029	0.171	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	6	5.486	5.474	5.77	5.32	0.03	0.174	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	6	3.267	3.36	4.786	1.698	1.461	1.209	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	6	23.	23.167	26.	22.	2.167	1.472	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	6	5.3	6.817	19.4	0.3	49.126	7.009	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	6	0.75	0.767	0.9	0.7	0.007	0.082	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	6	0.7	0.683	0.8	0.6	0.006	0.075	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	6	0.48	0.47	0.52	0.42	0.001	0.038	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	6	2.075	2.038	2.17	1.89	0.012	0.109	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	6	0.85	0.85	0.9	0.8	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	6	4.8	4.883	5.5	4.7	0.094	0.306	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	6	5.45	5.483	7.3	4.4	1.214	1.102	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	6	2.2	2.383	3.8	1.4	0.778	0.882	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	6	3.29	3.385	4.82	1.71	1.484	1.218	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0087

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Other-Lo Lim.	6.5	6	6	1.00	2	2	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	6	6	1.00	2	2	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0088

NPS Station ID: SHEN0088
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.193226/ -78.783837

Depth of Water: 0
 Elevation: 1520
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR09 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.68 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0088

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	10.5	11.5	18.	7.5	16.333	4.041	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	18.	18.429	21.	15.	5.619	2.37	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.29	5.271	5.33	5.18	0.003	0.055	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.29	5.268	5.33	5.18	0.003	0.055	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	5.129	5.391	6.607	4.677	0.506	0.712	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	18.	18.	21.	15.	4.667	2.16	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	2.8	7.386	23.3	0.3	85.518	9.248	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.671	0.8	0.5	0.016	0.125	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.6	0.571	0.7	0.4	0.009	0.095	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.47	0.466	0.5	0.43	0.001	0.029	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	0.93	0.9	1.1	0.65	0.021	0.147	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.8	0.771	0.9	0.7	0.006	0.076	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.5	4.543	5.3	3.6	0.456	0.675	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.4	5.314	6.3	4.3	0.518	0.72	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	0.6	0.577	1.	0.04	0.102	0.319	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	5.17	5.434	6.66	4.71	0.516	0.719	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0088

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH		7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS		7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00			
	Other-Lo Lim.	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER		7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)		7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)		7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0089

NPS Station ID: SHEN0089
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.193226/ -78.783837

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR09
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0089

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	2	12.95	12.95	13.5	12.4	0.605	0.778	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	2	17.	17.	19.	15.	8.	2.828	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	2	9.55	9.55	9.6	9.5	0.005	0.071	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	2	5.175	5.175	5.47	4.88	0.174	0.417	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/01/95-06/01/95	2	5.082	5.082	5.47	4.88	0.191	0.438	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/01/95-06/01/95	2	8.286	8.286	13.183	3.388	47.962	6.925	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	2	11.	11.	12.	10.	2.	1.414	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0089

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00							2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00							2	2	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0090

NPS Station ID: SHEN0090
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.194031/ -78.779810

Depth of Water: 0
 Elevation: 1560
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR10 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.18 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0090

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	4	10.25	9.875	11.	8.	1.729	1.315	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	4	16.	16.25	18.	15.	2.25	1.5	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	4	5.485	5.47	5.56	5.35	0.008	0.092	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	4	5.484	5.463	5.56	5.35	0.009	0.092	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	4	3.284	3.447	4.467	2.754	0.571	0.756	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	4	16.	15.75	17.	14.	2.25	1.5	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	4	6.1	8.025	18.7	1.2	56.409	7.511	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	4	0.55	0.55	0.6	0.5	0.003	0.058	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	4	0.4	0.425	0.5	0.4	0.002	0.05	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	4	0.53	0.523	0.53	0.5	0.	0.015	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	4	1.06	1.048	1.09	0.98	0.002	0.047	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	4	0.75	0.75	0.8	0.7	0.003	0.058	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	4	3.75	3.675	4.	3.2	0.129	0.359	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	4	4.9	4.975	5.6	4.5	0.269	0.519	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	4	0.7	0.7	0.9	0.5	0.033	0.183	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	4	3.31	3.475	4.5	2.78	0.578	0.76	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0090

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00				2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	4	4	1.00				2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	4	4	1.00				2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	4	0	0.00				2	0	0.00	2	0	0.00				
	Fresh Acute								2	0	0.00	2	0	0.00				
	Drinking Water	250.	4	0	0.00				2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	4	0	0.00				2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00				2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0091

NPS Station ID: SHEN0091
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.194031/ -78.779810

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR10
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0091

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	1	12.8	12.8	12.8	12.8	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	1	5.23	5.23	5.23	5.23	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/01/95-06/01/95	1	5.23	5.23	5.23	5.23	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/01/95-06/01/95	1	5.888	5.888	5.888	5.888	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	1	9.	9.	9.	9.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0091

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0		0.00						1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0		0.00						1	0	0.00						
	Other-Lo Lim.	6.5	1	1		1.00						1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0092

NPS Station ID: SHEN0092
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.194031/ -78.782865

Depth of Water: 0
 Elevation: 1480
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR08 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.24 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0092

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	12.714	19.5	7.	22.071	4.698	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	23.	23.429	26.	22.	1.952	1.397	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.84	5.809	6.06	5.55	0.034	0.185	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.84	5.775	6.06	5.55	0.036	0.189	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	1.445	1.679	2.818	0.871	0.5	0.707	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	23.	22.714	25.	21.	1.571	1.254	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	2.8	4.329	20.8	-2.2	56.429	7.512	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.714	0.8	0.7	0.001	0.038	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.729	0.8	0.7	0.002	0.049	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.57	0.559	0.63	0.5	0.002	0.048	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.01	2.073	2.43	1.85	0.054	0.233	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.9	1.	0.8	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.	5.114	5.9	4.5	0.235	0.485	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.8	5.529	6.9	4.2	0.966	0.983	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	2.	2.114	4.	0.4	1.268	1.126	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	1.46	1.694	2.84	0.88	0.507	0.712	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0092

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0093

NPS Station ID: SHEN0093
 Location: Paine Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.194199/ -78.784059

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_FISH_3F124
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0093

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/95-06/17/98	4	16.8	17.025	18.7	15.8	1.476	1.215	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-06/17/98	4	19.	18.75	19.	18.	0.25	0.5	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/31/95-06/17/98	4	9.05	8.95	9.2	8.5	0.11	0.332	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/31/95-06/17/98	4	5.565	5.577	5.83	5.35	0.039	0.199	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/31/95-06/17/98	4	5.564	5.545	5.83	5.35	0.041	0.202	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/31/95-06/17/98	4	2.732	2.852	4.467	1.479	1.539	1.241	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-06/17/98	2	11.5	11.5	12.	11.	0.5	0.707	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/27/96-06/17/98	3	3.18	3.18	3.36	3.	0.032	0.18	**	**	**	**
83509 STREAM, WIDTH METER	06/27/96-06/17/98	3	4.	3.933	4.1	3.7	0.043	0.208	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/27/96-06/17/98	3	0.06	0.06	0.07	0.05	0.	0.01	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0093

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00							4	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	4	0	0.00							4	0	0.00			
	Other-Lo Lim.	6.5	4	4	1.00							4	4	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0094

NPS Station ID: SHEN0094
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.194365/ -78.784031

Depth of Water: 0
 Elevation: 1480
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR07 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0094

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.5	12.786	19.	7.	20.405	4.517	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	23.	23.429	28.	22.	4.619	2.149	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.68	5.68	5.78	5.49	0.01	0.099	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.68	5.67	5.78	5.49	0.01	0.1	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.089	2.14	3.236	1.66	0.292	0.54	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	22.	22.714	27.	21.	4.238	2.059	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	-1.3	-1.671	2.8	-7.2	12.172	3.489	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.714	0.8	0.7	0.001	0.038	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.729	0.8	0.7	0.002	0.049	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.55	0.563	0.72	0.49	0.006	0.078	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.85	1.936	2.28	1.74	0.039	0.198	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.886	1.	0.7	0.015	0.121	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.9	4.986	5.6	4.5	0.125	0.353	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.8	5.486	6.8	4.2	0.895	0.946	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	1.7	1.857	3.3	0.3	0.92	0.959	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.11	2.157	3.26	1.67	0.297	0.545	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0094

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0095

NPS Station ID: SHEN0095
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.194392/ -78.777031

Depth of Water: 0
 Elevation: 1600
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR13
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR13 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.25 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0095

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	4	9.75	9.625	11.	8.	1.563	1.25	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	4	20.	19.75	21.	18.	1.583	1.258	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	4	5.6	5.633	5.78	5.55	0.012	0.109	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	4	5.597	5.623	5.78	5.55	0.012	0.11	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	4	2.529	2.384	2.818	1.66	0.308	0.555	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	4	19.	19.	20.	18.	0.667	0.816	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	4	1.55	1.775	3.7	0.3	3.036	1.742	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	4	0.5	0.5	0.6	0.4	0.007	0.082	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	4	0.6	0.6	0.7	0.5	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	4	0.595	0.6	0.63	0.58	0.	0.022	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	4	1.695	1.698	1.73	1.67	0.001	0.028	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	4	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	4	3.95	3.95	4.2	3.7	0.057	0.238	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	4	5.55	5.75	6.7	5.2	0.443	0.666	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	4	1.95	1.85	2.3	1.2	0.297	0.545	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	4	2.55	2.403	2.84	1.67	0.313	0.56	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0095

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00				2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	4	4	1.00				2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	4	4	1.00				2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	4	0	0.00				2	0	0.00	2	0	0.00				
	Fresh Acute								2	0	0.00	2	0	0.00				
	Drinking Water	250.	4	0	0.00				2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	4	0	0.00				2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00				2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0096

NPS Station ID: SHEN0096
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.194392/ -78.777031

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR13
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0096

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	1	13.3	13.3	13.3	13.3	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	1	5.49	5.49	5.49	5.49	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/01/95-06/01/95	1	5.49	5.49	5.49	5.49	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/01/95-06/01/95	1	3.236	3.236	3.236	3.236	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0096

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0		0.00						1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0		0.00						1	0	0.00						
	Other-Lo Lim.	6.5	1	1		1.00						1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0097

NPS Station ID: SHEN0097
 Location: Paine Run
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.194392/ -78.781448

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_NPRI
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0097

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	1	14.4	14.4	14.4	14.4	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	1	5.47	5.47	5.47	5.47	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/01/95-06/01/95	1	5.47	5.47	5.47	5.47	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/01/95-06/01/95	1	3.388	3.388	3.388	3.388	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	1	12.	12.	12.	12.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0097

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0		0.00						1	0	0.00							
00406 PH, FIELD	Fresh Chronic	9.	1	0		0.00						1	0	0.00							
	Other-Lo Lim.	6.5	1	1		1.00						1	1	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0098

NPS Station ID: SHEN0098
 Location: N F MOORMANS RIVER NEAR BROWNS COVE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204001200.00
 Description:

LAT/LON: 38.195003/ -78.732504

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.50

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02031400
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0098

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	4	14.25	14.375	17.	12.	4.229	2.056	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	4	2.	3.375	9.	0.5	15.229	3.902	**	**	**	**
00400	PH (STANDARD UNITS)	09/21/81-06/23/82	4	6.9	6.9	7.1	6.7	0.033	0.183	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/21/81-06/23/82	4	6.889	6.872	7.1	6.7	0.034	0.185	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.129	0.134	0.2	0.079	0.003	0.055	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	4	7.1	7.05	7.1	6.9	0.01	0.1	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/21/81-06/23/82	4	7.1	7.041	7.1	6.9	0.01	0.101	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.079	0.091	0.126	0.079	0.001	0.023	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	4##	0.008	0.008	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	4	0.2	0.213	0.4	0.05	0.021	0.144	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	4	11.	10.75	11.	10.	0.25	0.5	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/21/81-06/23/82	4	2.15	2.15	2.3	2.	0.03	0.173	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	4	1.3	1.275	1.4	1.1	0.016	0.126	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/21/81-06/23/82	4	1.75	1.825	2.2	1.6	0.069	0.263	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	4	0.2	0.225	0.3	0.2	0.002	0.05	**	**	**	**
00932	SODIUM, PERCENT	09/21/81-06/23/82	4	26.	26.25	29.	24.	4.25	2.062	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	4	0.4	0.4	0.5	0.3	0.007	0.082	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	4	0.95	0.925	1.	0.8	0.009	0.096	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	4	3.	3.25	4.	3.	0.25	0.5	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/21/81-06/23/82	4	10.75	10.95	12.6	9.7	1.537	1.24	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-06/23/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0098

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
00631	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
	Fresh Acute	860.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00
00940	Drinking Water	250.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0098

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0		0.00	1	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0099

NPS Station ID: SHEN0099 LAT/LON: 38.195003/ -78.739198
 Location: N.F. OF MOORMANS RIVER (BLACKROCK GAP)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 1880
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_VTSSS_AB02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB02 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NORTH FORK OF MOORMANS RIVER (BLACKROCK GAP) INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.10 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0099

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/29/87-04/29/87	1	6.31	6.31	6.31	6.31	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/29/87-04/29/87	1	6.31	6.31	6.31	6.31	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/29/87-04/29/87	1	0.49	0.49	0.49	0.49	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/29/87-04/29/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/29/87-04/29/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/29/87-04/29/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/29/87-04/29/87	1	0.55	0.55	0.55	0.55	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/29/87-04/29/87	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/29/87-04/29/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/29/87-04/29/87	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/29/87-04/29/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0099

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0100

NPS Station ID: SHEN0100
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.195337/ -78.788004

Depth of Water: 0
 Elevation: 1440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR06 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.27 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0100

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	6	11.	13.	19.	8.	23.2	4.817	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	23.	23.143	26.	22.	2.143	1.464	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.8	5.763	5.96	5.51	0.024	0.156	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.8	5.738	5.96	5.51	0.025	0.159	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	1.585	1.828	3.09	1.096	0.481	0.693	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	22.	22.286	25.	21.	1.905	1.38	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	-2.2	4.157	12.8	-2.2	37.686	6.139	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.686	0.8	0.6	0.005	0.069	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.729	0.8	0.7	0.002	0.049	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.55	0.554	0.63	0.5	0.002	0.047	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.9	1.94	2.27	1.74	0.037	0.191	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.9	1.	0.8	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.	5.043	5.7	4.5	0.156	0.395	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.7	5.457	6.7	4.2	0.843	0.918	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	1.7	1.871	3.5	0.3	1.002	1.001	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	1.6	1.844	3.11	1.11	0.486	0.697	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0100

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0101

NPS Station ID: SHEN0101
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.195476/ -78.778531

Depth of Water: 0
 Elevation: 1510
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR11 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.75 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0101

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.5	13.286	19.	7.5	17.571	4.192	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	24.	24.857	29.	23.	5.476	2.34	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.63	5.686	5.89	5.54	0.019	0.137	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.63	5.669	5.89	5.54	0.019	0.138	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.344	2.145	2.884	1.288	0.36	0.6	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	23.	24.143	28.	22.	4.476	2.116	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	4.4	5.3	12.8	1.2	14.957	3.867	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.729	0.8	0.7	0.002	0.049	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.8	0.771	0.9	0.7	0.006	0.076	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.57	0.561	0.63	0.5	0.002	0.05	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.12	2.164	2.51	1.88	0.06	0.246	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.9	1.	0.8	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.1	5.2	6.1	4.6	0.267	0.516	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.9	5.6	7.	4.2	1.057	1.028	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	2.1	2.314	4.5	0.5	1.588	1.26	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.36	2.163	2.91	1.3	0.366	0.605	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0101

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0102

NPS Station ID: SHEN0102
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.195503/ -78.770948

Depth of Water: 0
 Elevation: 1640
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR14
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR14 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.24 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0102

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	5	10.	11.2	17.	8.5	11.325	3.365	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	5	22.	21.2	22.	20.	1.2	1.095	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.64	5.654	5.7	5.61	0.002	0.039	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.64	5.653	5.7	5.61	0.002	0.039	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	5	2.291	2.225	2.455	1.995	0.039	0.199	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	5	21.	20.8	22.	20.	0.7	0.837	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	5	7.8	10.34	27.8	3.7	100.543	10.027	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	5	0.7	0.66	0.7	0.6	0.003	0.055	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	5	0.7	0.66	0.7	0.6	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	5	0.57	0.564	0.58	0.53	0.	0.019	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	5	1.79	1.8	1.88	1.75	0.003	0.052	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	5	0.9	0.92	1.	0.9	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	5	3.7	3.74	4.	3.5	0.043	0.207	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	5	5.2	5.3	6.1	4.5	0.605	0.778	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	5	2.9	2.84	3.2	2.3	0.153	0.391	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	5	2.31	2.242	2.47	2.01	0.039	0.198	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0102

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0103

NPS Station ID: SHEN0103
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.195503/ -78.789170

Depth of Water: 0
 Elevation: 1480
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR05 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.95 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0103

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	10.	12.429	20.	8.	25.036	5.004	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	21.	20.571	23.	19.	2.619	1.618	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.18	5.214	5.39	5.09	0.013	0.116	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.18	5.202	5.39	5.09	0.014	0.116	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	6.607	6.287	8.128	4.074	2.545	1.595	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	20.	20.	23.	18.	2.667	1.633	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	7.8	4.843	11.9	-2.2	23.63	4.861	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.5	0.514	0.7	0.4	0.011	0.107	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.5	0.514	0.6	0.4	0.005	0.069	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.52	0.503	0.54	0.45	0.001	0.038	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.61	1.571	1.7	1.41	0.01	0.098	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.8	0.771	0.9	0.6	0.012	0.111	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.1	5.3	6.1	4.7	0.223	0.473	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	6.8	6.671	8.7	4.7	2.452	1.566	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	0.2	0.207	0.4	0.07	0.02	0.142	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	6.66	6.336	8.19	4.11	2.582	1.607	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0103

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0104

NPS Station ID: SHEN0104
 Location: Paine Run
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.195503/ -78.789170

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR05
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0104

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/95-05/31/95	1	14.4	14.4	14.4	14.4	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-05/31/95	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/31/95-05/31/95	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/31/95-05/31/95	1	4.92	4.92	4.92	4.92	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/31/95-05/31/95	1	4.92	4.92	4.92	4.92	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/31/95-05/31/95	1	12.023	12.023	12.023	12.023	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-05/31/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0104

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00															
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00															
	Other-Lo Lim.	6.5	1	1	1.00									1	1	1.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0105

NPS Station ID: SHEN0105
 Location: N.F. OF MOORMANS RIVER (UPPER REACH)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.195616/ -78.732199

Depth of Water: 0
 Elevation: 1820

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_VTSSS_AB04
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB04 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NORTH FORK OF MOORMANS RIVER (UPPER REACH) OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0105

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/29/87-04/29/87	1	7.13	7.13	7.13	7.13	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/29/87-04/29/87	1	7.13	7.13	7.13	7.13	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/29/87-04/29/87	1	0.074	0.074	0.074	0.074	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/29/87-04/29/87	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/29/87-04/29/87	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/29/87-04/29/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/29/87-04/29/87	1	1.54	1.54	1.54	1.54	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/29/87-04/29/87	1	0.43	0.43	0.43	0.43	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/29/87-04/29/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/29/87-04/29/87	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/29/87-04/29/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0105

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0106

NPS Station ID: SHEN0106
 Location: Paine Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.195699/ -78.777976

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_FISH_3F125
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0106

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/17/98	4	14.9	15.425	17.7	14.2	2.736	1.654	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/17/98	4	20.	19.75	20.	19.	0.25	0.5	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/01/95-06/17/98	4	9.25	9.175	9.4	8.8	0.082	0.287	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/01/95-06/17/98	4	5.28	5.4	5.87	5.17	0.101	0.318	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/01/95-06/17/98	4	5.28	5.332	5.87	5.17	0.107	0.328	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/01/95-06/17/98	4	5.254	4.654	6.761	1.349	5.399	2.324	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/17/98	2	12.5	12.5	13.	12.	0.5	0.707	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/27/96-06/17/98	3	4.5	4.8	5.7	4.2	0.63	0.794	**	**	**	**
83509 STREAM, WIDTH METER	06/27/96-06/17/98	3	4.7	4.633	5.	4.2	0.163	0.404	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/27/96-06/17/98	3	0.04	0.04	0.06	0.02	0.	0.02	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0106

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00						4	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	4	0	0.00						4	0	0.00				
	Other-Lo Lim.	6.5	4	4	1.00						4	4	1.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0107

NPS Station ID: SHEN0107
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.195892/ -78.777337

Depth of Water: 0
 Elevation: 1510
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR12 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.43 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0107

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.5	12.857	18.	7.5	16.643	4.08	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	24.	24.857	28.	23.	2.81	1.676	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.61	5.619	5.84	5.36	0.029	0.171	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.61	5.59	5.84	5.36	0.03	0.174	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.455	2.57	4.365	1.445	1.004	1.002	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	24.	24.	27.	22.	2.667	1.633	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	1.2	1.757	2.8	1.2	0.573	0.757	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.743	0.8	0.7	0.003	0.053	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.8	0.771	0.9	0.7	0.006	0.076	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.57	0.557	0.63	0.49	0.003	0.052	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.13	2.17	2.51	1.9	0.063	0.25	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.9	1.	0.8	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.2	5.214	6.	4.6	0.221	0.471	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.8	5.586	7.1	4.2	1.131	1.064	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	2.2	2.386	4.6	0.5	1.631	1.277	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.47	2.59	4.4	1.46	1.019	1.009	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0107

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0108

NPS Station ID: SHEN0108
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.196366/ -78.788837

Depth of Water: 0
 Elevation: 1440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR04 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.27 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0108

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	12.5	19.	8.	20.75	4.555	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	23.	22.857	25.	21.	1.81	1.345	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.85	5.767	5.95	5.52	0.026	0.162	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.85	5.74	5.95	5.52	0.027	0.165	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	1.413	1.818	3.02	1.122	0.5	0.707	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	22.	22.286	25.	21.	1.905	1.38	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	6.2	2.871	9.4	-8.1	31.992	5.656	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.7	0.8	0.6	0.003	0.058	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.729	0.8	0.7	0.002	0.049	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.57	0.551	0.63	0.5	0.002	0.049	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.84	1.933	2.26	1.76	0.032	0.18	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.886	1.	0.7	0.015	0.121	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.	5.043	5.7	4.5	0.156	0.395	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.7	5.514	6.9	4.2	0.971	0.986	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	1.8	1.871	3.4	0.3	0.946	0.972	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	1.42	1.831	3.04	1.13	0.507	0.712	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0108

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0109

NPS Station ID: SHEN0109
 Location: Paine Run
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.196366/ -78.788837

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR04
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0109

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/95-05/31/95	3	13.1	13.1	13.9	12.3	0.64	0.8	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-05/31/95	3	20.	19.333	20.	18.	1.333	1.155	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/31/95-05/31/95	3	9.1	9.067	9.5	8.6	0.203	0.451	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/31/95-05/31/95	3	4.85	5.057	5.54	4.78	0.176	0.42	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/31/95-05/31/95	3	4.85	4.951	5.54	4.78	0.193	0.44	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/31/95-05/31/95	3	14.125	11.202	16.596	2.884	53.414	7.309	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-05/31/95	3	13.	12.667	13.	12.	0.333	0.577	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0109

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00							3	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00							3	0	0.00			
	Other-Lo Lim.	6.5	3	3	1.00							3	3	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0110

NPS Station ID: SHEN0110
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.196532/ -78.767392

Depth of Water: 0
 Elevation: 1600
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR21
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR21 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.15 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0110

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	12.857	20.	8.5	21.893	4.679	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	23.	23.286	26.	22.	2.571	1.604	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.36	5.366	5.45	5.31	0.002	0.042	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.36	5.364	5.45	5.31	0.002	0.042	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	4.365	4.325	4.898	3.548	0.16	0.4	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	22.	22.857	26.	22.	2.476	1.574	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	3.7	4.429	10.3	0.3	11.769	3.431	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.7	0.9	0.6	0.01	0.1	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.6	0.629	0.8	0.6	0.006	0.076	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.49	0.471	0.53	0.41	0.002	0.042	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.	2.064	2.29	1.84	0.029	0.172	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.8	0.814	1.	0.7	0.011	0.107	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.	5.086	5.9	4.5	0.245	0.495	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.9	5.786	8.	3.9	2.175	1.475	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	2.	2.014	4.	0.2	1.345	1.16	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	4.4	4.36	4.94	3.58	0.162	0.403	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0110

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0111

NPS Station ID: SHEN0111
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.196532/ -78.767392

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR21
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0111

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	1	14.6	14.6	14.6	14.6	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/06/95-06/06/95	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/06/95-06/06/95	1	1.259	1.259	1.259	1.259	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	1	13.	13.	13.	13.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0111

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00						1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00						1	1	1.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0112

NPS Station ID: SHEN0112
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.196920/ -78.768809

Depth of Water: 0
 Elevation: 1580
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR19
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR19 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.80 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0112

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	6	11.	13.167	20.	8.5	21.667	4.655	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	6	24.5	25.333	28.	24.	3.067	1.751	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	6	5.48	5.505	5.62	5.44	0.004	0.065	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	6	5.48	5.501	5.62	5.44	0.004	0.065	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	6	3.311	3.154	3.631	2.399	0.195	0.442	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	6	24.5	24.667	27.	23.	2.667	1.633	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	6	3.6	0.983	5.3	-2.2	6.526	2.555	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	6	0.8	0.8	0.9	0.7	0.008	0.089	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	6	0.7	0.767	0.9	0.7	0.011	0.103	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	6	0.575	0.553	0.6	0.49	0.003	0.05	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	6	2.125	2.14	2.4	1.87	0.046	0.213	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	6	0.95	0.917	1.	0.8	0.01	0.098	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	6	4.95	4.967	5.4	4.5	0.119	0.344	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	6	5.4	5.417	7.2	4.1	1.322	1.15	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	6	2.75	3.	4.9	1.7	1.264	1.124	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	6	3.34	3.182	3.66	2.42	0.198	0.445	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0112

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Other-Lo Lim.	6.5	6	6	1.00	2	2	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	6	6	1.00	2	2	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0113

NPS Station ID: SHEN0113
 Location: Paine Run
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.196920/ -78.768809

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR19
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0113

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	1	14.9	14.9	14.9	14.9	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	1	5.23	5.23	5.23	5.23	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/06/95-06/06/95	1	5.23	5.23	5.23	5.23	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/06/95-06/06/95	1	5.888	5.888	5.888	5.888	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	1	13.	13.	13.	13.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0113

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00						1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00						1	1	1.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0114

NPS Station ID: SHEN0114
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.197199/ -78.773670

Depth of Water: 0
 Elevation: 1540
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR15
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR15 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.18 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0114

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	5	11.	11.7	18.	7.5	14.7	3.834	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	5	24.	24.8	29.	23.	6.2	2.49	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.51	5.478	5.56	5.34	0.007	0.083	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.51	5.471	5.56	5.34	0.007	0.084	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	5	3.09	3.379	4.571	2.754	0.494	0.703	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	5	24.	24.4	28.	22.	5.3	2.302	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	5	7.8	7.8	12.8	3.7	12.655	3.557	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	5	0.7	0.76	0.9	0.7	0.008	0.089	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	5	0.8	0.78	0.9	0.7	0.007	0.084	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	5	0.56	0.548	0.59	0.5	0.002	0.041	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	5	2.02	2.106	2.44	1.89	0.044	0.21	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	5	1.	0.92	1.	0.8	0.012	0.11	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	5	4.9	4.94	5.4	4.5	0.113	0.336	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	5	5.1	5.14	6.	4.3	0.573	0.757	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	5	2.7	3.04	5.1	1.7	1.588	1.26	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	5	3.11	3.406	4.61	2.78	0.504	0.71	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0114

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0115

NPS Station ID: SHEN0115
 Location: Paine Run
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.197199/ -78.773670

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR15
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0115

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	2	13.9	13.9	13.9	13.9	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	2	21.5	21.5	22.	21.	0.5	0.707	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	2	7.2	7.2	7.6	6.8	0.32	0.566	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	2	4.955	4.955	4.98	4.93	0.001	0.035	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/01/95-06/01/95	2	4.954	4.954	4.98	4.93	0.001	0.035	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/01/95-06/01/95	2	11.11	11.11	11.749	10.471	0.816	0.903	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	2	13.5	13.5	14.	13.	0.5	0.707	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0115

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00							2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00							2	2	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0116

NPS Station ID: SHEN0116 LAT/LON: 38.197226/ -78.742226
 Location: N F MOORMANS RIVER TRIB NEAR BROWNS COVE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02080204 RF1 Mile Point: 0.000
 RF3 Index: 02070005016800.00 RF3 Mile Point: 4.31
 Description:

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02031420
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 13.30
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0116

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	4	13.5	13.25	15.	11.	2.917	1.708	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	4	0.45	1.	3.	0.1	1.807	1.344	**	**	**	**
00400	PH (STANDARD UNITS)	09/21/81-06/23/82	4	6.25	6.1	6.3	5.6	0.113	0.337	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/21/81-06/23/82	4	6.247	5.985	6.3	5.6	0.131	0.362	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.566	1.036	2.512	0.501	0.971	0.986	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	4	6.25	6.25	6.4	6.1	0.017	0.129	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/21/81-06/23/82	4	6.247	6.236	6.4	6.1	0.017	0.13	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.566	0.581	0.794	0.398	0.029	0.171	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	4##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	4	0.025	0.035	0.07	0.02	0.001	0.024	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	4	3.	3.	3.	3.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/21/81-06/23/82	4	0.5	0.475	0.5	0.4	0.002	0.05	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	4	0.45	0.45	0.5	0.4	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/21/81-06/23/82	4	0.55	0.55	0.6	0.5	0.003	0.058	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	4	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	09/21/81-06/23/82	4	20.5	21.	23.	20.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	4	1.15	1.125	1.3	0.9	0.029	0.171	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	4	0.7	0.725	0.8	0.7	0.003	0.05	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	4	3.	2.75	3.	2.	0.25	0.5	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/21/81-06/23/82	4	4.35	4.525	5.4	4.	0.369	0.608	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0116

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	4	4	1.00	1	1	1.00	1	1	1.00	2	2	1.00			
00403	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	4	4	1.00	1	1	1.00	1	1	1.00	2	2	1.00			
00631	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Fresh Acute	860.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00940	Drinking Water	250.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0116

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0117

NPS Station ID: SHEN0117
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.197253/ -78.772531

Depth of Water: 0
 Elevation: 1550
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR16
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR16 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.21 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0117

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	5	10.5	11.4	18.	7.5	15.425	3.927	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	5	24.	25.2	29.	23.	5.7	2.387	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.48	5.448	5.5	5.29	0.008	0.089	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.48	5.44	5.5	5.29	0.008	0.09	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	5	3.311	3.631	5.129	3.162	0.711	0.843	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	5	24.	24.4	28.	22.	5.3	2.302	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	5	5.3	7.8	14.4	2.8	23.155	4.812	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	5	0.8	0.8	0.9	0.7	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	5	0.7	0.76	0.9	0.7	0.008	0.089	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	5	0.56	0.542	0.59	0.49	0.002	0.044	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	5	1.99	2.082	2.4	1.89	0.04	0.201	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	5	1.	0.92	1.	0.8	0.012	0.11	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	5	4.9	4.88	5.3	4.5	0.092	0.303	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	5	5.	5.04	5.9	4.1	0.653	0.808	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	5	3.	3.14	4.9	1.9	1.243	1.115	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	5	3.34	3.662	5.17	3.19	0.72	0.849	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0117

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0118

NPS Station ID: SHEN0118
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.197365/ -78.789309

Depth of Water: 0
 Elevation: 1440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR03 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.34 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0118

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	12.643	19.	8.	19.726	4.441	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	23.	23.	25.	21.	2.	1.414	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.66	5.65	5.86	5.42	0.026	0.161	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.66	5.624	5.86	5.42	0.027	0.163	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.188	2.376	3.802	1.38	0.804	0.897	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	22.	22.143	24.	21.	1.476	1.215	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	-3.8	-2.329	4.4	-7.2	19.989	4.471	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.686	0.8	0.6	0.005	0.069	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.729	0.8	0.7	0.002	0.049	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.56	0.57	0.76	0.49	0.008	0.091	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.87	1.939	2.24	1.73	0.044	0.21	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	1.	0.914	1.	0.8	0.011	0.107	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.	5.029	5.6	4.5	0.126	0.355	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.8	5.5	6.8	4.2	0.91	0.954	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	1.7	1.8	3.3	0.4	0.823	0.907	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.21	2.394	3.83	1.39	0.818	0.904	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0118

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0119

NPS Station ID: SHEN0119
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.197781/ -78.789920

Depth of Water: 0
 Elevation: 1400
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR02 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.28 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0119

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	10.5	12.429	19.5	7.	23.952	4.894	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	21.	21.857	24.	21.	1.476	1.215	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.8	5.81	6.01	5.6	0.025	0.159	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.8	5.786	6.01	5.6	0.026	0.161	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	1.585	1.637	2.512	0.977	0.328	0.572	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	21.	21.286	23.	20.	0.905	0.951	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	6.2	0.914	7.8	-9.7	43.871	6.624	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.6	0.614	0.7	0.5	0.005	0.069	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.7	0.8	0.6	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.56	0.547	0.59	0.49	0.001	0.037	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.92	1.929	2.2	1.75	0.03	0.174	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.914	1.	0.8	0.008	0.09	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.9	4.943	5.4	4.5	0.103	0.321	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.9	5.729	7.2	4.4	0.972	0.986	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	1.5	1.529	2.9	0.3	0.629	0.793	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	1.6	1.651	2.53	0.99	0.331	0.575	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0119

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0120

NPS Station ID: SHEN0120
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.197837/ -78.765365

Depth of Water: 0
 Elevation: 1640
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR25
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR25 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.44 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0120

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	5	11.	11.6	17.5	8.5	11.925	3.453	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	5	27.	26.8	28.	25.	1.7	1.304	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.55	5.542	5.61	5.45	0.003	0.058	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.55	5.539	5.61	5.45	0.003	0.058	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	5	2.818	2.892	3.548	2.455	0.162	0.402	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	5	26.	26.	28.	24.	2.5	1.581	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	5	9.4	1.76	9.4	-4.7	30.693	5.54	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	5	1.	0.98	1.1	0.9	0.007	0.084	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	5	0.8	0.78	0.9	0.7	0.007	0.084	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	5	0.56	0.554	0.58	0.52	0.001	0.024	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	5	2.22	2.254	2.68	2.	0.069	0.262	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	5	1.	0.96	1.	0.9	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	5	5.8	5.76	6.	5.5	0.043	0.207	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	5	5.6	5.66	6.7	4.7	0.713	0.844	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	5	2.5	2.28	3.1	1.1	0.632	0.795	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	5	2.84	2.916	3.58	2.47	0.166	0.407	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0120

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Other-Lo Lim.	6.5	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0121

NPS Station ID: SHEN0121
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.197837/ -78.765365

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR25
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0121

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	1	13.1	13.1	13.1	13.1	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/06/95-06/06/95	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/06/95-06/06/95	1	7.943	7.943	7.943	7.943	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	1	16.	16.	16.	16.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0121

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0122

NPS Station ID: SHEN0122
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.198059/ -78.788476

Depth of Water: 0
 Elevation: 1440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR37
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR37 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0122

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.5	13.	20.5	8.	23.167	4.813	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	19.	18.429	20.	17.	1.286	1.134	**	**	**	**
00400 PH (STANDARD UNITS)	03/08/92-10/06/94	7	6.06	6.001	6.17	5.75	0.024	0.154	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	6.06	5.977	6.17	5.75	0.024	0.156	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	0.871	1.054	1.778	0.676	0.159	0.398	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	18.	18.143	20.	17.	1.143	1.069	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	96.2	102.229	164.4	65.3	910.349	30.172	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.4	0.386	0.5	0.3	0.005	0.069	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.6	0.586	0.7	0.5	0.005	0.069	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.58	0.567	0.6	0.51	0.001	0.033	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.87	1.919	2.14	1.82	0.014	0.12	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	1.	0.957	1.	0.9	0.003	0.053	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.1	4.171	4.9	3.2	0.532	0.73	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	7.1	7.186	9.4	5.4	2.378	1.542	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	0.3	0.414	1.	0.2	0.088	0.297	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	0.88	1.063	1.79	0.68	0.161	0.401	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0122

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0123

NPS Station ID: SHEN0123
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.198059/ -78.788476

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR37
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0123

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/95-05/31/95	1	13.4	13.4	13.4	13.4	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-05/31/95	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/31/95-05/31/95	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/31/95-05/31/95	1	5.79	5.79	5.79	5.79	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/31/95-05/31/95	1	5.79	5.79	5.79	5.79	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/31/95-05/31/95	1	1.622	1.622	1.622	1.622	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-05/31/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0123

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0		0.00						1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0		0.00						1	0	0.00						
	Other-Lo Lim.	6.5	1	1		1.00						1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0124

NPS Station ID: SHEN0124
 Location: PAINE RUN NEAR HARRISTON, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005016600.00
 Description:

LAT/LON: 38.198337/ -78.792504

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 7.10

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 01627400
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 26.10
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0124

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/23/81-06/24/82	5	14.	10.5	15.	2.	33.25	5.766	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/23/81-06/24/82	5	3.	3.86	11.	0.3	17.148	4.141	**	**	**	**
00400	PH (STANDARD UNITS)	09/23/81-06/24/82	4	5.85	5.75	6.	5.3	0.097	0.311	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/23/81-06/24/82	4	5.847	5.655	6.	5.3	0.109	0.33	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/23/81-06/24/82	4	1.422	2.214	5.012	1.	3.537	1.881	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/23/81-06/24/82	5	6.	5.88	6.2	5.5	0.077	0.277	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/23/81-06/24/82	5	6.	5.808	6.2	5.5	0.084	0.289	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/23/81-06/24/82	5	1.	1.558	3.162	0.631	1.062	1.03	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/23/81-06/24/82	5 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/23/81-06/24/82	5	0.02	0.031	0.08	0.005	0.001	0.03	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/23/81-06/24/82	5	4.	3.8	4.	3.	0.2	0.447	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/23/81-06/24/82	5	0.6	0.54	0.6	0.4	0.008	0.089	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/23/81-06/24/82	5	0.6	0.62	0.7	0.6	0.002	0.045	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/23/81-06/24/82	5	0.6	0.58	0.6	0.5	0.002	0.045	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/23/81-06/24/82	5	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	09/23/81-06/24/82	5	17.	17.6	20.	16.	2.3	1.517	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/23/81-06/24/82	5	1.6	1.6	1.8	1.5	0.015	0.122	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/23/81-06/24/82	5	0.9	0.9	1.	0.8	0.005	0.071	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/23/81-06/24/82	5	5.	5.2	6.	5.	0.2	0.447	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/23/81-06/24/82	5	4.7	4.7	5.5	3.7	0.42	0.648	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0124

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	4	4	1.00	1	1	1.00	1	1	1.00	2	2	1.00			
00403	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00631	Drinking Water	10.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0124

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	0	0	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0125

NPS Station ID: SHEN0125
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.198420/ -78.767448

Depth of Water: 0
 Elevation: 1580
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR24
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR24 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.08 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0125

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	6	12.	13.583	20.	8.5	21.542	4.641	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	25.	25.857	29.	24.	3.476	1.864	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.51	5.486	5.68	5.28	0.017	0.13	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.51	5.469	5.68	5.28	0.017	0.132	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	3.09	3.398	5.248	2.089	1.091	1.044	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	25.	25.286	28.	23.	3.238	1.799	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	3.7	3.843	6.9	0.3	6.563	2.562	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.8	0.786	0.9	0.7	0.008	0.09	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.8	0.8	0.9	0.7	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.59	0.566	0.61	0.51	0.002	0.044	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.06	2.139	2.42	1.89	0.04	0.2	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.929	1.	0.8	0.006	0.076	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.	5.1	5.9	4.5	0.247	0.497	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.8	5.6	7.4	4.2	1.307	1.143	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	3.1	2.971	4.9	0.9	1.619	1.272	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	3.11	3.424	5.29	2.11	1.108	1.053	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0125

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0126

NPS Station ID: SHEN0126
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.198420/ -78.793226

Depth of Water: 0
 Elevation: 1390
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PAIN
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PAIN IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.39 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/29/97	258	10.5	10.912	23.	0.	33.762	5.811	3.	6.5	16.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/29/97	263	21.	21.114	32.	17.	2.369	1.539	20.	20.	22.	22.
00400	PH (STANDARD UNITS)	09/01/92-07/29/97	263	5.79	5.787	6.27	4.98	0.058	0.241	5.49	5.6	5.98	6.09
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/29/97	263	5.79	5.717	6.27	4.98	0.063	0.251	5.49	5.6	5.98	6.09
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/29/97	263	1.622	1.918	10.471	0.537	1.545	1.243	0.813	1.047	2.512	3.236
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/29/97	263	20.	20.536	30.	17.	2.295	1.515	19.	20.	21.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/29/97	263	6.9	17.341	347.3	-8.	2471.655	49.716	1.2	2.8	-3.8	14.4
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/29/97	28	0.9	1.032	3.	0.4	0.227	0.476	0.5	0.8	1.2	1.41
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/29/97	263	0.6	0.608	1.1	0.5	0.006	0.08	0.5	0.6	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/29/97	263	0.6	0.653	1.2	0.5	0.006	0.078	0.6	0.6	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/29/97	263	0.54	0.54	0.68	0.42	0.001	0.03	0.51	0.52	0.56	0.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/29/97	263	1.87	1.868	2.34	1.55	0.025	0.157	1.64	1.74	2.	2.07
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/29/97	263	0.9	0.858	1.	0.7	0.004	0.062	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/29/97	263	5.2	5.185	6.2	4.6	0.053	0.23	4.9	5.	5.3	5.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/29/97	263	5.4	5.432	7.3	2.7	0.839	0.916	4.3	4.8	6.2	6.6
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	08/18/94-08/18/94	1	17.599	17.599	17.599	17.599	0.	0.	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	10/21/93-07/29/97	114	15.319	18.233	111.894	3.021	180.711	13.443	7.176	11.774	20.001	34.346
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/23/96-05/13/97	10	0.005	0.006	0.01	0.001	0.	0.003	0.001	0.002	0.01	0.01
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/29/97	263	0.6	0.861	4.8	0.	0.477	0.69	0.2	0.4	1.3	1.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/29/97	263	1.64	1.933	10.55	0.54	1.568	1.252	0.82	1.06	2.53	3.26

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0126

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	263	0	0.00	75	0	0.00	113	0	0.00	75	0	0.00			
	Other-Lo Lim.	6.5	263	263	1.00	75	75	1.00	113	113	1.00	75	75	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	263	255	0.97	75	72	0.96	113	113	1.00	75	70	0.93			
	Fresh Acute	860.	263	0	0.00	75	0	0.00	113	0	0.00	75	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	263	0	0.00	75	0	0.00	113	0	0.00	75	0	0.00			
	Drinking Water	250.	263	0	0.00	75	0	0.00	113	0	0.00	75	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	263	0	0.00	75	0	0.00	113	0	0.00	75	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	263	0	0.00	75	0	0.00	113	0	0.00	75	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1992 - Station SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/29/97	15	7.	8.2	17.5	0.	25.136	5.014	1.2	5.	11.	17.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/29/97	19	22.	22.	26.	20.	2.	1.414	21.	21.	22.	25.
00400	PH (STANDARD UNITS)	09/01/92-07/29/97	19	5.78	5.734	6.16	5.09	0.061	0.248	5.39	5.6	5.91	5.98
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/29/97	19	5.78	5.656	6.16	5.09	0.068	0.261	5.39	5.6	5.91	5.98
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/29/97	19	1.66	2.208	8.128	0.692	2.86	1.691	1.047	1.23	2.512	4.074
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/29/97	19	21.	21.579	25.	20.	1.48	1.216	20.	21.	22.	24.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/29/97	19	2.8	0.637	4.4	-8.	7.196	2.682	0.3	1.2	-0.6	-2.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/29/97	19	0.7	0.674	0.8	0.6	0.004	0.065	0.6	0.6	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/29/97	19	0.7	0.7	0.8	0.6	0.003	0.058	0.6	0.7	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/29/97	19	0.56	0.555	0.58	0.52	0.	0.018	0.52	0.54	0.57	0.57
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/29/97	19	1.84	1.877	2.15	1.72	0.015	0.123	1.72	1.77	1.98	2.06
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/29/97	19	1.	0.968	1.	0.9	0.002	0.048	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/29/97	19	4.9	4.984	5.5	4.7	0.045	0.212	4.8	4.9	5.1	5.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/29/97	19	6.	5.916	6.3	5.3	0.095	0.308	5.4	5.6	6.2	6.3
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/29/97	19	1.8	1.737	3.	0.9	0.24	0.49	1.2	1.3	2.	2.5
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/29/97	19	1.67	2.226	8.19	0.7	2.904	1.704	1.06	1.24	2.53	4.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/29/97	57	11.	11.242	23.	1.5	35.582	5.965	3.	6.	16.75	19.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/29/97	58	22.	22.224	32.	20.	4.493	2.12	21.	21.	22.	24.1
00400	PH (STANDARD UNITS)	09/01/92-07/29/97	58	5.83	5.794	6.19	4.98	0.066	0.256	5.46	5.6	6.	6.092
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/29/97	58	5.83	5.711	6.19	4.98	0.073	0.27	5.46	5.6	6.	6.092
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/29/97	58	1.481	1.947	10.471	0.646	2.3	1.517	0.809	1.	2.512	3.467
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/29/97	58	21.	21.483	30.	19.	4.219	2.054	19.9	21.	22.	23.1
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/29/97	58	8.25	6.133	17.8	-3.1	27.044	5.2	0.4	2.8	10.3	13.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/29/97	58	0.6	0.64	1.1	0.5	0.013	0.114	0.5	0.6	0.7	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/29/97	58	0.7	0.7	1.2	0.6	0.012	0.108	0.6	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/29/97	58	0.56	0.549	0.61	0.42	0.001	0.035	0.51	0.52	0.58	0.59
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/29/97	58	1.95	1.926	2.34	1.59	0.028	0.169	1.659	1.79	2.07	2.13
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/29/97	58	0.9	0.872	1.	0.8	0.002	0.049	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/29/97	58	5.	5.06	6.1	4.6	0.067	0.26	4.8	4.9	5.2	5.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/29/97	58	5.4	5.743	7.3	3.9	0.928	0.964	4.7	4.9	6.725	7.11
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	10/21/93-07/29/97	11	18.235	20.885	55.874	9.381	183.326	13.54	9.687	12.484	20.413	51.764
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/29/97	58	1.5	1.531	4.8	0.005	0.689	0.83	0.04	1.3	1.825	2.42
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/29/97	58	1.49	1.962	10.55	0.65	2.334	1.528	0.816	1.01	2.53	3.49

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/29/97	52	11.	11.683	23.	2.	34.069	5.837	3.	6.625	16.	20.25
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/29/97	52	21.	21.327	27.	20.	1.518	1.232	20.	21.	21.	22.7
00400	PH (STANDARD UNITS)	09/01/92-07/29/97	52	5.885	5.86	6.25	5.3	0.071	0.267	5.449	5.633	6.1	6.177
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/29/97	52	5.885	5.776	6.25	5.3	0.079	0.28	5.449	5.632	6.1	6.177
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/29/97	52	1.303	1.673	5.012	0.562	1.237	1.112	0.665	0.795	2.331	3.558
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/29/97	52	20.	20.788	26.	19.	1.464	1.21	20.	20.	21.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/29/97	52	8.25	7.671	16.9	-2.2	22.639	4.758	1.41	4.025	11.2	14.19
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/29/97	52	0.6	0.617	0.9	0.5	0.005	0.068	0.53	0.6	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/29/97	52	0.7	0.665	0.9	0.6	0.005	0.071	0.6	0.6	0.7	0.77
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/29/97	52	0.53	0.53	0.58	0.45	0.001	0.029	0.483	0.51	0.55	0.56

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/29/97	52	1.9	1.894	2.22	1.63	0.026	0.162	1.663	1.75	2.03	2.1
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/29/97	52	0.8	0.819	1.	0.7	0.003	0.053	0.8	0.8	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/29/97	52	5.3	5.279	6.2	4.9	0.054	0.232	5.	5.125	5.4	5.6
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/29/97	52	5.7	5.538	6.8	4.1	0.842	0.918	4.3	4.6	6.5	6.6
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	10/21/93-07/29/97	50	14.499	20.069	111.894	3.021	326.58	18.072	5.258	10.949	24.142	42.62
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/29/97	52	0.7	0.772	2.6	0.004	0.264	0.514	0.037	0.4	1.075	1.47
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/29/97	52	1.315	1.687	5.05	0.57	1.256	1.121	0.673	0.8	2.348	3.588

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/29/97	52	10.	10.617	21.	0.	31.865	5.645	2.	7.	15.	18.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/29/97	52	21.	20.75	23.	20.	0.544	0.738	20.	20.	21.	22.
00400	PH (STANDARD UNITS)	09/01/92-07/29/97	52	5.84	5.806	6.12	5.37	0.038	0.194	5.543	5.633	5.98	6.03
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/29/97	52	5.84	5.763	6.12	5.37	0.039	0.198	5.543	5.632	5.98	6.03
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/29/97	52	1.445	1.727	4.266	0.759	0.627	0.792	0.933	1.047	2.331	2.864
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/29/97	52	20.	20.25	23.	18.	0.858	0.926	19.	20.	21.	21.7
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/29/97	52	5.75	4.658	14.4	-1.3	14.255	3.776	0.3	2.125	7.8	-0.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/29/97	52	0.6	0.596	0.7	0.5	0.003	0.052	0.5	0.6	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/29/97	52	0.6	0.637	0.8	0.5	0.004	0.06	0.6	0.6	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/29/97	52	0.54	0.543	0.6	0.48	0.001	0.026	0.51	0.52	0.56	0.577
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/29/97	52	1.84	1.84	2.09	1.56	0.02	0.14	1.623	1.75	1.955	2.024
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/29/97	52	0.9	0.896	1.	0.8	0.001	0.034	0.9	0.9	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/29/97	52	5.3	5.269	5.6	5.	0.021	0.144	5.	5.2	5.4	5.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/29/97	52	5.45	5.506	6.8	3.7	0.558	0.747	4.46	5.025	6.	6.6
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	10/21/93-07/29/97	23	14.425	15.769	38.674	5.252	47.3	6.877	8.641	10.982	18.846	23.555
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/29/97	52	0.5	0.523	1.1	0.	0.069	0.263	0.2	0.325	0.7	0.87
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/29/97	52	1.46	1.742	4.3	0.77	0.636	0.798	0.94	1.06	2.348	2.889

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/29/97	52	12.	11.279	20.	1.	33.396	5.779	3.3	6.625	16.75	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/29/97	52	20.	20.365	22.	19.	0.668	0.817	19.3	20.	21.	22.
00400	PH (STANDARD UNITS)	09/01/92-07/29/97	52	5.68	5.728	6.27	5.12	0.066	0.258	5.446	5.548	5.93	6.087
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/29/97	52	5.68	5.655	6.27	5.12	0.072	0.268	5.446	5.547	5.93	6.087
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/29/97	52	2.089	2.215	7.586	0.537	1.934	1.391	0.819	1.176	2.836	3.582
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/29/97	52	20.	19.731	22.	18.	0.946	0.972	19.	19.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/29/97	52	5.	4.665	16.9	-5.	20.186	4.493	1.2	2.575	1.525	10.96
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/29/97	52	0.6	0.571	0.7	0.5	0.002	0.05	0.5	0.5	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/29/97	52	0.6	0.612	0.7	0.5	0.001	0.038	0.6	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/29/97	52	0.53	0.538	0.68	0.49	0.001	0.032	0.503	0.52	0.55	0.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/29/97	52	1.835	1.829	2.13	1.55	0.023	0.151	1.62	1.695	1.948	2.04
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/29/97	52	0.8	0.833	0.9	0.8	0.002	0.047	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/29/97	52	5.3	5.227	5.8	4.8	0.046	0.215	4.9	5.	5.375	5.5
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/29/97	52	5.3	5.356	7.	3.8	0.502	0.709	4.36	5.	5.8	6.44
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	10/21/93-07/29/97	17	18.363	18.262	30.728	9.986	33.121	5.755	11.754	13.716	21.579	27.773
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/29/97	52	0.45	0.427	0.9	0.	0.053	0.23	0.005	0.3	0.6	0.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/29/97	52	2.11	2.233	7.65	0.54	1.964	1.401	0.826	1.188	2.86	3.609

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0126

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/29/97	30	9.	10.183	22.5	0.	37.646	6.136	3.05	5.	15.	19.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/29/97	30	20.	19.967	23.	17.	0.861	0.928	19.	20.	20.	21.
00400	PH (STANDARD UNITS)	09/01/92-07/29/97	30	5.705	5.751	6.07	5.39	0.031	0.175	5.521	5.648	5.898	6.008
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/29/97	30	5.705	5.717	6.07	5.39	0.032	0.179	5.521	5.648	5.897	6.008
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/29/97	30	1.973	1.917	4.074	0.851	0.591	0.769	0.982	1.267	2.252	3.013
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/29/97	30	19.	19.5	22.	17.	0.741	0.861	19.	19.	20.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/29/97	30	129.95	110.31	347.3	1.3	12052.569	109.784	3.77	7.875	201.325	276.13
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/29/97	30	0.6	0.57	0.7	0.5	0.003	0.053	0.5	0.5	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/29/97	30	0.6	0.613	0.7	0.6	0.001	0.035	0.6	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/29/97	30	0.525	0.533	0.58	0.5	0.	0.019	0.52	0.52	0.54	0.57
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/29/97	30	1.76	1.819	2.13	1.6	0.023	0.153	1.642	1.69	1.95	2.03
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/29/97	30	0.8	0.807	0.9	0.8	0.001	0.025	0.8	0.8	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/29/97	30	5.2	5.17	5.4	4.9	0.015	0.121	5.	5.1	5.225	5.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/29/97	30	4.65	4.343	5.8	2.7	0.74	0.861	3.01	3.575	5.	5.19
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	10/21/93-07/29/97	13	12.793	13.248	20.528	3.406	25.455	5.045	4.792	9.868	16.556	20.391
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/29/97	30	0.5	0.503	1.1	0.2	0.033	0.183	0.3	0.375	0.6	0.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/29/97	30	1.99	1.934	4.11	0.86	0.601	0.775	0.994	1.278	2.273	3.033

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0127

NPS Station ID: SHEN0127
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.198420/ -78.793226

Depth of Water: 0
 Elevation: 1400
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR01 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.39 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0127

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	12.857	19.	8.5	17.06	4.13	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	22.	22.143	25.	21.	2.143	1.464	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.89	5.83	6.11	5.48	0.056	0.236	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.89	5.775	6.11	5.48	0.059	0.243	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	1.288	1.679	3.311	0.776	0.848	0.921	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	21.	21.286	24.	20.	1.905	1.38	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	7.	2.943	8.7	-3.1	18.79	4.335	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.6	0.629	0.7	0.5	0.006	0.076	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.7	0.8	0.6	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.56	0.55	0.6	0.5	0.002	0.041	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.9	1.911	2.21	1.72	0.031	0.177	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.9	1.	0.8	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.	4.971	5.3	4.5	0.086	0.293	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.8	5.657	7.1	4.4	1.003	1.001	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	1.3	1.543	3.	0.3	0.706	0.84	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	1.3	1.691	3.34	0.78	0.865	0.93	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0127

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0128

NPS Station ID: SHEN0128
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.198420/ -78.793226

Depth of Water: 0
 Elevation: 1390
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_VT35
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT35 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.39 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0128

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-04/26/95	20	9.75	10.56	19.5	2.	29.472	5.429	4.	5.75	15.	18.92
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/14/87-04/26/95	32	21.	20.906	25.	16.	3.314	1.82	18.3	20.	22.	23.
00400	PH (STANDARD UNITS)	08/14/87-04/26/95	32	5.795	5.815	6.24	5.18	0.078	0.28	5.408	5.623	6.05	6.179
00400	CONVERTED PH (STANDARD UNITS)	08/14/87-04/26/95	32	5.794	5.724	6.24	5.18	0.087	0.295	5.408	5.622	6.05	6.179
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/14/87-04/26/95	32	1.608	1.89	6.607	0.575	1.892	1.376	0.664	0.892	2.385	3.962
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/14/87-04/26/95	32	20.	20.313	24.	15.	3.899	1.975	17.6	19.	21.75	23.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/14/87-04/26/95	32	5.75	3.216	19.5	-9.	41.043	6.407	0.86	1.825	-3.075	13.92
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/14/87-04/26/95	32	0.6	0.578	0.8	0.5	0.007	0.083	0.5	0.5	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/14/87-04/26/95	32	0.6	0.65	0.8	0.5	0.006	0.076	0.6	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/14/87-04/26/95	32	0.555	0.556	0.63	0.5	0.001	0.035	0.51	0.533	0.58	0.614
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/14/87-04/26/95	32	1.795	1.883	2.27	1.54	0.041	0.202	1.646	1.743	2.075	2.137
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/14/87-04/26/95	32	0.8	0.85	1.	0.8	0.005	0.067	0.8	0.8	0.9	0.97
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/14/87-04/26/95	32	5.3	5.334	5.9	4.5	0.106	0.326	4.93	5.125	5.6	5.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/14/87-04/26/95	32	5.65	5.544	6.9	3.7	0.783	0.885	4.13	4.9	6.275	6.74
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	6	18.033	18.087	30.296	7.758	52.703	7.26	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	6	19.42	18.284	29.913	9.326	59.02	7.682	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/14/87-04/26/95	32	0.045	0.589	3.4	0.	0.708	0.841	0.	0.006	1.3	1.77
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/14/87-04/26/95	32	1.62	1.905	6.66	0.58	1.927	1.388	0.673	0.9	2.405	3.992

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0128

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	32	0	0.00	8	0	0.00	16	0	0.00	8	0	0.00				
	Other-Lo Lim.	6.5	32	32	1.00	8	8	1.00	16	16	1.00	8	8	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	32	32	1.00	8	8	1.00	16	16	1.00	8	8	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	32	0	0.00	8	0	0.00	16	0	0.00	8	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	32	0	0.00	8	0	0.00	16	0	0.00	8	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	32	0	0.00	8	0	0.00	16	0	0.00	8	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	32	0	0.00	8	0	0.00	16	0	0.00	8	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0129

NPS Station ID: SHEN0129
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.198420/ -78.793226

Depth of Water: 0
 Elevation: 1390

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PA0A
 Within Park Boundary: Yes

Date Created: 04/24/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION PA0A IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.39 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-06/05/97	151	24.	24.735	34.	20.	7.343	2.71	22.	23.	26.	28.8
00400	PH (STANDARD UNITS)	04/16/93-06/05/97	151	5.4	5.404	5.82	5.14	0.017	0.132	5.24	5.3	5.49	5.598
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-06/05/97	151	5.4	5.385	5.82	5.14	0.018	0.133	5.24	5.3	5.49	5.598
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-06/05/97	151	3.981	4.122	7.244	1.514	1.424	1.194	2.524	3.236	5.012	5.754
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	04/16/93-06/05/97	151	24.	24.04	32.	19.	6.332	2.516	22.	22.	25.	28.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-06/05/97	151	8.7	0.176	8.7	-7.2	10.694	3.27	0.3	1.2	-2.2	-3.8
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	01/18/96-06/05/97	40	2.25	2.318	4.4	1.2	0.663	0.814	1.31	1.7	2.975	3.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-06/05/97	151	0.8	0.776	1.2	0.6	0.018	0.133	0.6	0.7	0.8	0.98
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-06/05/97	151	0.8	0.8	1.3	0.6	0.017	0.131	0.7	0.7	0.8	1.
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-06/05/97	151	0.49	0.488	0.56	0.42	0.001	0.027	0.45	0.47	0.5	0.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-06/05/97	151	1.98	2.011	2.51	1.67	0.036	0.189	1.8	1.85	2.12	2.29
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-06/05/97	151	0.8	0.834	1.	0.7	0.009	0.092	0.7	0.8	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-06/05/97	151	5.5	5.499	6.	4.8	0.072	0.268	5.1	5.4	5.7	5.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-06/05/97	151	4.8	4.819	6.1	3.9	0.239	0.489	4.2	4.5	5.2	5.5
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	03/19/96-03/19/96	3	27.336	28.185	30.441	26.777	3.896	1.974	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/23/94-06/05/97	64	40.458	41.511	95.547	8.906	273.121	16.526	20.5	31.646	50.692	58.907
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	12/02/96-06/05/97	16	0.005	0.015	0.1	0.002	0.001	0.024	0.002	0.003	0.02	0.051
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-06/05/97	151	1.7	2.065	6.	0.	1.224	1.106	1.02	1.3	2.6	3.48
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-06/05/97	151	4.01	4.154	7.3	1.53	1.447	1.203	2.542	3.26	5.05	5.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0129

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	151	0	0.00	12	0	0.00	80	0	0.00	59	0	0.00			
	Other-Lo Lim.	6.5	151	151	1.00	12	12	1.00	80	80	1.00	59	59	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	151	151	1.00	12	12	1.00	80	80	1.00	59	59	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	151	0	0.00	12	0	0.00	80	0	0.00	59	0	0.00			
	Drinking Water	250.	151	0	0.00	12	0	0.00	80	0	0.00	59	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	151	0	0.00	12	0	0.00	80	0	0.00	59	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	151	0	0.00	12	0	0.00	80	0	0.00	59	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1993 - Station SHEN0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-06/05/97	52	24.	25.423	34.	21.	10.602	3.256	22.	23.	27.	31.
00400	PH (STANDARD UNITS)	04/16/93-06/05/97	52	5.44	5.44	5.82	5.14	0.022	0.148	5.243	5.323	5.568	5.61
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-06/05/97	52	5.44	5.416	5.82	5.14	0.022	0.15	5.243	5.323	5.567	5.61
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-06/05/97	52	3.635	3.841	7.244	1.514	1.668	1.291	2.455	2.707	4.759	5.715
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/16/93-06/05/97	52	24.	24.385	31.	19.	8.124	2.85	22.	22.	25.75	30.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-06/05/97	52	3.7	0.585	8.7	-3.8	8.284	2.878	0.3	1.2	-1.3	-3.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-06/05/97	52	0.7	0.781	1.2	0.6	0.025	0.158	0.6	0.7	0.9	1.07
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-06/05/97	52	0.8	0.844	1.3	0.6	0.032	0.179	0.7	0.7	0.975	1.17
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-06/05/97	52	0.5	0.5	0.56	0.44	0.001	0.024	0.47	0.49	0.51	0.54
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-06/05/97	52	2.055	2.069	2.51	1.77	0.032	0.178	1.853	1.93	2.13	2.379
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-06/05/97	52	0.85	0.875	1.	0.7	0.009	0.097	0.8	0.8	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-06/05/97	52	5.35	5.302	5.6	4.8	0.047	0.216	4.9	5.125	5.5	5.57
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-06/05/97	52	4.9	4.965	6.1	4.1	0.231	0.481	4.33	4.7	5.2	5.84
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-06/05/97	52	2.6	2.713	6.	0.2	1.802	1.342	1.4	1.725	3.3	5.01
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-06/05/97	52	3.66	3.87	7.3	1.53	1.695	1.302	2.47	2.728	4.793	5.761

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-06/05/97	41	25.	25.22	33.	22.	6.826	2.613	23.	23.	26.5	29.
00400	PH (STANDARD UNITS)	04/16/93-06/05/97	41	5.41	5.403	5.54	5.18	0.005	0.071	5.33	5.365	5.45	5.49
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-06/05/97	41	5.41	5.397	5.54	5.18	0.005	0.071	5.33	5.365	5.45	5.49
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-06/05/97	41	3.89	4.004	6.607	2.884	0.5	0.707	3.236	3.548	4.315	4.677
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/16/93-06/05/97	41	24.	24.707	32.	22.	6.162	2.482	22.	23.	26.	28.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-06/05/97	41	-1.3	-1.341	1.9	-5.5	3.199	1.789	0.3	1.15	-2.8	-3.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-06/05/97	41	0.8	0.815	1.2	0.7	0.018	0.135	0.7	0.7	0.9	1.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-06/05/97	41	0.8	0.824	1.1	0.7	0.009	0.094	0.7	0.8	0.9	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-06/05/97	41	0.48	0.476	0.51	0.43	0.	0.022	0.442	0.46	0.49	0.508
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-06/05/97	41	1.88	1.968	2.42	1.74	0.043	0.209	1.784	1.82	2.21	2.324
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-06/05/97	41	0.8	0.766	0.9	0.7	0.003	0.053	0.7	0.7	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-06/05/97	41	5.6	5.554	5.9	4.8	0.046	0.213	5.3	5.5	5.7	5.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-06/05/97	41	4.5	4.707	5.8	4.2	0.217	0.466	4.3	4.4	4.95	5.6
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-06/05/97	41	2.1	2.276	4.5	0.7	0.684	0.827	1.5	1.7	2.7	3.56
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-06/05/97	41	3.92	4.036	6.66	2.91	0.508	0.713	3.26	3.58	4.35	4.71

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-06/05/97	16	25.	25.313	29.	22.	4.363	2.089	22.7	23.25	27.	28.3
00400	PH (STANDARD UNITS)	04/16/93-06/05/97	16	5.295	5.303	5.45	5.21	0.006	0.076	5.217	5.228	5.368	5.422
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-06/05/97	16	5.295	5.297	5.45	5.21	0.006	0.076	5.217	5.227	5.368	5.422
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-06/05/97	16	5.07	5.046	6.166	3.548	0.717	0.847	3.788	4.291	5.925	6.068
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/16/93-06/05/97	16	25.	25.063	29.	22.	4.329	2.081	22.	23.25	26.75	28.3
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-06/05/97	16	-3.45	-3.056	-2.2	-3.8	0.637	0.798	-2.2	-2.2	-3.8	-3.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-06/05/97	16	0.8	0.781	0.9	0.7	0.007	0.083	0.7	0.7	0.875	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-06/05/97	16	0.8	0.788	0.9	0.6	0.008	0.089	0.67	0.7	0.875	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-06/05/97	16	0.5	0.501	0.52	0.46	0.	0.016	0.467	0.5	0.51	0.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-06/05/97	16	2.1	2.126	2.45	1.94	0.025	0.159	1.947	2.008	2.223	2.436
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-06/05/97	16	1.	0.963	1.	0.9	0.002	0.05	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-06/05/97	16	5.75	5.706	5.9	4.9	0.062	0.249	5.32	5.625	5.9	5.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-06/05/97	16	5.2	5.156	5.7	4.5	0.127	0.356	4.57	4.925	5.475	5.63

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-06/05/97	16	1.45	1.438	2.	0.	0.231	0.48	0.77	1.225	1.775	2.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-06/05/97	16	5.11	5.086	6.22	3.58	0.728	0.853	3.818	4.325	5.97	6.115

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-06/05/97	29	23.	23.483	25.	22.	1.33	1.153	22.	22.5	25.	25.
00400	PH (STANDARD UNITS)	04/16/93-06/05/97	29	5.29	5.316	5.46	5.14	0.008	0.09	5.2	5.24	5.405	5.44
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-06/05/97	29	5.29	5.307	5.46	5.14	0.008	0.091	5.2	5.24	5.405	5.44
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-06/05/97	29	5.129	4.934	7.244	3.467	1.043	1.021	3.631	3.936	5.754	6.31
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	04/16/93-06/05/97	29	23.	23.034	25.	22.	1.249	1.117	22.	22.	24.	25.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-06/05/97	29	6.2	1.524	7.9	-3.1	10.409	3.226	0.3	2.7	-1.3	-2.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-06/05/97	29	0.7	0.731	0.9	0.6	0.007	0.081	0.6	0.7	0.8	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-06/05/97	29	0.7	0.731	0.8	0.7	0.002	0.047	0.7	0.7	0.8	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-06/05/97	29	0.47	0.473	0.52	0.42	0.001	0.034	0.43	0.44	0.5	0.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-06/05/97	29	1.85	1.867	2.	1.67	0.01	0.098	1.73	1.79	1.95	2.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-06/05/97	29	0.8	0.814	0.9	0.8	0.001	0.035	0.8	0.8	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-06/05/97	29	5.7	5.71	6.	5.3	0.03	0.174	5.5	5.6	5.8	6.
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-06/05/97	29	4.5	4.503	5.3	3.9	0.207	0.456	4.	4.1	4.75	5.3
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-06/05/97	29	1.2	1.217	1.7	0.6	0.089	0.298	0.9	1.	1.45	1.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-06/05/97	29	5.17	4.972	7.3	3.49	1.061	1.03	3.66	3.965	5.8	6.36

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0129

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-06/05/97	13	22.	22.538	25.	20.	3.103	1.761	20.4	21.	24.5	25.
00400	PH (STANDARD UNITS)	04/16/93-06/05/97	13	5.61	5.582	5.7	5.46	0.008	0.092	5.464	5.485	5.665	5.688
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-06/05/97	13	5.61	5.573	5.7	5.46	0.008	0.092	5.464	5.485	5.665	5.688
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-06/05/97	13	2.455	2.671	3.467	1.995	0.321	0.567	2.052	2.163	3.275	3.436
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	04/16/93-06/05/97	13	21.	21.538	24.	19.	3.103	1.761	19.4	20.	23.5	24.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-06/05/97	13	6.2	4.3	8.7	-7.2	17.378	4.169	1.48	3.25	7.8	-0.84
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-06/05/97	13	0.7	0.731	1.1	0.6	0.017	0.132	0.6	0.65	0.8	0.98
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-06/05/97	13	0.7	0.715	0.8	0.6	0.003	0.055	0.64	0.7	0.75	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-06/05/97	13	0.5	0.497	0.51	0.48	0.	0.01	0.48	0.49	0.505	0.51
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-06/05/97	13	2.07	2.095	2.28	1.94	0.017	0.13	1.948	1.97	2.24	2.272
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-06/05/97	13	0.8	0.777	0.8	0.7	0.002	0.044	0.7	0.75	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-06/05/97	13	5.4	5.385	5.7	4.9	0.038	0.195	4.98	5.4	5.5	5.62
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-06/05/97	13	5.	4.877	5.2	4.3	0.105	0.324	4.34	4.55	5.15	5.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-06/05/97	13	1.3	1.469	2.4	0.9	0.247	0.497	0.94	1.05	1.9	2.32
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-06/05/97	13	2.47	2.694	3.49	2.01	0.325	0.57	2.07	2.185	3.305	3.462

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0130

NPS Station ID: SHEN0130
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.198420/ -78.793226

Depth of Water: 0
 Elevation: 1390
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PA01
 Within Park Boundary: Yes

Date Created: 04/24/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PA01 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.39 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/11/92-01/19/95	100	23.	23.27	34.	20.	5.613	2.369	21.	22.	24.	26.9
00400	PH (STANDARD UNITS)	11/11/92-01/19/95	100	5.525	5.562	6.13	5.13	0.043	0.208	5.283	5.46	5.67	5.818
00400	CONVERTED PH (STANDARD UNITS)	11/11/92-01/19/95	100	5.525	5.518	6.13	5.13	0.045	0.212	5.283	5.46	5.67	5.818
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/11/92-01/19/95	100	2.986	3.037	7.413	0.741	1.772	1.331	1.521	2.138	3.467	5.213
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/11/92-01/19/95	100	23.	22.88	33.	19.	5.44	2.332	21.	21.	24.	26.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/11/92-01/19/95	100	2.8	1.869	16.9	-5.6	19.972	4.469	0.3	1.2	-1.3	-4.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/11/92-01/19/95	100	0.7	0.703	1.2	0.6	0.012	0.108	0.6	0.6	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/11/92-01/19/95	100	0.7	0.757	1.1	0.6	0.008	0.089	0.7	0.7	0.8	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/11/92-01/19/95	100	0.52	0.52	0.62	0.42	0.001	0.036	0.47	0.49	0.55	0.56
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/11/92-01/19/95	100	1.835	1.858	2.63	1.48	0.029	0.169	1.661	1.753	1.94	2.069
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/11/92-01/19/95	100	0.9	0.923	1.	0.7	0.007	0.084	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/11/92-01/19/95	100	5.2	5.216	6.1	4.6	0.118	0.344	4.8	5.	5.4	5.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/11/92-01/19/95	100	5.1	5.197	6.8	3.9	0.372	0.61	4.4	4.7	5.775	5.9
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/23/94-01/19/95	13	38.362	42.787	127.355	12.323	862.448	29.367	12.375	27.076	50.235	101.923
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/11/92-01/19/95	100	1.8	1.888	5.1	0.2	0.653	0.808	0.9	1.5	2.3	2.88
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/11/92-01/19/95	100	3.005	3.061	7.47	0.75	1.798	1.341	1.537	2.16	3.49	5.255

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0130

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH					3	0	0.00	88	0	0.00	9	0	0.00			
	Fresh Chronic	9.	100	0	0.00	3	0	0.00	88	0	0.00	9	0	0.00			
	Other-Lo Lim.	6.5	100	100	1.00	3	3	1.00	88	88	1.00	9	9	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS					3	3	1.00	88	88	1.00	9	9	1.00			
	Other-Lo Lim.	200.	100	100	1.00	3	3	1.00	88	88	1.00	9	9	1.00			
00941	CHLORIDE, DISSOLVED IN WATER					3	0	0.00	88	0	0.00	9	0	0.00			
	Fresh Acute	860.	100	0	0.00	3	0	0.00	88	0	0.00	9	0	0.00			
	Drinking Water	250.	100	0	0.00	3	0	0.00	88	0	0.00	9	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)					3	0	0.00	88	0	0.00	9	0	0.00			
	Drinking Water	250.	100	0	0.00	3	0	0.00	88	0	0.00	9	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)					3	0	0.00	88	0	0.00	9	0	0.00			
	Drinking Water	44.	100	0	0.00	3	0	0.00	88	0	0.00	9	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1992 - Station SHEN0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	39	23.	23.897	34.	21.	6.621	2.573	21.	22.	24.	27.
00400	PH (STANDARD UNITS)	39	5.55	5.557	5.88	5.13	0.024	0.156	5.34	5.48	5.67	5.73
00400	CONVERTED PH (STANDARD UNITS)	39	5.55	5.529	5.88	5.13	0.025	0.158	5.34	5.48	5.67	5.73
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	39	2.818	2.96	7.413	1.318	1.414	1.189	1.862	2.138	3.311	4.571
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	39	23.	23.436	33.	20.	5.884	2.426	21.	22.	24.	26.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	39	2.8	0.526	3.7	-5.6	7.208	2.685	0.3	1.2	-1.3	-4.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	39	0.7	0.713	1.2	0.6	0.013	0.115	0.6	0.7	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	39	0.8	0.774	1.1	0.7	0.007	0.085	0.7	0.7	0.8	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	39	0.54	0.534	0.57	0.45	0.001	0.026	0.5	0.52	0.56	0.57
00935	POTASSIUM, DISSOLVED (MG/L AS K)	39	1.86	1.907	2.63	1.48	0.039	0.198	1.65	1.81	1.97	2.14
00941	CHLORIDE, DISSOLVED IN WATER MG/L	39	1.	0.985	1.	0.8	0.002	0.043	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	39	5.1	5.082	5.9	4.6	0.077	0.277	4.8	4.9	5.3	5.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	39	5.7	5.587	6.	4.4	0.113	0.336	5.1	5.5	5.8	5.9
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	39	2.3	2.387	5.1	1.6	0.504	0.71	1.6	1.8	2.6	3.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	39	2.84	2.984	7.47	1.33	1.434	1.197	1.88	2.16	3.34	4.61

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	25	23.	23.	29.	20.	5.667	2.38	20.6	21.	24.	27.4
00400	PH (STANDARD UNITS)	25	5.56	5.603	6.13	5.15	0.077	0.278	5.256	5.42	5.71	6.13
00400	CONVERTED PH (STANDARD UNITS)	25	5.56	5.528	6.13	5.15	0.083	0.288	5.256	5.42	5.71	6.13
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	25	2.754	2.965	7.079	0.741	2.722	1.65	0.741	1.95	3.803	5.559
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	25	22.	22.48	29.	20.	5.843	2.417	20.	21.	23.5	26.8
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	25	2.8	4.	16.2	-0.6	28.841	5.37	0.3	0.8	2.35	15.66
00915	CALCIUM, DISSOLVED (MG/L AS CA)	25	0.7	0.716	1.	0.6	0.014	0.118	0.6	0.6	0.8	0.94
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	25	0.7	0.756	1.	0.6	0.012	0.108	0.6	0.7	0.8	0.94
00930	SODIUM, DISSOLVED (MG/L AS NA)	25	0.52	0.518	0.56	0.42	0.001	0.038	0.462	0.495	0.55	0.56
00935	POTASSIUM, DISSOLVED (MG/L AS K)	25	1.83	1.855	2.15	1.67	0.012	0.11	1.706	1.795	1.92	2.006
00941	CHLORIDE, DISSOLVED IN WATER MG/L	25	0.9	0.864	0.9	0.8	0.002	0.049	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	25	5.2	5.228	6.	4.6	0.14	0.374	4.72	5.	5.5	5.84
00955	SILICA, DISSOLVED (MG/L AS SI02)	25	4.9	5.036	6.3	3.9	0.482	0.694	4.32	4.45	5.65	6.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	25	1.7	1.844	3.6	0.2	0.809	0.9	0.2	1.6	2.35	3.1
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	25	2.79	2.99	7.14	0.75	2.763	1.662	0.75	1.97	3.83	5.602

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	22	22.	22.182	24.	20.	1.68	1.296	20.	21.	23.	24.
00400	PH (STANDARD UNITS)	22	5.525	5.587	6.13	5.43	0.034	0.185	5.46	5.488	5.58	5.991
00400	CONVERTED PH (STANDARD UNITS)	22	5.525	5.558	6.13	5.43	0.035	0.188	5.46	5.488	5.58	5.991
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	22	2.986	2.764	3.715	0.741	0.639	0.8	1.031	2.63	3.255	3.467
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	22	22.	21.864	24.	19.	1.933	1.39	20.	21.	23.	24.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	22	6.9	2.977	16.9	-3.8	34.308	5.857	1.2	1.2	-2.425	14.82
00915	CALCIUM, DISSOLVED (MG/L AS CA)	22	0.7	0.655	0.7	0.6	0.003	0.051	0.6	0.6	0.7	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	22	0.7	0.723	0.8	0.6	0.004	0.061	0.63	0.7	0.8	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	22	0.51	0.507	0.58	0.47	0.001	0.029	0.48	0.488	0.52	0.56
00935	POTASSIUM, DISSOLVED (MG/L AS K)	22	1.735	1.754	2.08	1.6	0.018	0.133	1.613	1.655	1.8	2.027
00941	CHLORIDE, DISSOLVED IN WATER MG/L	22	0.8	0.845	1.	0.7	0.005	0.074	0.8	0.8	0.9	0.97
00946	SULFATE, DISSOLVED (MG/L AS SO4)	22	5.2	5.241	5.8	4.6	0.088	0.297	4.9	5.075	5.425	5.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	22	4.7	4.868	6.8	4.1	0.468	0.684	4.26	4.5	4.8	6.39

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/11/92-01/19/95	22	1.5	1.468	2.1	0.5	0.18	0.425	0.6	1.4	1.8	2.01
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/11/92-01/19/95	22	3.005	2.785	3.74	0.75	0.647	0.804	1.039	2.65	3.28	3.49

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0130

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/11/92-01/19/95	14	23.5	23.714	29.	21.	6.681	2.585	21.	21.	25.25	28.5
00400	PH (STANDARD UNITS)	11/11/92-01/19/95	14	5.42	5.462	5.78	5.23	0.044	0.209	5.235	5.278	5.715	5.775
00400	CONVERTED PH (STANDARD UNITS)	11/11/92-01/19/95	14	5.42	5.42	5.78	5.23	0.046	0.214	5.235	5.278	5.715	5.775
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/11/92-01/19/95	14	3.806	3.804	5.888	1.66	2.512	1.585	1.679	1.931	5.279	5.821
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/11/92-01/19/95	14	23.	23.643	29.	21.	6.709	2.59	21.	21.	25.25	28.5
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/11/92-01/19/95	14	1.55	0.064	1.9	-3.8	2.627	1.621	0.3	0.3	-0.775	-3.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/11/92-01/19/95	14	0.7	0.729	1.	0.6	0.015	0.12	0.6	0.6	0.8	0.95
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/11/92-01/19/95	14	0.7	0.764	1.	0.7	0.009	0.093	0.7	0.7	0.8	0.95
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/11/92-01/19/95	14	0.49	0.506	0.62	0.45	0.003	0.052	0.455	0.468	0.53	0.605
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/11/92-01/19/95	14	1.85	1.887	2.25	1.73	0.025	0.157	1.73	1.765	1.953	2.2
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/11/92-01/19/95	14	1.	0.979	1.	0.8	0.003	0.058	0.85	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/11/92-01/19/95	14	5.55	5.529	6.1	5.1	0.116	0.341	5.1	5.2	5.825	6.05
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/11/92-01/19/95	14	4.95	4.914	5.3	4.4	0.083	0.288	4.4	4.75	5.125	5.25
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/11/92-01/19/95	14	1.1	1.236	2.3	0.7	0.209	0.457	0.8	0.9	1.45	2.15
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/11/92-01/19/95	14	3.835	3.834	5.94	1.67	2.555	1.598	1.69	1.945	5.32	5.87

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0131

NPS Station ID: SHEN0131
 Location: Paine Run
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.198420/ -78.793226

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_VTS35
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0131

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-04/26/95	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-04/26/95	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/26/95-04/26/95	1	11.2	11.2	11.2	11.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/26/95-04/26/95	1	5.73	5.73	5.73	5.73	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/26/95-04/26/95	1	5.73	5.73	5.73	5.73	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/95-04/26/95	1	1.862	1.862	1.862	1.862	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-04/26/95	1	11.	11.	11.	11.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0131

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0132

NPS Station ID: SHEN0132
 Location: Paine Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.198448/ -78.793171

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_FISH_3F123
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0132

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/23/94-06/16/98	7	17.	17.343	19.6	14.8	2.556	1.599	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/26/96-06/16/98	4	17.	17.25	18.	17.	0.25	0.5	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/23/94-06/16/98	7	9.2	9.529	10.	9.1	0.196	0.442	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/23/94-06/16/98	6	5.805	6.005	6.72	5.64	0.213	0.461	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/23/94-06/16/98	6	5.778	5.852	6.72	5.64	0.241	0.491	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/23/94-06/16/98	6	1.668	1.407	2.291	0.191	0.955	0.977	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/16/98-06/16/98	2	11.	11.	11.	11.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/26/96-06/16/98	3	2.9	3.21	4.33	2.4	1.003	1.002	**	**	**	**
83509 STREAM, WIDTH METER	06/26/96-06/16/98	3	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/26/96-06/16/98	3	0.04	0.047	0.06	0.04	0.	0.012	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0132

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	0	0.00							7	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	6	0	0.00							6	0	0.00			
	Other-Lo Lim.	6.5	6	5	0.83							6	5	0.83			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0133

NPS Station ID: SHEN0133
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.198616/ -78.793309

Depth of Water: 0
 Elevation: 1390

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_VTSSS_AU01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION AU01 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.71 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0133

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	5.58	5.58	5.58	5.58	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	5.58	5.58	5.58	5.58	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	2.63	2.63	2.63	2.63	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	0.51	0.51	0.51	0.51	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	1.72	1.72	1.72	1.72	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0133

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0133

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0134

NPS Station ID: SHEN0134
 Location: Paine Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.198642/ -78.793698

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_LTEM_3L301
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/89-05/13/97	37	15.2	15.051	22.	3.3	10.764	3.281	12.3	12.85	17.1	19.54
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/31/95-05/13/97	6	18.	18.333	21.	17.	2.267	1.506	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/23/89-05/13/97	32	10.	9.95	13.7	8.3	1.348	1.161	8.49	9.	10.175	11.7
00406 PH, FIELD, STANDARD UNITS SU	05/29/91-05/13/97	15	5.8	5.901	7.27	5.17	0.328	0.572	5.212	5.48	6.11	6.904
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/29/91-05/13/97	15	5.8	5.662	7.27	5.17	0.389	0.624	5.212	5.48	6.11	6.904
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/29/91-05/13/97	15	1.585	2.179	6.761	0.054	3.879	1.97	0.153	0.776	3.311	6.157
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/31/95-05/13/97	6	11.	10.333	11.	8.	1.467	1.211	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0134

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard	Exceed	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	32	0	0.00	15	0	0.00	1	0	0.00	16	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	15	0	0.00	7	0	0.00	1	0	0.00	7	0	0.00						
	Other-Lo Lim.	6.5	15	12	0.80	7	7	1.00	1	1	1.00	7	4	0.57						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/89-05/13/97	18	15.9	16.683	20.4	13.4	3.491	1.868	14.84	15.2	17.775	19.77
00300 OXYGEN, DISSOLVED MG/L	05/23/89-05/13/97	15	9.	9.413	12.	8.3	0.928	0.964	8.36	8.7	10.	10.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/89-05/13/97	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/23/89-05/13/97	1	13.7	13.7	13.7	13.7	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0134

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/89-05/13/97	18	12.95	14.072	22.	10.6	7.346	2.71	11.41	12.5	15.5	17.68
00300 OXYGEN, DISSOLVED MG/L	05/23/89-05/13/97	16	10.	10.219	12.	8.8	0.618	0.786	8.94	9.925	10.925	11.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0135

NPS Station ID: SHEN0135
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.198753/ -78.772670

Depth of Water: 0
 Elevation: 1600
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR18
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR18 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.91 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0135

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	12.	13.286	19.5	8.	18.655	4.319	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	25.	24.714	27.	23.	2.238	1.496	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.68	5.73	5.98	5.65	0.013	0.115	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.68	5.719	5.98	5.65	0.013	0.116	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.089	1.912	2.239	1.047	0.171	0.413	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	24.	23.857	26.	22.	1.81	1.345	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	-1.3	0.457	9.4	-3.8	22.906	4.786	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.6	0.557	0.6	0.5	0.003	0.053	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.9	0.857	0.9	0.8	0.003	0.053	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.63	0.609	0.67	0.55	0.003	0.05	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.28	2.304	2.73	1.98	0.071	0.266	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.886	1.	0.7	0.011	0.107	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	6.1	6.1	6.9	5.5	0.237	0.486	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	7.1	7.186	10.1	5.	3.831	1.957	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	1.2	1.171	1.8	0.5	0.212	0.461	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.11	1.93	2.26	1.06	0.174	0.417	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0135

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0136

NPS Station ID: SHEN0136
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.198753/ -78.772670

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR18
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0136

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/01/95-06/01/95	1	14.1	14.1	14.1	14.1	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/01/95-06/01/95	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/01/95-06/01/95	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/01/95-06/01/95	1	5.54	5.54	5.54	5.54	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/01/95-06/01/95	1	5.54	5.54	5.54	5.54	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/01/95-06/01/95	1	2.884	2.884	2.884	2.884	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/01/95-06/01/95	1	14.	14.	14.	14.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0136

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0137

NPS Station ID: SHEN0137
 Location: VAAAL513R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.199115/ -78.664892

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_NURE_37 /4087973
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE BROWNS COVE VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0137

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/14/77-01/14/77	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/14/77-01/14/77	1	65.	65.	65.	65.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/14/77-01/14/77	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/14/77-01/14/77	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/14/77-01/14/77	1	1.259	1.259	1.259	1.259	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/14/77-01/14/77	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/14/77-01/14/77	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/14/77-01/14/77	1	3.17	3.17	3.17	3.17	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/14/77-01/14/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/14/77-01/14/77	1	61.	61.	61.	61.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/14/77-01/14/77	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/14/77-01/14/77	1	34.	34.	34.	34.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/14/77-01/14/77	1	5300.	5300.	5300.	5300.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/14/77-01/14/77	1	48.	48.	48.	48.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/14/77-01/14/77	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0137

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0138

NPS Station ID: SHEN0138
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.201726/ -78.761587

Depth of Water: 0
 Elevation: 1720
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR28
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR28 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.28 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0138

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	12.429	19.	8.5	14.286	3.78	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	25.	26.286	31.	24.	8.571	2.928	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.23	5.213	5.32	5.04	0.007	0.087	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.23	5.205	5.32	5.04	0.008	0.087	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	5.888	6.238	9.12	4.786	1.889	1.374	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	24.	25.286	30.	23.	8.905	2.984	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	3.7	3.871	15.3	-0.6	32.076	5.664	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.686	0.8	0.6	0.005	0.069	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.7	0.8	0.6	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.54	0.55	0.63	0.5	0.002	0.042	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.19	2.27	2.65	1.93	0.084	0.29	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.8	0.857	1.	0.8	0.006	0.079	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	6.	6.5	8.3	5.6	1.097	1.047	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	6.8	6.957	9.4	4.9	3.313	1.82	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	1.2	1.086	1.5	0.2	0.178	0.422	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	5.94	6.287	9.19	4.82	1.918	1.385	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0138

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0139

NPS Station ID: SHEN0139
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.201726/ -78.761587

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR28
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0139

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	2	13.	13.	13.8	12.2	1.28	1.131	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	2	19.5	19.5	23.	16.	24.5	4.95	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	2	8.1	8.1	8.6	7.6	0.5	0.707	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	2	4.925	4.925	5.06	4.79	0.036	0.191	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/06/95-06/06/95	2	4.904	4.904	5.06	4.79	0.037	0.193	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/06/95-06/06/95	2	12.464	12.464	16.218	8.71	28.189	5.309	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	2	12.5	12.5	15.	10.	12.5	3.536	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0139

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00												
00406 PH, FIELD	Fresh Chronic	9.	2	0	0.00												
	Other-Lo Lim.	6.5	2	2	1.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0140

NPS Station ID: SHEN0140
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.201892/ -78.763393

Depth of Water: 0
 Elevation: 1860
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR26
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION PR26 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.78 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0140

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	6	12.25	13.667	20.	8.5	19.567	4.423	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	6	25.5	26.	29.	24.	3.2	1.789	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	6	5.515	5.492	5.65	5.32	0.016	0.128	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	6	5.513	5.476	5.65	5.32	0.017	0.129	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	6	3.071	3.344	4.786	2.239	1.002	1.001	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	6	25.	25.167	28.	23.	2.967	1.722	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	6	-1.75	1.85	11.2	-4.7	38.891	6.236	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	6	0.8	0.817	1.	0.7	0.014	0.117	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	6	0.8	0.8	0.9	0.7	0.008	0.089	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	6	0.6	0.573	0.6	0.52	0.002	0.041	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	6	2.12	2.15	2.39	1.92	0.035	0.188	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	6	0.95	0.933	1.	0.8	0.007	0.082	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	6	4.8	4.917	5.4	4.5	0.126	0.354	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	6	5.45	5.6	7.7	4.3	1.56	1.249	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	6	3.4	3.3	5.1	1.9	1.42	1.192	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	6	3.1	3.372	4.82	2.26	1.014	1.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0140

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Other-Lo Lim.	6.5	6	6	1.00	2	2	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	6	6	1.00	2	2	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0141

NPS Station ID: SHEN0141
 Location: Paine Run
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.201892/ -78.763393

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR26
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0141

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/95-06/06/95	1	14.6	14.6	14.6	14.6	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/06/95-06/06/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/95-06/06/95	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/06/95-06/06/95	1	5.36	5.36	5.36	5.36	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/06/95-06/06/95	1	5.36	5.36	5.36	5.36	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/06/95-06/06/95	1	4.365	4.365	4.365	4.365	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/06/95-06/06/95	1	13.	13.	13.	13.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0141

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00												
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00												
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0142

NPS Station ID: SHEN0142
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.202837/ -78.762337

Depth of Water: 0
 Elevation: 1670
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR27
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR27 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.88 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0142

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	12.5	13.5	20.	8.5	16.333	4.041	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	26.	25.714	29.	23.	4.905	2.215	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.62	5.577	5.73	5.35	0.016	0.126	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.62	5.561	5.73	5.35	0.016	0.127	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.399	2.751	4.467	1.862	0.766	0.875	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	25.	25.143	28.	23.	3.81	1.952	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	7.8	4.943	11.9	-1.3	23.85	4.884	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.9	0.843	1.	0.7	0.013	0.113	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.8	0.786	0.9	0.7	0.008	0.09	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.6	0.574	0.61	0.52	0.002	0.04	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.09	2.151	2.4	1.94	0.027	0.165	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.929	1.	0.8	0.006	0.076	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.7	4.943	5.7	4.4	0.216	0.465	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.8	5.686	7.5	4.2	1.361	1.167	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	3.5	3.2	5.3	0.8	2.263	1.504	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.42	2.774	4.5	1.88	0.774	0.88	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0142

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00	2	2	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0143

NPS Station ID: SHEN0143
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.204309/ -78.772338

Depth of Water: 0
 Elevation: 1720
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR17
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR17 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.55 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0143

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	12.	12.5	18.5	7.	15.917	3.99	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	27.	27.143	30.	25.	2.81	1.676	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.56	5.534	5.6	5.4	0.005	0.073	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.56	5.529	5.6	5.4	0.005	0.073	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.754	2.959	3.981	2.512	0.286	0.534	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	26.	26.286	29.	25.	2.238	1.496	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	6.9	2.571	8.7	-2.2	16.822	4.102	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.7	0.714	0.8	0.6	0.005	0.069	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	1.	0.957	1.1	0.8	0.01	0.098	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.67	0.659	0.78	0.55	0.006	0.077	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.15	2.186	2.52	1.93	0.063	0.252	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	1.	0.929	1.	0.7	0.012	0.111	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.7	5.943	6.9	5.5	0.273	0.522	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	6.6	6.886	10.3	5.2	3.141	1.772	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	2.3	2.2	3.3	0.2	0.993	0.997	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.78	2.983	4.01	2.53	0.29	0.539	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0143

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0144

NPS Station ID: SHEN0144
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.205226/ -78.779420

Depth of Water: 0
 Elevation: 1560
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR38
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR38 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.88 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0144

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-04/09/94	5	11.	11.8	17.5	8.	12.325	3.511	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-04/09/94	5	22.	22.	24.	21.	1.5	1.225	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.57	5.544	5.57	5.49	0.001	0.037	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-04/09/94	5	5.57	5.543	5.57	5.49	0.001	0.037	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-04/09/94	5	2.692	2.866	3.236	2.692	0.063	0.251	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-04/09/94	5	21.	21.4	23.	21.	0.8	0.894	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-04/09/94	5	86.9	78.48	98.6	33.7	653.927	25.572	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-04/09/94	5	0.5	0.54	0.6	0.5	0.003	0.055	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-04/09/94	5	0.7	0.72	0.8	0.7	0.002	0.045	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-04/09/94	5	0.64	0.608	0.65	0.52	0.003	0.054	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-04/09/94	5	1.84	1.868	2.14	1.69	0.027	0.165	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-04/09/94	5	1.	0.98	1.	0.9	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-04/09/94	5	5.3	5.12	5.5	4.6	0.157	0.396	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-04/09/94	5	5.6	5.96	6.9	5.2	0.553	0.744	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-04/09/94	5	0.8	0.98	1.8	0.7	0.217	0.466	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-04/09/94	5	2.71	2.886	3.26	2.71	0.064	0.253	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0144

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
	Fresh Acute	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0145

NPS Station ID: SHEN0145
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.207087/ -78.757087

Depth of Water: 0
 Elevation: 1720
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR29
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR29 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.52 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0145

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.5	12.714	18.5	8.5	12.905	3.592	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	28.	28.143	31.	25.	4.476	2.116	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.47	5.441	5.5	5.29	0.005	0.069	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.47	5.436	5.5	5.29	0.005	0.07	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	3.388	3.662	5.129	3.162	0.44	0.663	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	28.	27.429	30.	25.	3.619	1.902	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	6.9	10.929	25.8	0.3	107.412	10.364	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	1.	0.986	1.1	0.9	0.008	0.09	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.9	0.9	1.	0.8	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.6	0.581	0.64	0.52	0.002	0.045	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.08	2.153	2.42	1.96	0.026	0.162	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.929	1.	0.8	0.006	0.076	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.6	4.886	5.6	4.3	0.228	0.478	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.7	5.871	7.6	4.7	1.209	1.1	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	4.3	4.057	5.7	1.6	2.19	1.48	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	3.42	3.694	5.17	3.19	0.445	0.667	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0145

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0146

NPS Station ID: SHEN0146
 Location: Paine Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.207087/ -78.757087

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR29
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0146

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/07/95-06/07/95	1	14.2	14.2	14.2	14.2	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/07/95-06/07/95	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/07/95-06/07/95	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/07/95-06/07/95	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/07/95-06/07/95	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/07/95-06/07/95	1	6.31	6.31	6.31	6.31	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/07/95-06/07/95	1	14.	14.	14.	14.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0146

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00						1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00						1	1	1.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0147

NPS Station ID: SHEN0147
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.207448/ -78.755809

Depth of Water: 0
 Elevation: 1750
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR30
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR30 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.96 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0147

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	12.571	19.	8.5	14.202	3.769	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	28.	27.714	32.	24.	7.238	2.69	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.42	5.433	5.52	5.31	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.42	5.428	5.52	5.31	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	3.802	3.735	4.898	3.02	0.4	0.633	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	27.	26.857	31.	23.	6.81	2.61	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	6.2	4.	9.4	-2.2	17.017	4.125	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	1.	0.971	1.2	0.8	0.022	0.15	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.8	0.843	1.	0.7	0.016	0.127	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.58	0.577	0.64	0.52	0.002	0.045	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.05	2.11	2.3	1.96	0.017	0.132	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.929	1.	0.8	0.006	0.076	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.3	4.586	5.3	4.1	0.221	0.471	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.7	5.886	7.8	4.7	1.351	1.163	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	4.2	4.229	6.3	1.4	2.899	1.703	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	3.83	3.764	4.94	3.04	0.407	0.638	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0147

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0148

NPS Station ID: SHEN0148
 Location: DOYLES RIVER NEAR BROWNS COVE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204002100.00
 Description:

LAT/LON: 38.207781/ -78.675004

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 2.29

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02032110
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.30
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0148

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/25/82	6	16.25	13.167	19.5	2.	45.067	6.713	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/25/82	6	3.5	6.017	23.	0.3	72.506	8.515	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/25/82	6	7.1	7.133	7.4	7.	0.027	0.163	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/25/82	6	7.089	7.11	7.4	7.	0.027	0.165	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/25/82	6	0.082	0.078	0.1	0.04	0.001	0.026	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/25/82	6	7.1	7.117	7.3	7.	0.018	0.133	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/25/82	6	7.089	7.1	7.3	7.	0.018	0.134	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/25/82	6	0.082	0.079	0.1	0.05	0.001	0.023	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/25/82	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/25/82	6	0.15	0.222	0.5	0.04	0.035	0.187	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/25/82	6	12.5	12.5	14.	11.	1.1	1.049	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/25/82	6	2.65	2.583	2.8	2.3	0.038	0.194	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/25/82	6	1.4	1.467	1.7	1.3	0.023	0.151	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/25/82	6	2.15	2.15	2.6	1.8	0.103	0.321	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/25/82	6	0.3	0.267	0.3	0.2	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/25/82	6	26.5	26.333	29.	24.	3.067	1.751	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/25/82	6	0.3	0.333	0.4	0.3	0.003	0.052	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/25/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/25/82	6	4.5	4.5	5.	4.	0.3	0.548	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/25/82	6	13.	12.783	15.2	9.7	3.418	1.849	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0148

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0148

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0149

NPS Station ID: SHEN0149
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.207920/ -78.752726

Depth of Water: 0
 Elevation: 1970
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_PR36
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR36 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.06 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0149

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	11.143	12.	10.	0.476	0.69	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	73.	78.857	100.	69.	167.143	12.928	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	4.82	4.473	4.86	3.9	0.211	0.459	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	4.82	4.272	4.86	3.9	0.258	0.508	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	15.136	53.417	125.893	13.804	2556.39	50.561	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	71.	76.286	96.	66.	152.238	12.338	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	77.8	53.2	104.5	5.3	1894.127	43.522	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	1.2	1.157	1.3	0.8	0.026	0.162	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.7	0.686	0.8	0.5	0.008	0.09	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.41	0.443	0.58	0.4	0.004	0.065	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	6.69	6.456	6.86	5.02	0.411	0.641	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.5	0.543	0.9	0.4	0.033	0.181	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	22.7	21.886	23.	16.2	6.305	2.511	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	24.1	23.214	24.5	18.	5.365	2.316	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	0.01	0.037	0.2	0.004	0.005	0.072	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	15.26	53.841	126.89	13.91	2596.937	50.96	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0149

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0150

NPS Station ID: SHEN0150
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.208476/ -78.757004

Depth of Water: 0
 Elevation: 1840
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_SWAS_PR31
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR31 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.52 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0150

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	12.	12.857	19.	8.5	13.726	3.705	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	28.	27.429	30.	24.	3.952	1.988	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.74	5.773	6.06	5.62	0.022	0.148	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.74	5.753	6.06	5.62	0.022	0.15	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	1.82	1.764	2.399	0.871	0.266	0.516	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	27.	26.714	29.	23.	4.905	2.215	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	6.9	6.729	16.2	0.3	30.596	5.531	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	0.9	0.957	1.2	0.8	0.023	0.151	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.9	0.957	1.1	0.9	0.006	0.079	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.63	0.614	0.7	0.54	0.003	0.054	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.23	2.229	2.63	1.99	0.048	0.219	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	0.9	0.929	1.	0.8	0.006	0.076	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.8	6.471	8.	5.7	1.009	1.005	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	6.3	6.257	8.7	4.7	2.086	1.444	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	2.6	2.1	3.2	0.5	0.91	0.954	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	1.83	1.779	2.42	0.88	0.272	0.521	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0150

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0151

NPS Station ID: SHEN0151
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.208476/ -78.757004

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): SHEN_PARK_PR31
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0151

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/07/95-06/07/95	1	13.5	13.5	13.5	13.5	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/07/95-06/07/95	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/07/95-06/07/95	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/07/95-06/07/95	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/07/95-06/07/95	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/07/95-06/07/95	1	3.981	3.981	3.981	3.981	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/07/95-06/07/95	1	43.	43.	43.	43.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0151

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0152

NPS Station ID: SHEN0152
 Location: Paine Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.209142/ -78.753420

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_LTEM_3L300
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Crimora VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0152

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/89-05/21/97	39	15.3	15.1	18.5	11.3	3.362	1.833	12.8	13.5	16.	17.8
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/07/95-05/21/97	5	22.	21.8	22.	21.	0.2	0.447	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/22/89-05/21/97	31	8.9	8.929	13.	7.4	1.464	1.21	7.84	8.	9.2	10.
00406 PH, FIELD, STANDARD UNITS SU	05/30/91-05/21/97	15	6.32	6.067	6.99	4.92	0.648	0.805	4.926	5.19	6.86	6.954
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/30/91-05/21/97	15	6.32	5.496	6.99	4.92	0.998	0.999	4.926	5.19	6.86	6.954
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/30/91-05/21/97	15	0.479	3.191	12.023	0.102	18.588	4.311	0.111	0.138	6.457	11.858
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/07/95-05/21/97	5	14.	13.2	14.	10.	3.2	1.789	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0152

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	31	0	0.00	15	0	0.00	16	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	15	0	0.00	7	0	0.00	8	0	0.00			
	Other-Lo Lim.	6.5	15	8	0.53	7	4	0.57	8	4	0.50			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0152

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/89-05/21/97	18	15.8	15.967	18.5	13.	2.068	1.438	13.9	15.075	17.	18.5
00300 OXYGEN, DISSOLVED MG/L	05/22/89-05/21/97	15	8.2	8.647	12.	7.4	1.251	1.119	7.64	8.	9.	10.62

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0152

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/89-05/21/97	21	14.8	14.357	17.8	11.3	3.374	1.837	11.7	12.95	15.5	17.4
00300 OXYGEN, DISSOLVED MG/L	05/22/89-05/21/97	16	9.	9.194	13.	7.6	1.606	1.267	7.88	8.225	9.975	10.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0153

NPS Station ID: SHEN0153
 Location: N F MOORMANS RIVER TRIB NEAR HARRISTON, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02070005016800.00
 Description:

LAT/LON: 38.209171/ -78.747782
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 2.59

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02031410
 Within Park Boundary: Yes
 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.90
 Distance from RF3: 0.02

Date Created: 04/24/82
 On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0153

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/21/81-06/23/82	4	12.	12.25	15.	10.	4.25	2.062	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/21/81-06/23/82	4	0.2	0.23	0.5	0.02	0.04	0.199	**	**	**	**
00400	PH (STANDARD UNITS)	09/21/81-06/23/82	4	5.85	5.95	6.6	5.5	0.297	0.545	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/21/81-06/23/82	4	5.722	5.744	6.6	5.5	0.353	0.594	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	1.897	1.802	3.162	0.251	2.492	1.579	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/21/81-06/23/82	4	6.15	6.175	6.4	6.	0.029	0.171	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/21/81-06/23/82	4	6.147	6.151	6.4	6.	0.03	0.173	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/21/81-06/23/82	4	0.713	0.706	1.	0.398	0.065	0.255	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/21/81-06/23/82	4##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/21/81-06/23/82	4	0.045	0.048	0.08	0.02	0.001	0.025	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/21/81-06/23/82	4	2.5	2.5	3.	2.	0.333	0.577	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/21/81-06/23/82	4	0.5	0.55	0.8	0.4	0.037	0.191	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/21/81-06/23/82	4	0.3	0.275	0.3	0.2	0.002	0.05	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/21/81-06/23/82	4	0.45	0.45	0.5	0.4	0.003	0.058	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/21/81-06/23/82	4	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	09/21/81-06/23/82	4	20.5	20.	22.	17.	4.667	2.16	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/21/81-06/23/82	4	1.2	1.15	1.3	0.9	0.03	0.173	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/21/81-06/23/82	4	0.6	0.625	0.7	0.6	0.002	0.05	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/21/81-06/23/82	4	2.	2.25	3.	2.	0.25	0.5	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/21/81-06/23/82	4	3.9	4.15	5.1	3.7	0.417	0.645	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/17/82-05/19/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0153

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	4	3	0.75	1	1	1.00	1	1	1.00	2	1	0.50			
00403	Fresh Chronic	9.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	4	4	1.00	1	1	1.00	1	1	1.00	2	2	1.00			
00631	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Fresh Acute	860.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00940	Drinking Water	250.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0153

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0154

NPS Station ID: SHEN0154
 Location: PAINE RUN
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.209670/ -78.752365

 Depth of Water: 0
 Elevation: 1840

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_PR32
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

On/Off RF1:
 On/Off RF3:

STATION PR32 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.67 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0154

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	12.	18.	8.5	11.833	3.44	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	28.	28.286	33.	24.	7.905	2.812	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.41	5.426	5.57	5.3	0.007	0.083	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.41	5.419	5.57	5.3	0.007	0.084	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	3.89	3.811	5.012	2.692	0.513	0.716	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	28.	27.714	32.	24.	7.238	2.69	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	6.9	5.557	8.7	0.3	10.88	3.298	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	1.1	1.043	1.3	0.8	0.036	0.19	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	0.9	0.871	1.1	0.7	0.022	0.15	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.59	0.587	0.67	0.53	0.003	0.053	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.01	2.09	2.33	1.96	0.022	0.148	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	1.	0.957	1.	0.9	0.003	0.053	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.3	4.543	5.1	4.1	0.166	0.408	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.5	5.714	7.6	4.6	1.178	1.085	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	5.2	4.7	7.2	1.5	3.933	1.983	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	3.92	3.84	5.05	2.71	0.523	0.723	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0154

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0155

NPS Station ID: SHEN0155
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.214142/ -78.750976

Depth of Water: 0
 Elevation: 1925
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_PR33
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR33 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.31 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0155

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	11.714	17.5	8.5	9.405	3.067	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	31.	30.857	36.	27.	8.81	2.968	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.54	5.549	5.65	5.39	0.009	0.095	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.54	5.54	5.65	5.39	0.009	0.095	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.884	2.887	4.074	2.239	0.429	0.655	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	31.	30.143	36.	26.	10.81	3.288	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	15.3	2.157	15.4	-13.8	145.74	12.072	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	1.3	1.286	1.5	1.1	0.018	0.135	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	1.1	1.057	1.3	0.9	0.02	0.14	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.64	0.631	0.71	0.58	0.003	0.051	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.98	2.001	2.17	1.82	0.012	0.109	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	4.2	4.286	4.9	3.9	0.111	0.334	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.3	5.143	6.	4.3	0.403	0.635	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	6.6	6.014	8.6	3.4	3.668	1.915	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.91	2.913	4.11	2.26	0.437	0.661	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0155

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0156

NPS Station ID: SHEN0156
 Location: PAINE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.215003/ -78.751643

Depth of Water: 0
 Elevation: 2000
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_PR34
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR34 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.36 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0156

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	11.571	17.	8.5	8.702	2.95	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	34.	33.714	37.	30.	7.238	2.69	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.58	5.597	5.77	5.41	0.013	0.114	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.58	5.584	5.77	5.41	0.013	0.115	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.63	2.604	3.89	1.698	0.48	0.693	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	33.	32.857	36.	29.	7.476	2.734	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	-14.6	-46.914	20.3	-127.2	3866.698	62.183	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	1.5	1.514	1.7	1.3	0.018	0.135	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	1.2	1.171	1.3	1.	0.012	0.111	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.68	0.651	0.7	0.58	0.003	0.053	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	2.04	2.014	2.19	1.85	0.014	0.119	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	1.	0.986	1.	0.9	0.001	0.038	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	5.2	5.257	5.9	4.6	0.33	0.574	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.4	5.286	6.4	4.4	0.568	0.754	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	6.9	6.471	8.9	3.9	4.072	2.018	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.65	2.624	3.92	1.71	0.488	0.698	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0156

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0157

NPS Station ID: SHEN0157
 Location: PAINE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.215088/ -78.750309

Depth of Water: 0
 Elevation: 2000
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_PR35
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PR35 IS LOCATED ON THE CRIMORA VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT PAINE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.87 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0157

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/08/92-10/06/94	7	11.	11.643	17.5	8.5	9.643	3.105	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/08/92-10/06/94	7	30.	29.857	36.	25.	13.81	3.716	**	**	**	**
00400	PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.54	5.566	5.85	5.4	0.028	0.168	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/08/92-10/06/94	7	5.54	5.54	5.85	5.4	0.029	0.17	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/08/92-10/06/94	7	2.884	2.884	3.981	1.413	0.987	0.994	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/08/92-10/06/94	7	30.	28.857	35.	24.	13.476	3.671	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/08/92-10/06/94	7	20.3	16.6	30.3	3.7	111.183	10.544	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/08/92-10/06/94	7	1.2	1.2	1.4	1.	0.017	0.129	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/08/92-10/06/94	7	1.	1.014	1.3	0.8	0.031	0.177	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/08/92-10/06/94	7	0.61	0.62	0.72	0.56	0.003	0.056	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/08/92-10/06/94	7	1.99	1.971	2.2	1.73	0.021	0.145	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/08/92-10/06/94	7	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/08/92-10/06/94	7	3.9	4.	4.5	3.7	0.073	0.271	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/08/92-10/06/94	7	5.3	5.129	5.8	4.4	0.272	0.522	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/08/92-10/06/94	7	6.	5.814	8.6	3.1	3.628	1.905	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/08/92-10/06/94	7	2.91	2.906	4.01	1.42	1.001	1.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0157

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	3	3	1.00	2	2	1.00	2	2	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Fresh Acute	860.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				
	Drinking Water	44.	7	0	0.00	3	0	0.00	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0158

NPS Station ID: SHEN0158
 Location: VAAL505R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.216698/ -78.588309

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_NURE_38 /4087965
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE FREE UNION VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0158

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/13/77-01/13/77	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/13/77-01/13/77	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	01/13/77-01/13/77	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	01/13/77-01/13/77	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/13/77-01/13/77	1	1.259	1.259	1.259	1.259	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	01/13/77-01/13/77	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01085 VANADIUM, DISSOLVED (UG/L AS V)	01/13/77-01/13/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
22703 URANIUM, NATURAL, DISSOLVED	01/13/77-01/13/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
82331 DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/13/77-01/13/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0158

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0159

NPS Station ID: SHEN0159
 Location: SOUTH R. RTE 778 BR HARRISTON
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070005002715.60
 Description:

LAT/LON: 38.218615/ -78.836116

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 6.780
 RF3 Mile Point: 16.52

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 009 /009 /SOUTH S-3A
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0159

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	9	24.	24.167	26.	23.	1.125	1.061	23.	23.	25.	26.
00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	10	6.05	6.48	9.	4.7	2.471	1.572	4.72	5.05	7.85	8.99
00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	10	5.35	6.26	16.	3.5	12.398	3.521	3.57	4.875	6.075	15.03
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	940.	3588.	10900.	340.	21233120.	4607.941	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	06/21/67-06/22/67	5	2.973	3.162	4.037	2.531	0.481	0.694	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			1450.448								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	220.	616.	2210.	80.	816330.	903.51	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	2.342	2.459	3.344	1.903	0.331	0.575	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			287.615								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0159

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	10	0	0.00						10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	2	0.40						5	2	0.40			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	3	0.60						5	3	0.60			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0160

NPS Station ID: SHEN0160
 Location: SOUTH R. RTE 778 BR HARRISTON
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070005002715.60
 Description:

LAT/LON: 38.218615/ -78.836116

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 6.780
 RF3 Mile Point: 16.52

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 062 /062 /SOUTH-S3A
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0160

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	24.25	24.25	25.5	23.	3.125	1.768	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	6.75	6.75	10.	3.5	21.125	4.596	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	5.35	5.35	5.4	5.3	0.005	0.071	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	3.95	3.95	5.7	2.2	6.125	2.475	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.211	0.211	0.372	0.05	0.052	0.228	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	1.049	1.049	1.323	0.775	0.15	0.387	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.95	1.95	2.23	1.67	0.157	0.396	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	8090.	8090.	9180.	7000.	2376200.	1541.493	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	3.904	3.904	3.963	3.845	0.007	0.083	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			8016.234								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	1	1720.	1720.	1720.	1720.	0.	0.	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	1	3.236	3.236	3.236	3.236	0.	0.	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			1720.								
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	4.125	4.125	4.5	3.75	0.281	0.53	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.81	0.81	1.04	0.58	0.106	0.325	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0160

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00								
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00								
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00								
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00								
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	1	1	1.00	1	1	1.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0161

NPS Station ID: SHEN0161
 Location: SOUTH RIVER AT HARRISTON, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005002400.00
 Description:

LAT/LON: 38.218615/ -78.836949

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.000

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 01627500
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 1.30
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0161

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/08/69-06/06/94	3	20.7	20.067	22.5	17.	7.863	2.804	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/06/94-06/06/94	1	31.5	31.5	31.5	31.5	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	06/06/94-06/06/94	1	730.	730.	730.	730.	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	09/04/30-04/08/69	40	332.	388.825	1538.	38.	73567.994	271.234	157.6	219.25	471.25	602.5
00065	STAGE, STREAM (FEET)	08/18/92-06/06/94	3	2.69	2.72	2.79	2.68	0.004	0.061	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	09/04/30-04/08/69	41	7.	7.415	18.	3.	12.749	3.571	3.2	5.	9.5	11.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/01/48-06/06/94	40	189.5	191.575	404.	115.	3035.43	55.095	128.3	145.	220.	262.1
00300	OXYGEN, DISSOLVED MG/L	08/19/92-06/06/94	2	9.4	9.4	10.1	8.7	0.98	0.99	**	**	**	**
00400	PH (STANDARD UNITS)	10/01/48-06/06/94	40	7.05	7.123	8.4	6.5	0.182	0.427	6.7	6.8	7.3	7.78
00400	CONVERTED PH (STANDARD UNITS)	10/01/48-06/06/94	40	7.047	6.972	8.4	6.5	0.205	0.453	6.7	6.8	7.3	7.78
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/01/48-06/06/94	40	0.09	0.107	0.316	0.004	0.006	0.078	0.017	0.05	0.158	0.2
00405	CARBON DIOXIDE (MG/L AS CO2)	04/08/69-04/08/69	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/08/69-04/08/69	1	56.	56.	56.	56.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/04/30-04/08/69	41	78.	77.317	134.	32.	388.122	19.701	53.2	62.5	90.5	97.8
00445	CARBONATE ION (MG/L AS CO3)	09/04/30-04/08/69	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00453	BICARBONATE, WATER, DISS, INCR TIT, FIELD, AS HCO3, MG/L	06/06/94-06/06/94	1	127.	127.	127.	127.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/06/94-06/06/94	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/06/94-06/06/94	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	06/06/94-06/06/94	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/06/94-06/06/94	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/06/94-06/06/94	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/06/94-06/06/94	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/06/94-06/06/94	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/06/94-06/06/94	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-04/08/69	41	80.	80.61	153.	32.	485.344	22.031	54.	63.5	95.5	107.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/01/48-04/08/69	38	16.5	18.	46.	8.	60.865	7.802	10.9	11.75	21.5	29.
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/04/30-04/08/69	41	21.	20.998	36.	7.9	27.115	5.207	15.	17.	24.5	27.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/04/30-04/08/69	41	6.7	6.88	16.	3.1	5.369	2.317	4.18	5.2	8.2	9.34
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/04/30-04/08/69	41	5.	5.444	25.	1.5	14.353	3.788	2.22	3.2	6.45	8.1
00931	SODIUM ADSORPTION RATIO	04/08/69-04/08/69	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	04/08/69-04/08/69	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/04/30-04/08/69	14	1.8	1.807	3.	1.2	0.31	0.557	1.2	1.3	2.025	2.9
00940	CHLORIDE, TOTAL IN WATER MG/L	09/04/30-04/08/69	41	6.	6.341	27.	1.	16.13	4.016	3.	4.	8.	9.
00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-04/08/69	41	15.	17.415	55.	7.	80.149	8.953	9.2	12.	21.	26.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/05/45-04/08/69	39	0.1	0.105	0.4	0.	0.007	0.083	0.	0.1	0.1	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/04/30-04/08/69	41	6.6	6.905	13.	2.3	2.291	1.514	5.72	6.15	7.65	8.56
01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/69-04/08/69	1	40.	40.	40.	40.	0.	0.	**	**	**	**
34790	SURFACTANTS, AS CTAS, WATER MG/L	08/18/92-08/18/92	1	7.	7.	7.	7.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0161

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
34795	ANTIMONY,SED,BOT,	08/18/92-08/18/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
34800	ARSENIC,SED,BOT,WET SIEVE,	08/18/92-08/18/92	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34810	BERYLLIUM,SED,BOT,WET SIEVE,	08/18/92-08/18/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
34816	BISMUTH,SED,BOT,WET SIEVE,	08/18/92-08/18/92	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34825	CADMIUM,SED,BOT,	08/18/92-08/18/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
34830	CALCIUM,SED,BOT,	08/18/92-08/18/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
34835	CERIUM,SED,BOT,	08/18/92-08/18/92	1	93.	93.	93.	93.	0.	0.	**	**	**	**
34840	CHROMIUM,SED,BOT,	08/18/92-08/18/92	1	130.	130.	130.	130.	0.	0.	**	**	**	**
34845	COBALT,SED,BOT,	08/18/92-08/18/92	1	35.	35.	35.	35.	0.	0.	**	**	**	**
34850	COPPER,SED,BOT,	08/18/92-08/18/92	1	65.	65.	65.	65.	0.	0.	**	**	**	**
34855	EUROPIUM,SED,BOT,	08/18/92-08/18/92	1	49.	49.	49.	49.	0.	0.	**	**	**	**
34860	GALLIUM,SED,BOT,	08/18/92-08/18/92	1	20.	20.	20.	20.	0.	0.	**	**	**	**
34870	GOLD,SED,BOT,	08/18/92-08/18/92	1##	4.	4.	4.	4.	0.	0.	**	**	**	**
34875	HOLMIUM,SED,BOT,	08/18/92-08/18/92	1##	2.	2.	2.	2.	0.	0.	**	**	**	**
34880	IRON,SED,BOT,	08/18/92-08/18/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
34885	LANTHANUM,SED,BOT,	08/18/92-08/18/92	1	49.	49.	49.	49.	0.	0.	**	**	**	**
34890	LEAD,SED,BOT,	08/18/92-08/18/92	1	38.	38.	38.	38.	0.	0.	**	**	**	**
34895	LITHIUM,SED,BOT,	08/18/92-08/18/92	1	80.	80.	80.	80.	0.	0.	**	**	**	**
34900	MAGNESIUM,SED,BOT,	08/18/92-08/18/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
34905	MANGANESE,SED,BOT,	08/18/92-08/18/92	1	3000.	3000.	3000.	3000.	0.	0.	**	**	**	**
34910	MERCURY,SED,BOT,	08/18/92-08/18/92	1	14.5	14.5	14.5	14.5	0.	0.	**	**	**	**
34915	MOLYBDENUM,SED,BOT,	08/18/92-08/18/92	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34920	NEODYMIUM,SED,BOT,	08/18/92-08/18/92	1	45.	45.	45.	45.	0.	0.	**	**	**	**
34925	NICKEL,SED,BOT,	08/18/92-08/18/92	1	40.	40.	40.	40.	0.	0.	**	**	**	**
34930	NIObIUM,SED,BOT,	08/18/92-08/18/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
34935	PHOSPHORUS,SED,BOT,	08/18/92-08/18/92	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
34940	POTASSIUM,SED,BOT,	08/18/92-08/18/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
34945	SCANDIUM,SED,BOT,	08/18/92-08/18/92	1	12.	12.	12.	12.	0.	0.	**	**	**	**
34950	SELENIUM,SED,BOT,	08/18/92-08/18/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
34955	SILVER,SED,BOT,	08/18/92-08/18/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
34960	SODIUM,SED,BOT,	08/18/92-08/18/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
34965	STRONTIUM,SED,BOT,	08/18/92-08/18/92	1	72.	72.	72.	72.	0.	0.	**	**	**	**
34970	SULFUR,SED,BOT,	08/18/92-08/18/92	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
34975	TANTALUM,SED,BOT,	08/18/92-08/18/92	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
34980	THORIUM,SED,BOT,	08/18/92-08/18/92	1	11.	11.	11.	11.	0.	0.	**	**	**	**
34985	TIN,SED,BOT,	08/18/92-08/18/92	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
35000	URANIUM,SED,BOT,	08/18/92-08/18/92	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
35005	VANADIUM,SED,BOT,	08/18/92-08/18/92	1	87.	87.	87.	87.	0.	0.	**	**	**	**
35010	YTTRIUM,SED,BOT,	08/18/92-08/18/92	1	32.	32.	32.	32.	0.	0.	**	**	**	**
35015	YTTERBIUM,SED,BOT,	08/18/92-08/18/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
35020	ZINC,SED,BOT,	08/18/92-08/18/92	1	180.	180.	180.	180.	0.	0.	**	**	**	**
39086	ALKALINITY, WATER, DISS, INCR TIT, FIELD, AS CaCO3, MG/L	06/06/94-06/06/94	1	104.	104.	104.	104.	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/04/30-10/05/53	40	109.5	108.25	231.	44.	1057.679	32.522	72.4	85.	123.75	142.9
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	04/08/69-04/08/69	1	128.	128.	128.	128.	0.	0.	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	04/08/69-04/08/69	1	54.3	54.3	54.3	54.3	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	04/08/69-04/08/69	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-09/21/49	36	1.1	1.083	2.2	0.3	0.163	0.404	0.54	0.8	1.3	1.59
71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/04/30-08/21/49	34	1.7	1.656	4.5	0.5	0.565	0.752	0.75	1.175	1.9	2.6
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-04/08/69	41	1.6	1.961	9.	0.4	2.843	1.686	0.82	1.1	2.05	2.76
71885	IRON (UG/L AS FE)	09/04/30-10/05/53	40	30.	33.	80.	10.	401.026	20.026	10.	20.	50.	60.
82662	DIMETHOATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/06/94-06/06/94	1	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0161

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00	
00400	PH	Fresh Chronic	9.	40	0	0.00	13	0	0.00	15	0	0.00	
		Other-Lo Lim.	6.5	40	2	0.05	13	2	0.15	15	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0161

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00613 NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00							1	0	0.00			
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	41	0	0.00	13	0	0.00	16	0	0.00	12	0	0.00			
	Drinking Water	250.	41	0	0.00	13	0	0.00	16	0	0.00	12	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	41	0	0.00	13	0	0.00	16	0	0.00	12	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	39	0	0.00	12	0	0.00	16	0	0.00	11	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	41	0	0.00	13	0	0.00	16	0	0.00	12	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0161

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060p	FLOW, STREAM, MEAN DAILY CFS	09/04/30-04/08/69	12	259.5	273.5	589.	38.	24148.636	155.398	65.6	164.	409.5	542.8
00080p	COLOR (PLATINUM-COBALT UNITS)	09/04/30-04/08/69	13	8.	8.538	18.	4.	16.103	4.013	4.4	5.5	10.	16.8
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/01/48-06/06/94	13	214.	215.615	404.	124.	5331.423	73.017	126.8	163.	249.	351.2
00400p	PH (STANDARD UNITS)	10/01/48-06/06/94	13	7.	7.131	8.4	6.5	0.359	0.599	6.5	6.75	7.5	8.28
00400p	CONVERTED PH (STANDARD UNITS)	10/01/48-06/06/94	13	7.	6.892	8.4	6.5	0.421	0.649	6.5	6.75	7.5	8.28
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/01/48-06/06/94	13	0.1	0.128	0.316	0.004	0.011	0.103	0.006	0.039	0.179	0.316
00440p	BICARBONATE ION (MG/L AS HCO3)	09/04/30-04/08/69	13	87.	86.077	134.	53.	536.744	23.168	54.2	68.5	97.	128.4
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-04/08/69	13	87.	91.	153.	54.	676.	26.	56.	73.	105.5	135.4
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/01/48-04/08/69	12	19.	21.667	46.	11.	98.061	9.903	11.6	14.	28.25	40.9
00915p	CALCIUM, DISSOLVED (MG/L AS Ca)	09/04/30-04/08/69	13	23.	23.308	36.	15.	32.731	5.721	15.4	19.	27.	32.8
00925p	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/04/30-04/08/69	13	7.3	8.054	16.	4.1	9.386	3.064	4.3	6.15	9.1	14.
00930p	SODIUM, DISSOLVED (MG/L AS Na)	09/04/30-04/08/69	13	5.9	6.977	25.	2.1	35.677	5.973	2.14	3.2	7.5	19.4
00940p	CHLORIDE, TOTAL IN WATER MG/L	09/04/30-04/08/69	13	7.	8.154	27.	2.	40.308	6.349	2.4	3.5	9.	21.
00945p	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-04/08/69	13	21.	22.154	55.	10.	144.808	12.034	10.	13.5	26.	46.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/05/45-04/08/69	12	0.1	0.075	0.2	0.	0.006	0.075	0.	0.	0.1	0.2
00955p	SILICA, DISSOLVED (MG/L AS SiO2)	09/04/30-04/08/69	13	7.8	8.046	13.	5.7	2.974	1.725	6.06	7.05	8.6	11.24
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/04/30-10/05/53	13	120.	127.077	231.	76.	1575.91	39.698	76.8	104.	142.5	201.8
71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-09/21/49	10	1.25	1.22	1.8	0.8	0.068	0.262	0.82	1.075	1.3	1.75
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-04/08/69	13	1.2	1.431	4.8	0.4	1.142	1.069	0.56	0.9	1.55	3.52
71885	IRON (UG/L AS Fe)	09/04/30-10/05/53	13	30.	34.615	80.	10.	410.256	20.255	10.	20.	45.	72.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0161

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060p	FLOW, STREAM, MEAN DAILY CFS	09/04/30-04/08/69	16	403.5	457.125	1538.	177.	108951.85	330.079	205.7	242.	537.25	982.9
00080p	COLOR (PLATINUM-COBALT UNITS)	09/04/30-04/08/69	16	5.	5.938	10.	3.	5.129	2.265	3.	4.25	7.75	9.3
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/01/48-06/06/94	15	179.	175.067	233.	115.	1469.21	38.33	119.2	141.	215.	225.8
00400p	PH (STANDARD UNITS)	10/01/48-06/06/94	15	7.1	7.107	7.6	6.6	0.069	0.263	6.72	6.9	7.3	7.48
00400p	CONVERTED PH (STANDARD UNITS)	10/01/48-06/06/94	15	7.1	7.033	7.6	6.6	0.075	0.274	6.72	6.9	7.3	7.48
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/01/48-06/06/94	15	0.079	0.093	0.251	0.025	0.003	0.058	0.034	0.05	0.126	0.196
00440p	BICARBONATE ION (MG/L AS HCO3)	09/04/30-04/08/69	16	77.5	77.125	102.	48.	257.183	16.037	50.8	67.75	90.75	97.8
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-04/08/69	16	76.5	77.25	102.	47.	291.8	17.082	51.2	65.5	94.	99.9
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/01/48-04/08/69	15	12.	14.2	21.	8.	18.743	4.329	9.2	11.	18.	20.4
00915p	CALCIUM, DISSOLVED (MG/L AS Ca)	09/04/30-04/08/69	16	20.5	20.5	27.	13.	18.667	4.32	13.7	17.5	24.	26.3
00925p	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/04/30-04/08/69	16	6.2	6.331	8.3	3.5	2.468	1.571	3.85	5.3	8.125	8.23
00930p	SODIUM, DISSOLVED (MG/L AS Na)	09/04/30-04/08/69	16	5.05	4.931	8.2	2.3	3.054	1.748	2.58	3.15	6.375	7.5
00940p	CHLORIDE, TOTAL IN WATER MG/L	09/04/30-04/08/69	16	5.	5.313	8.	3.	3.429	1.852	3.	4.	7.	8.
00945p	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-04/08/69	16	13.5	14.688	21.	8.	18.229	4.27	8.7	12.	18.75	21.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/05/45-04/08/69	16	0.1	0.088	0.1	0.	0.001	0.034	0.	0.1	0.1	0.1
00955p	SILICA, DISSOLVED (MG/L AS SiO2)	09/04/30-04/08/69	16	6.75	6.656	8.3	5.1	0.784	0.885	5.52	5.85	7.25	8.09
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/04/30-10/05/53	16	97.	98.875	131.	66.	436.783	20.899	68.1	85.	120.25	128.9
71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-09/21/49	15	1.	0.987	1.5	0.4	0.107	0.327	0.52	0.7	1.2	1.5
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-04/08/69	16	1.75	1.619	2.6	0.8	0.276	0.526	0.8	1.1	2.05	2.32
71885	IRON (UG/L AS Fe)	09/04/30-10/05/53	16	20.	25.625	80.	10.	346.25	18.608	10.	10.	30.	59.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0161

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060p	FLOW, STREAM, MEAN DAILY CFS	09/04/30-04/08/69	12	389.5	413.083	1113.	145.	66176.447	257.248	148.6	230.25	489.	939.6
00080p	COLOR (PLATINUM-COBALT UNITS)	09/04/30-04/08/69	12	8.	8.167	17.	3.	16.515	4.064	3.3	5.	10.75	15.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/01/48-06/06/94	12	190.	186.167	264.	134.	1989.424	44.603	134.9	145.	222.75	258.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

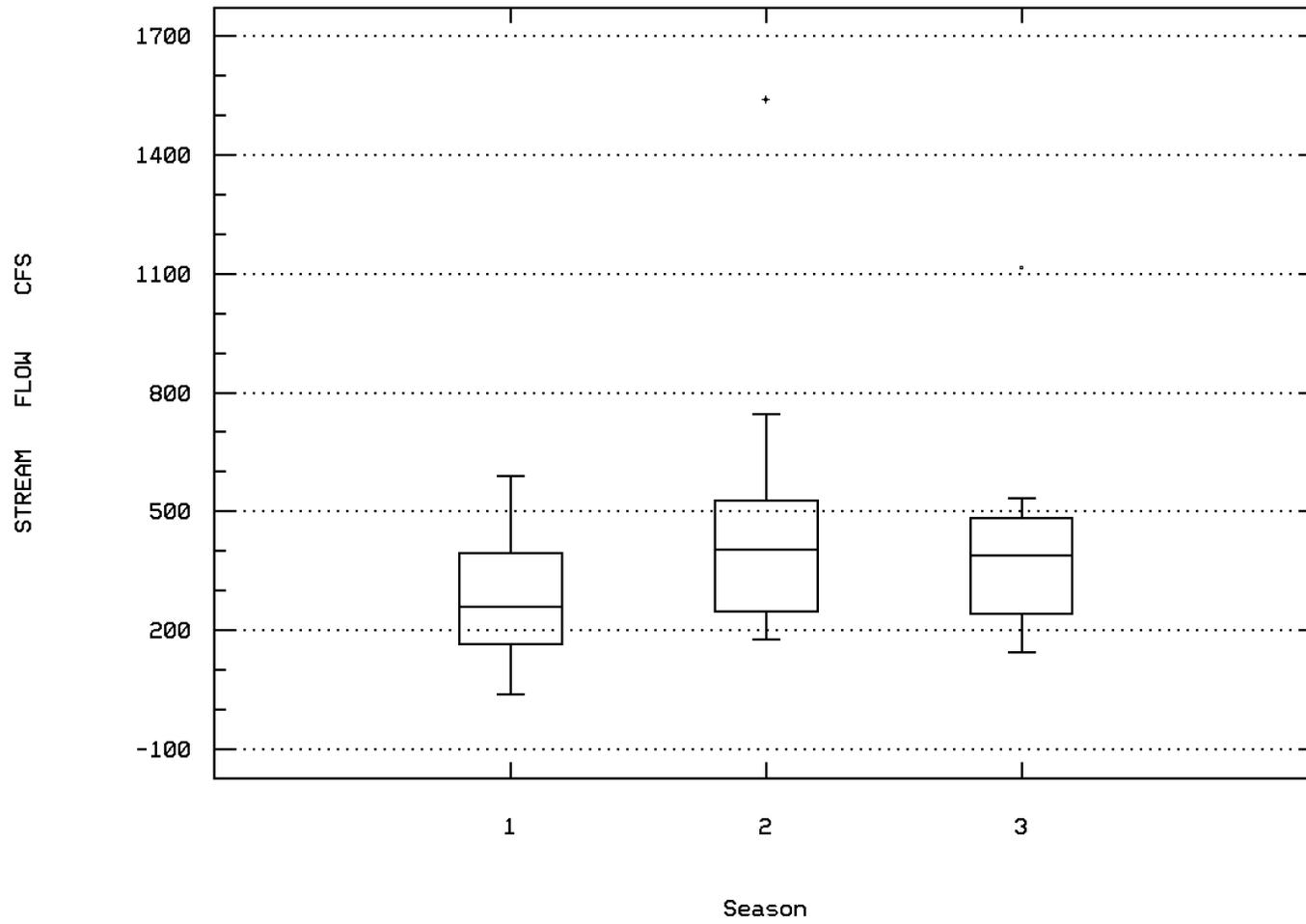
Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0161

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	PH (STANDARD UNITS)	10/01/48-06/06/94	12	7.2	7.133	8.1	6.7	0.166	0.408	6.7	6.725	7.3	7.89
00400p	CONVERTED PH (STANDARD UNITS)	10/01/48-06/06/94	12	7.2	6.997	8.1	6.7	0.186	0.432	6.7	6.725	7.3	7.89
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/01/48-06/06/94	12	0.063	0.101	0.2	0.008	0.005	0.071	0.018	0.05	0.189	0.2
00440p	BICARBONATE ION (MG/L AS HCO3)	09/04/30-04/08/69	12	66.5	68.083	97.	32.	291.356	17.069	39.8	58.25	82.75	93.4
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-04/08/69	12	70.5	73.833	108.	32.	435.424	20.867	40.4	60.25	91.25	103.5
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/01/48-04/08/69	11	19.	19.182	33.	11.	51.764	7.195	11.2	13.	24.	32.
00915p	CALCIUM, DISSOLVED (MG/L AS Ca)	09/04/30-04/08/69	12	18.5	19.158	27.	7.9	27.083	5.204	10.33	16.	23.75	26.1
00925p	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/04/30-04/08/69	12	5.9	6.342	9.8	3.1	3.535	1.88	3.67	5.025	7.925	9.29
00930p	SODIUM, DISSOLVED (MG/L AS Na)	09/04/30-04/08/69	12	4.1	4.467	10.	1.5	4.904	2.215	1.8	2.9	5.675	8.89
00940p	CHLORIDE, TOTAL IN WATER MG/L	09/04/30-04/08/69	12	6.	5.75	9.	1.	4.205	2.05	1.9	5.	7.	8.7
00945p	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-04/08/69	12	13.5	15.917	38.	7.	68.811	8.295	7.6	11.25	17.75	33.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/05/45-04/08/69	11	0.1	0.164	0.4	0.	0.013	0.112	0.02	0.1	0.2	0.38
00955p	SILICA, DISSOLVED (MG/L AS SiO2)	09/04/30-04/08/69	12	6.25	6.	7.3	2.3	1.495	1.223	3.35	6.025	6.4	7.09
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/04/30-10/05/53	11	96.	99.636	155.	44.	895.655	29.927	50.8	78.	122.	149.4
71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-09/21/49	11	1.	1.091	2.2	0.3	0.327	0.572	0.32	0.7	1.4	2.12
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-04/08/69	12	2.	2.992	9.	0.9	7.055	2.656	1.02	1.525	2.725	8.73
71885	IRON (UG/L AS Fe)	09/04/30-10/05/53	11	50.	41.818	80.	20.	376.364	19.4	20.	20.	50.	76.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0161 Parameter Code: 00060

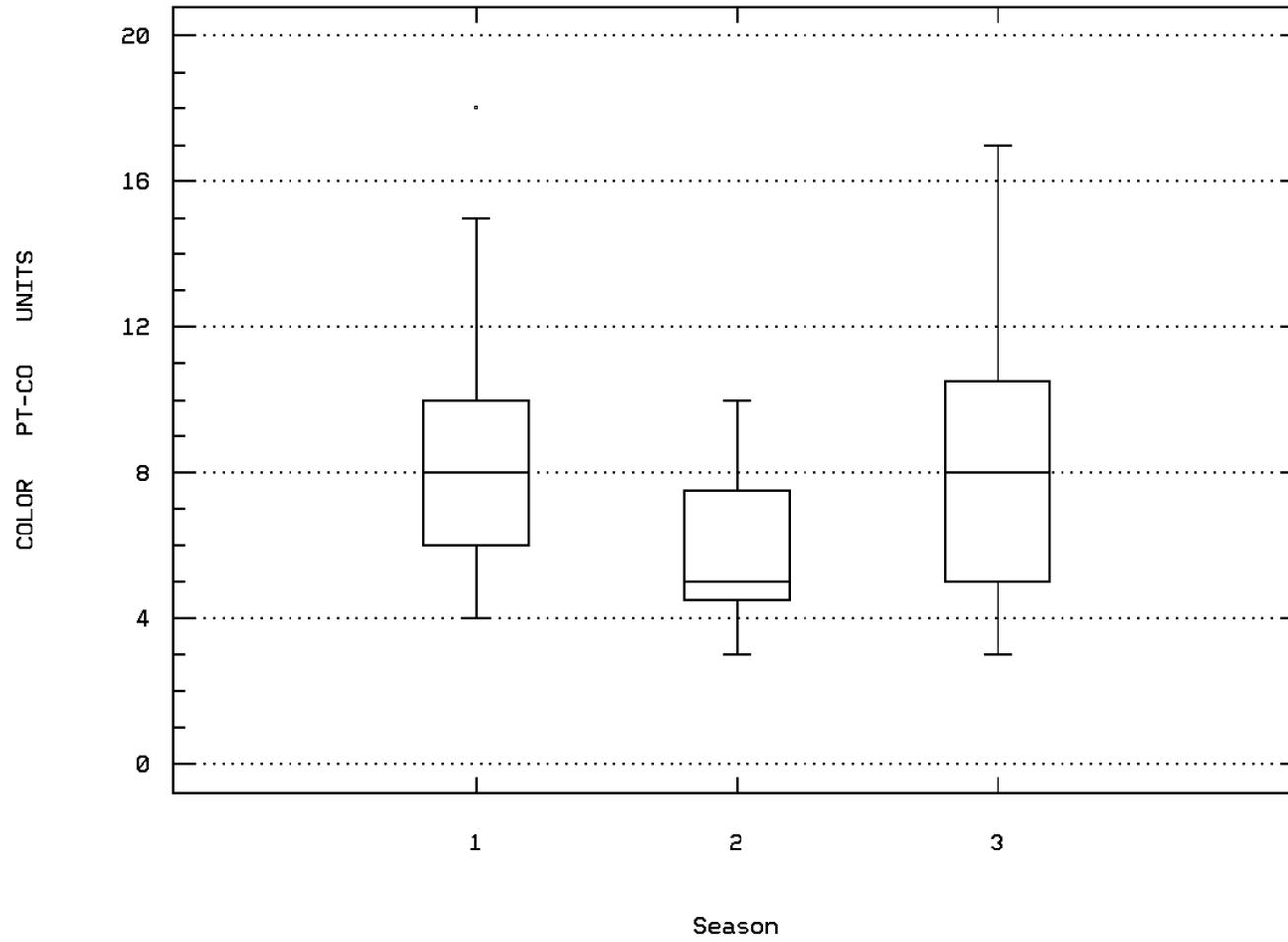
FLOW, STREAM, MEAN DAILY



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00080

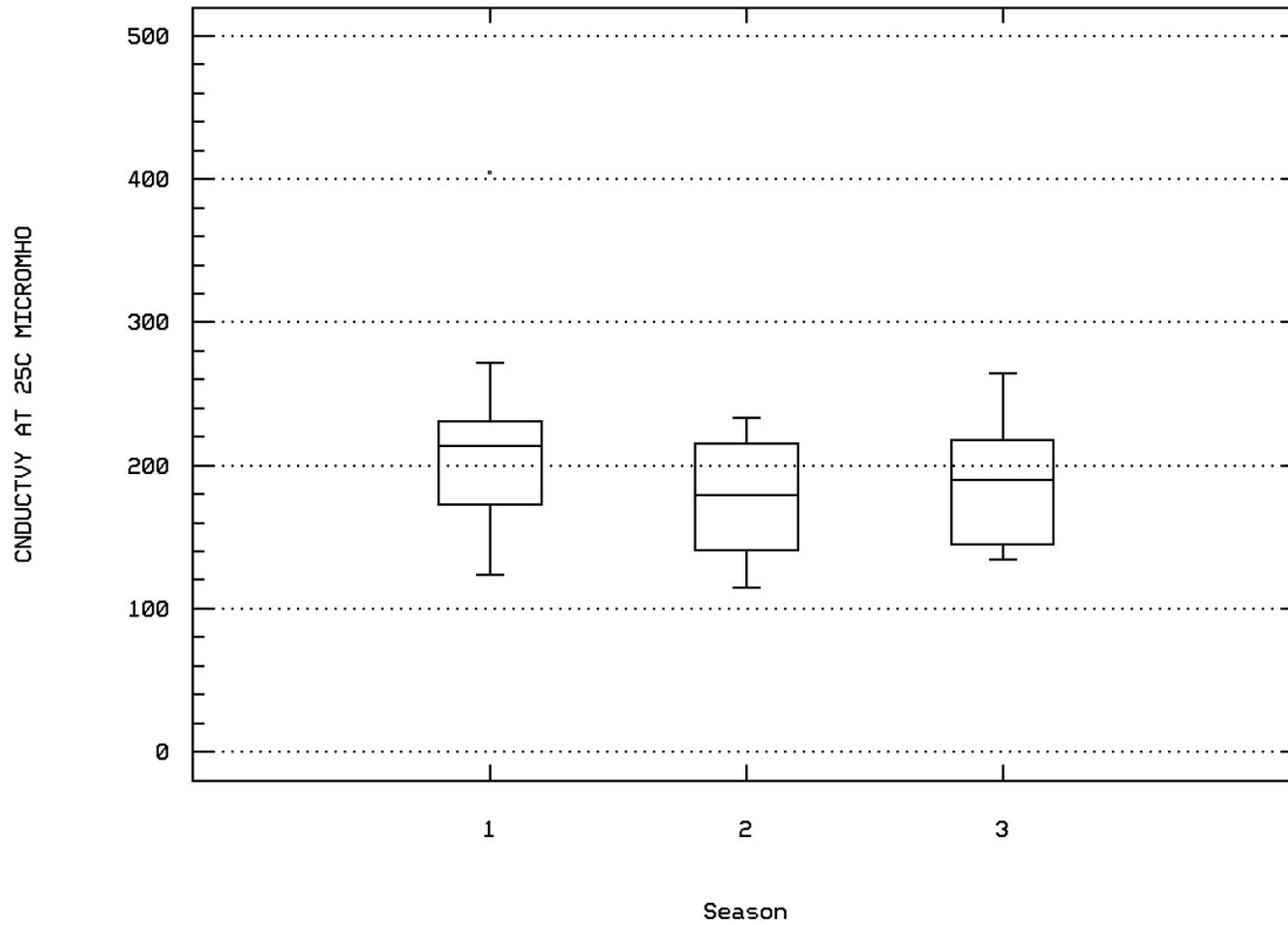
COLOR (PLATINUM-COBALT UNITS)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00095

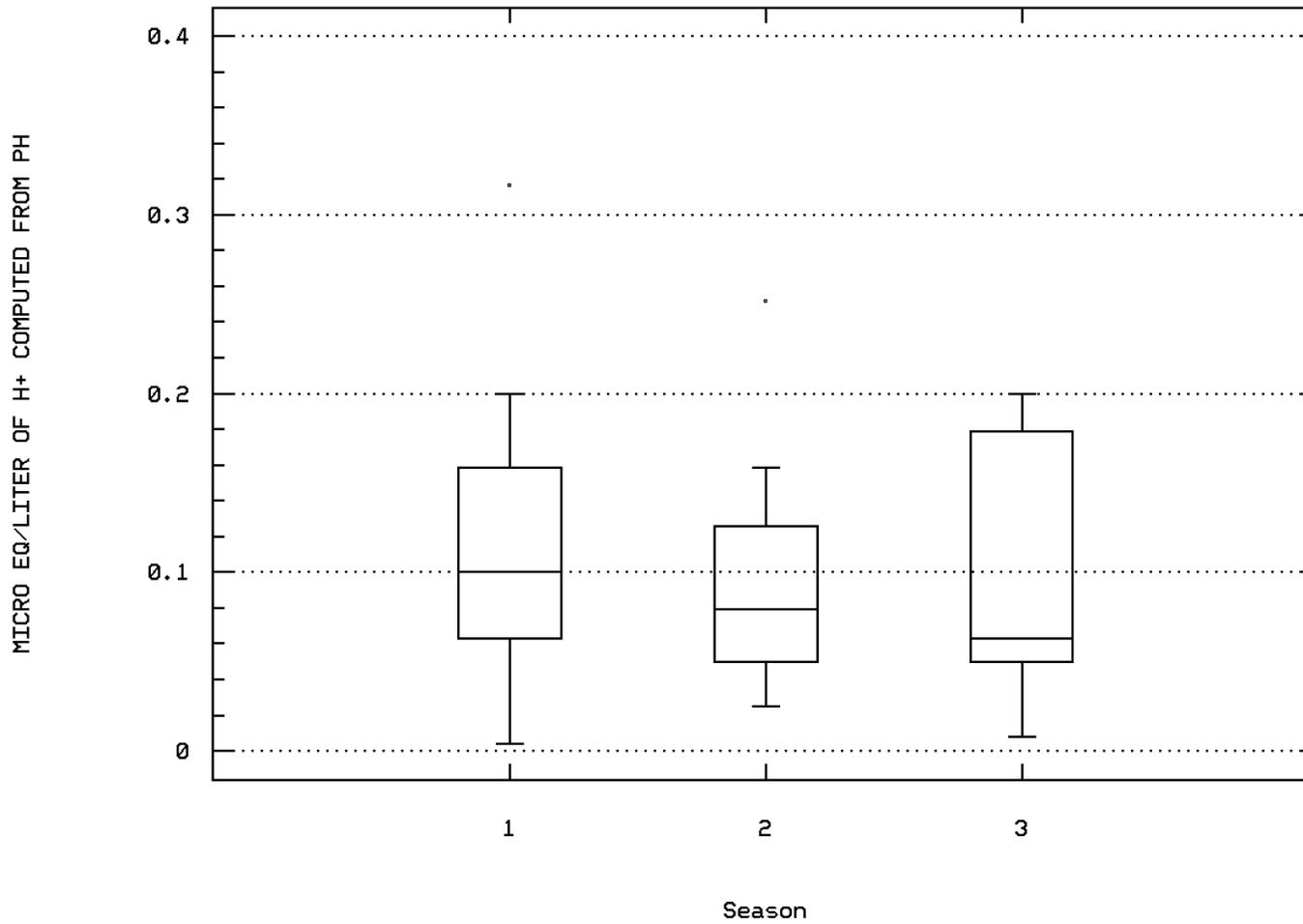
SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00400

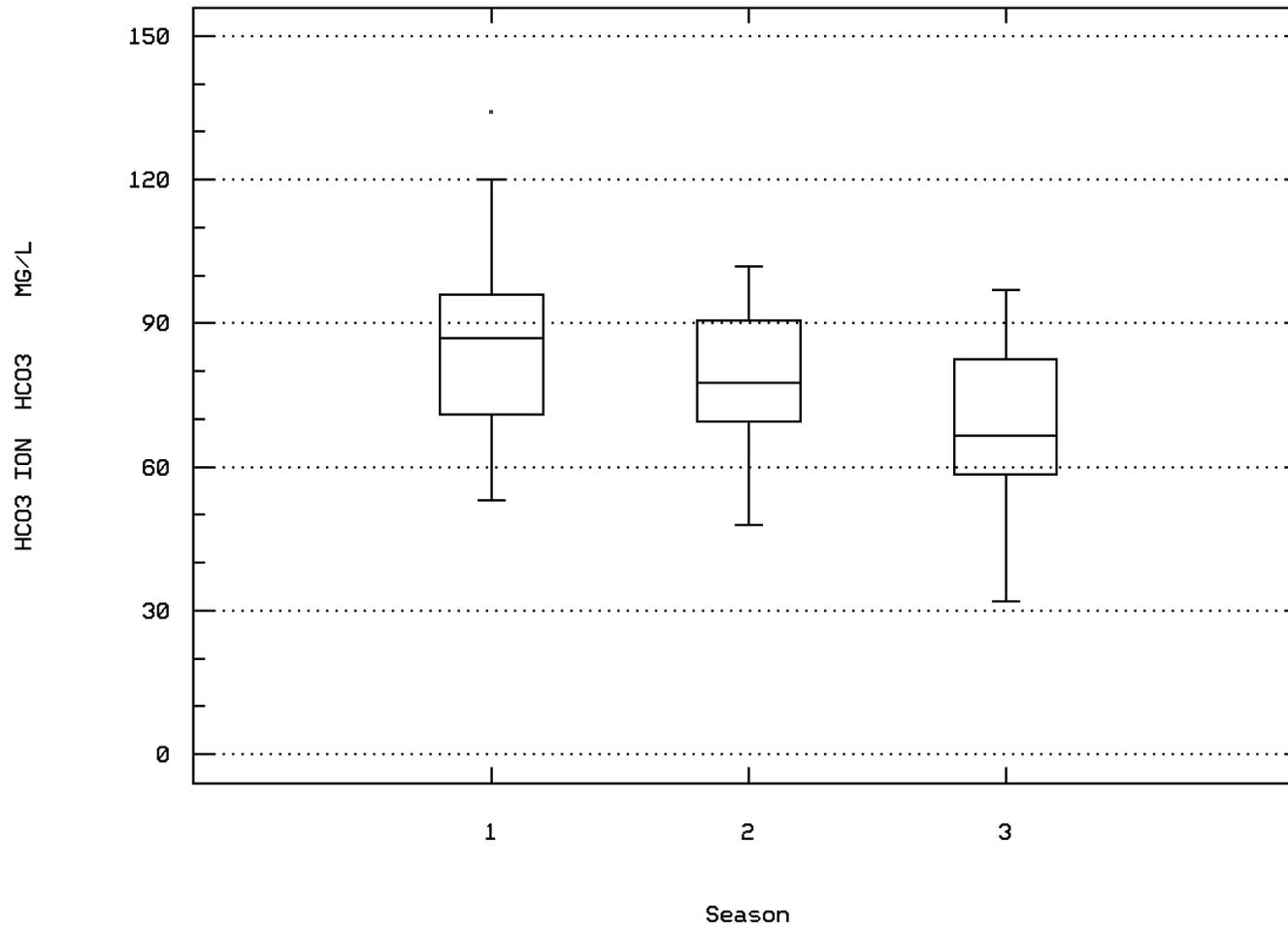
MICRO EQ/LITER OF H+ COMPUTED FROM PH



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00440

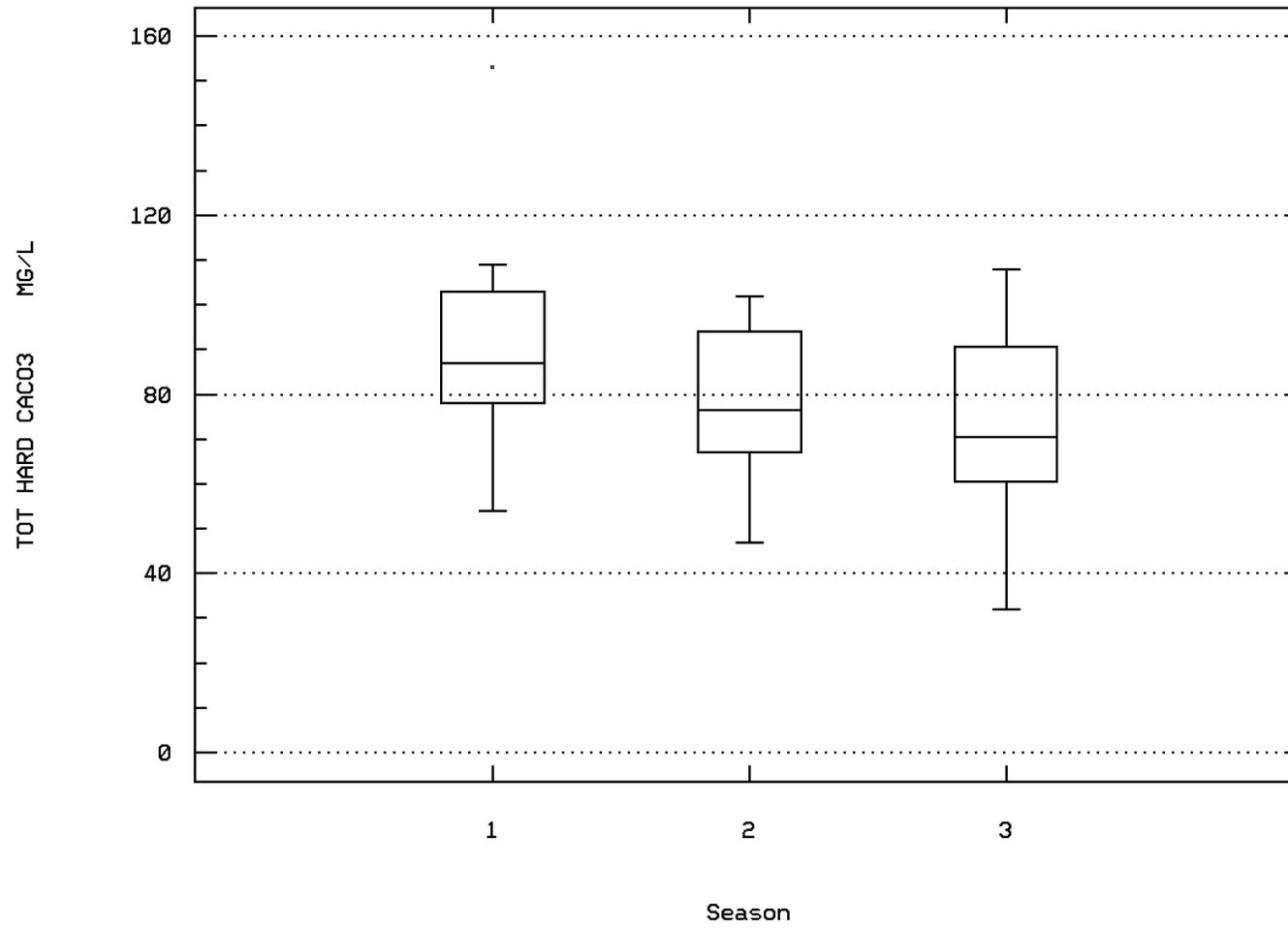
BICARBONATE ION (MG/L AS HCO3)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00900

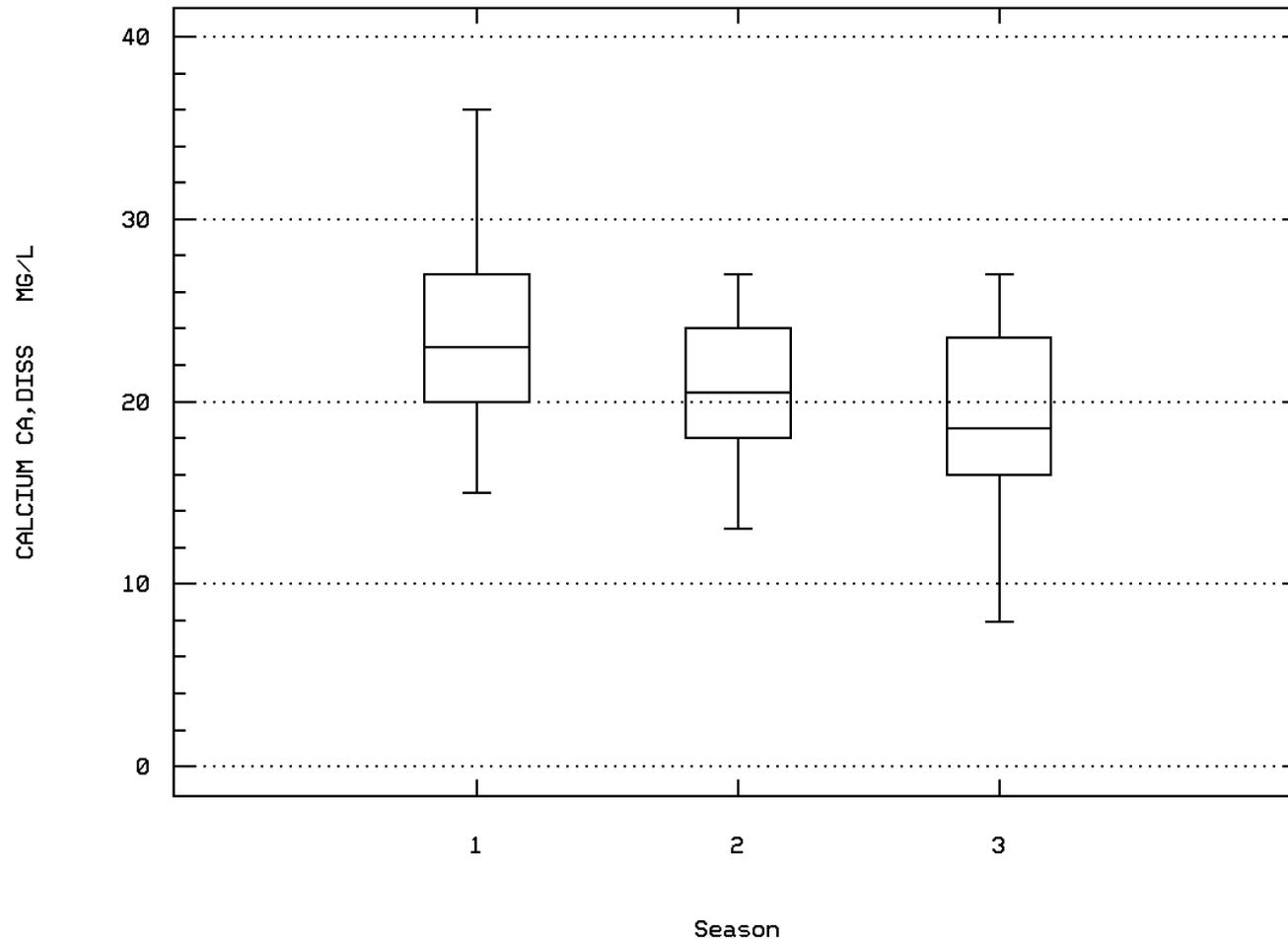
HARDNESS, TOTAL (MG/L AS CaCO3)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00915

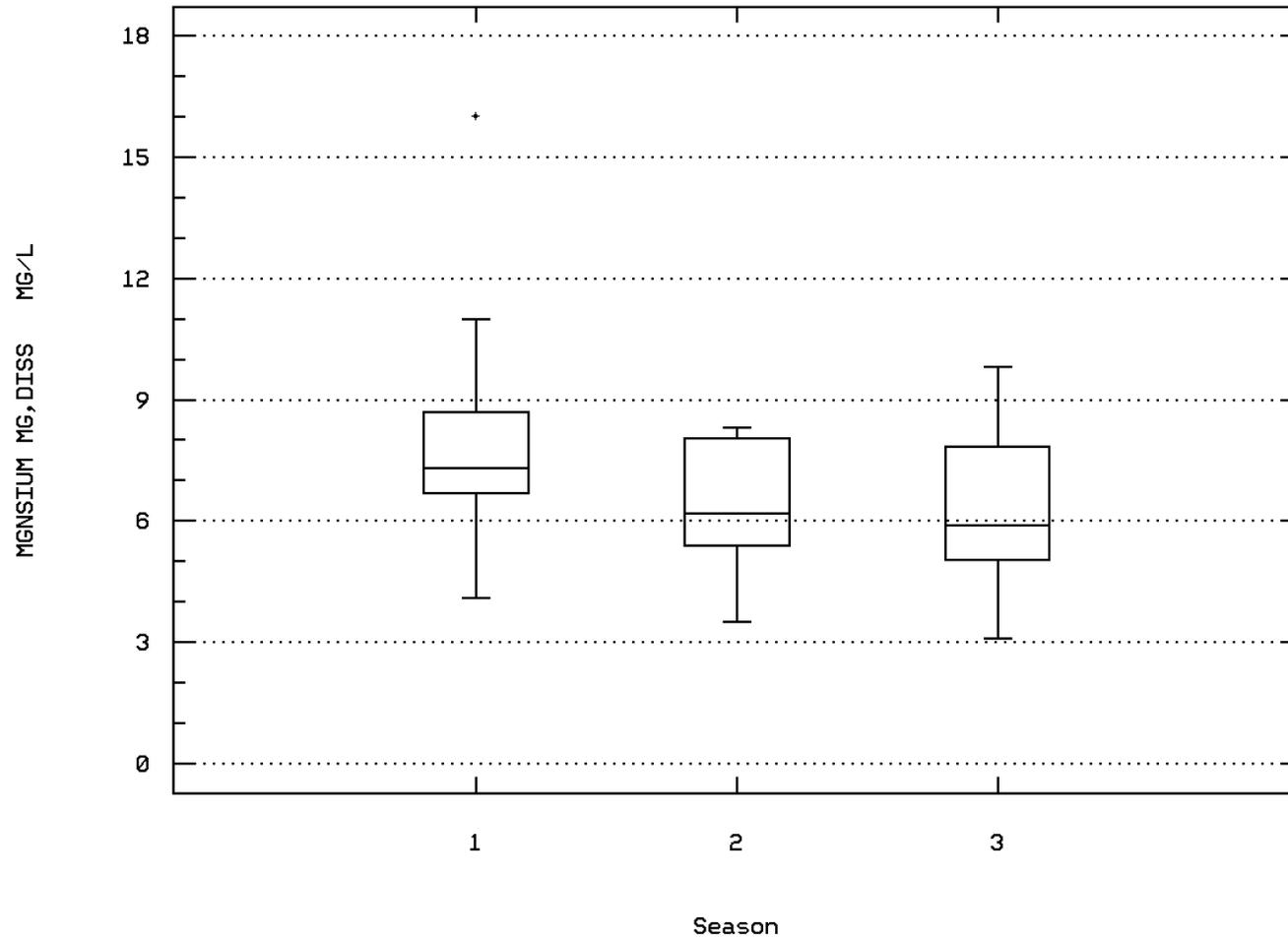
CALCIUM, DISSOLVED (MG/L AS CA)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00925

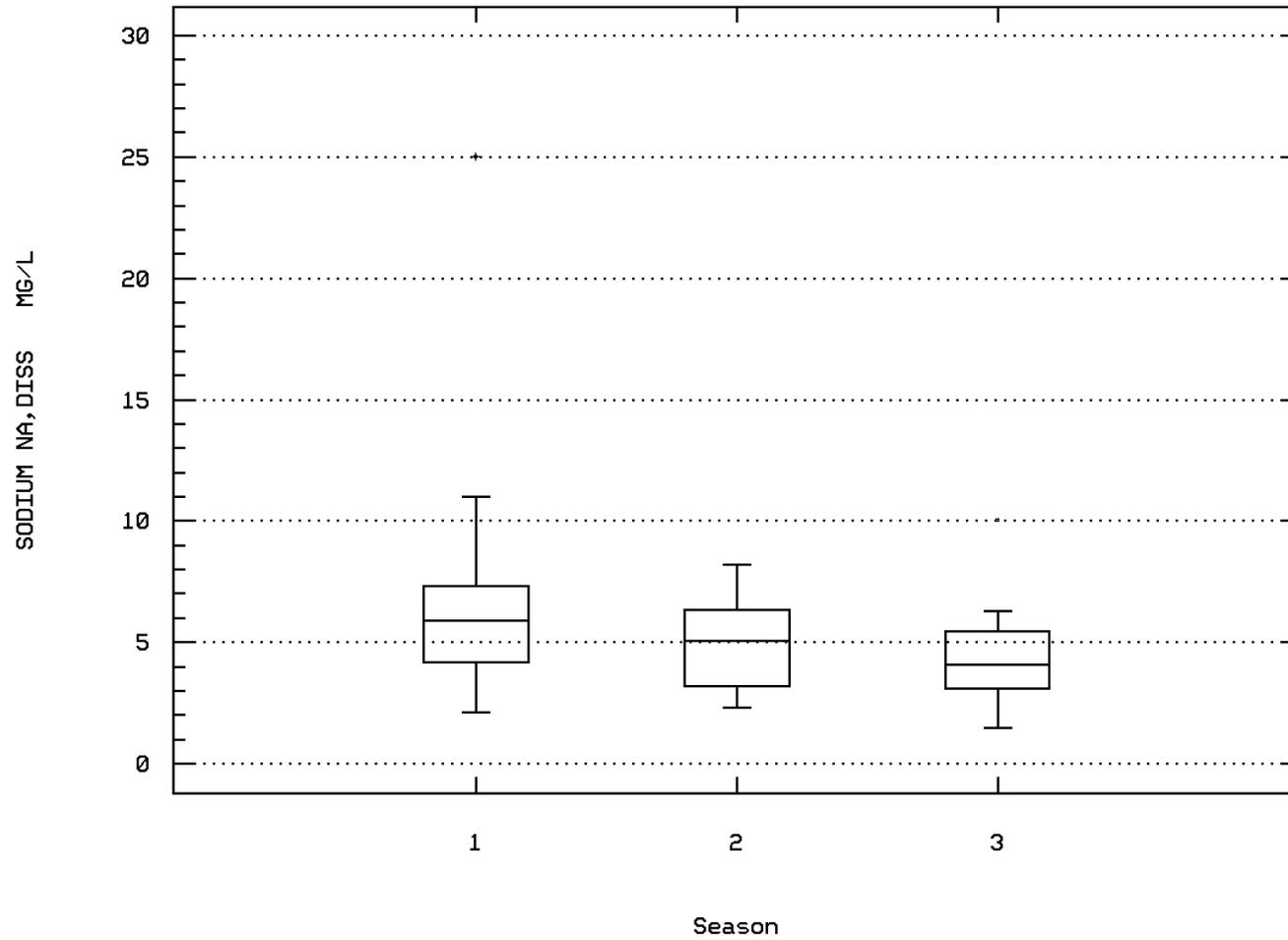
MAGNESIUM, DISSOLVED (MG/L AS MG)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00930

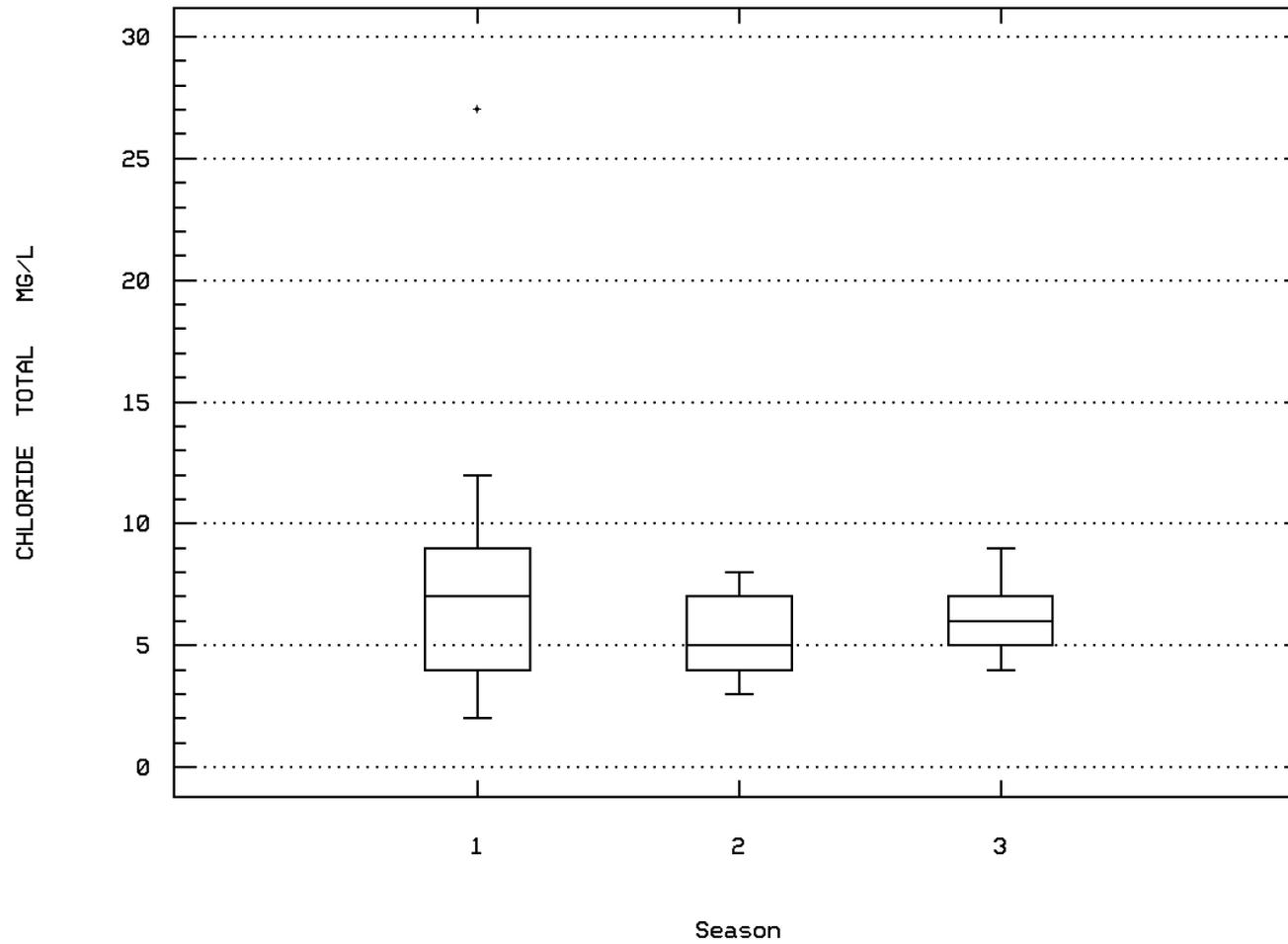
SODIUM, DISSOLVED (MG/L AS NA)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00940

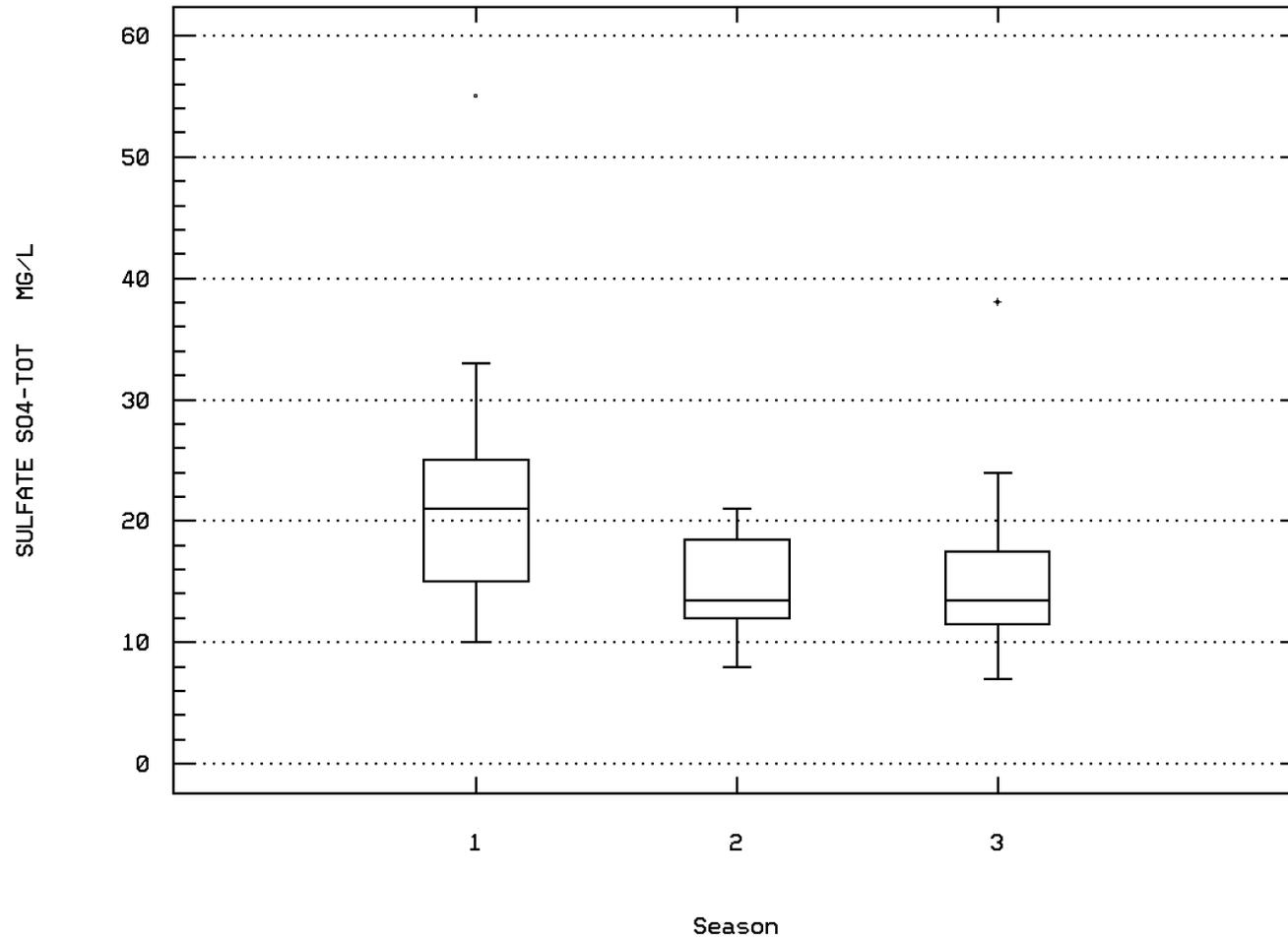
CHLORIDE, TOTAL IN WATER



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00945

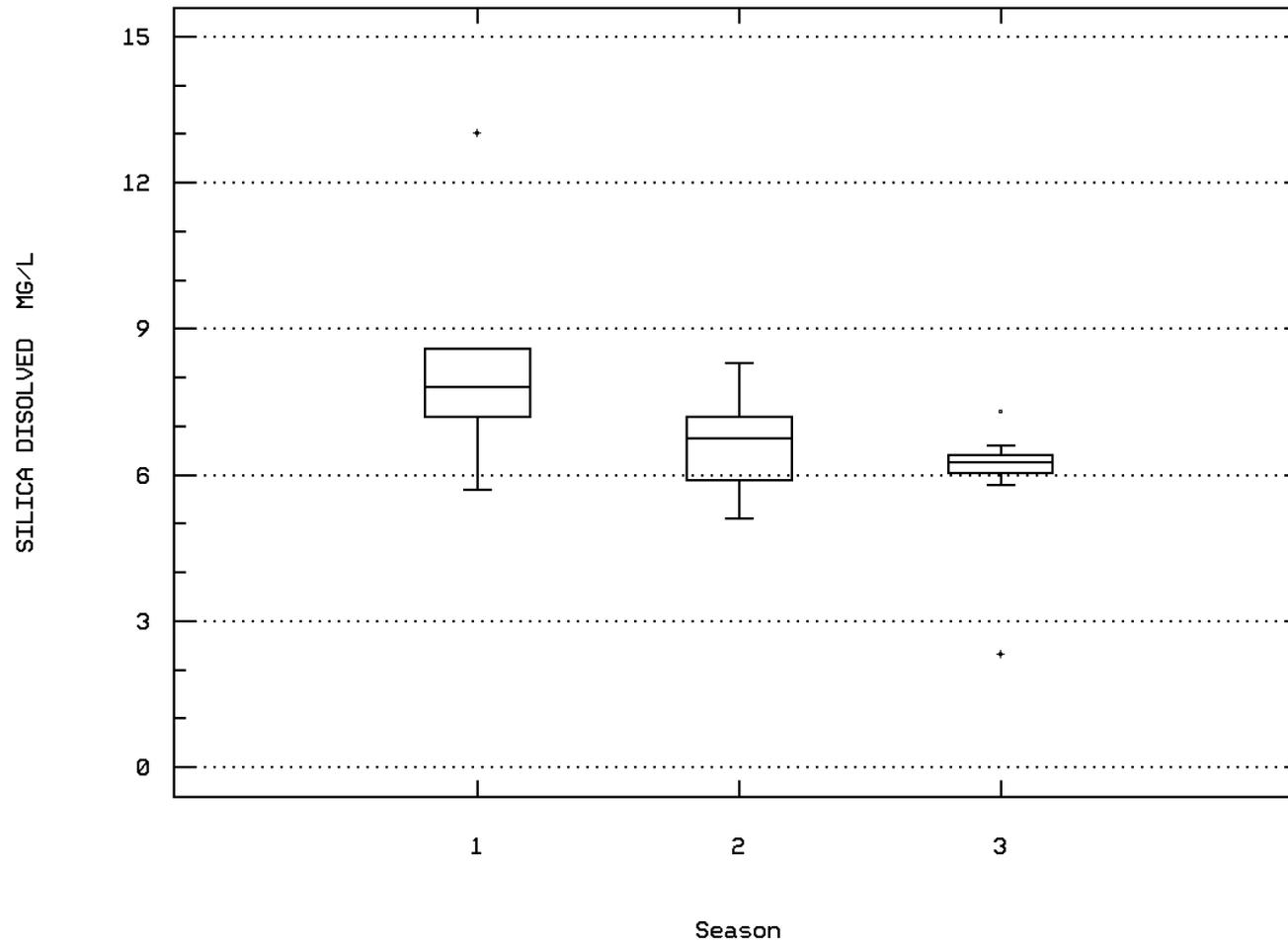
SULFATE, TOTAL (MG/L AS SO4)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 00955

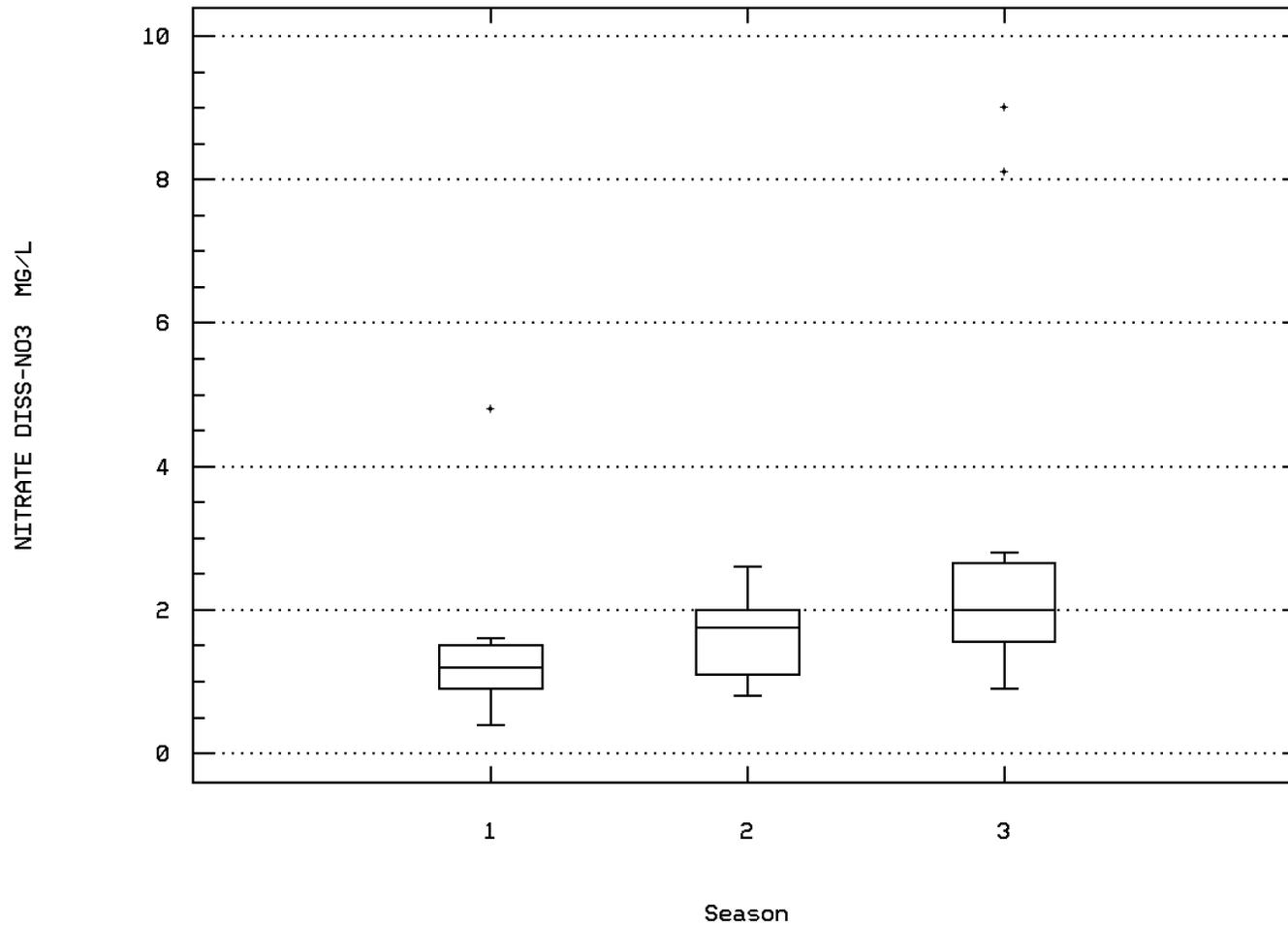
SILICA, DISSOLVED (MG/L AS SI02)



SOUTH RIVER AT HARRISTON, VA

Station: SHEN0161 Parameter Code: 71851

NITRATE NITROGEN, DISSOLVED (MG/L AS NO



SOUTH RIVER AT HARRISTON, VA

Station Inventory for Station: SHEN0162

NPS Station ID: SHEN0162
 Location: RT. 778 AT HARRISTON
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005027
 RF3 Index: 02070005008500.00
 Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: SOUTH RIVER

LAT/LON: 38.218615/ -78.837504

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 6.880
 RF3 Mile Point: 0.38

AMBIENT MONITORING BASIN: 1B SHENANDOAH
 SECTION: 03 TOPO MAP #: 0064 TOPO MAP NAME: CRIMORA, VA

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BSTH007.80 /VA1B03-X0076/VA1B6X0076
 Within Park Boundary: No

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

Date Created: / /

On/Off RF1: OFF
 On/Off RF3:

REGION: 6 VALLEY

Parameter Inventory for Station: SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	298	15.25	14.571	29.2	0.	49.427	7.03	4.95	8.5	21.	23.54
00060	FLOW, STREAM, MEAN DAILY CFS	03/02/70-09/20/73	42	250.5	274.143	910.	62.	33560.76	183.196	81.3	123.75	349.75	551.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/02/88-12/14/93	26	3.5	6.7	70.	0.5	178.475	13.359	1.06	1.825	6.625	11.46
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/15/94-12/21/98	53	4.8	8.715	115.	1.3	270.858	16.458	1.8	3.05	7.25	14.3
00080	COLOR (PLATINUM-COBALT UNITS)	03/18/91-02/08/93	22	16.	18.364	74.	6.	176.909	13.301	9.6	12.	19.25	25.1
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	104	268.5	272.404	523.	95.	9103.447	95.412	145.	198.5	345.	393.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	98	213.5	221.418	480.	76.	4869.998	69.785	138.3	170.5	270.75	292.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	81	9.8	10.253	14.5	6.4	3.802	1.95	8.1	8.65	11.7	13.18
00300p	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	214	10.05	10.137	15.	4.4	3.809	1.952	7.85	8.6	11.5	12.85
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	200	1.	1.385	7.	0.5	0.751	0.867	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	201	8.	8.973	162.	0.5	142.428	11.934	2.5	5.	11.	14.
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	297	8.1	8.054	9.5	1.2	0.427	0.653	7.496	7.7	8.4	8.72
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	297	8.1	3.673	9.5	1.2	19.685	4.437	7.496	7.7	8.4	8.72
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	297	0.008	212.46	63095.734	0.	13404274.757	3661.185	0.002	0.004	0.02	0.032
00403p	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	148	7.7	7.687	8.8	6.5	0.155	0.394	7.19	7.5	7.975	8.11
00403p	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	148	7.7	7.476	8.8	6.5	0.2	0.447	7.19	7.5	7.975	8.11
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	148	0.02	0.033	0.316	0.002	0.002	0.046	0.008	0.011	0.032	0.065
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	147	83.	83.245	201.	22.	672.049	25.924	51.8	64.	104.	112.2
00500	RESIDUE, TOTAL (MG/L)	03/02/70-08/10/92	40	144.	148.525	239.	98.	1312.153	36.224	100.3	122.25	165.25	216.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-08/10/92	40	39.	61.55	900.	14.	18682.049	136.682	24.	32.25	46.5	67.3
00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-08/10/92	40	108.	108.5	180.	56.	861.641	29.354	76.3	87.25	124.25	159.4
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/24/98-06/24/98	1	115.	115.	115.	115.	0.	0.	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	205	5.	9.585	190.	0.5	393.477	19.836	1.5	2.5	9.	19.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	205	2.5	3.122	29.	0.	12.522	3.539	1.	1.5	3.	6.4
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	205	3.	7.159	161.	0.	279.525	16.719	1.5	2.	6.	15.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	258 ##	0.05	0.093	1.5	0.01	0.033	0.181	0.02	0.02	0.063	0.2
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	257	0.02	0.028	0.26	0.005	0.001	0.03	0.005	0.01	0.035	0.06
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	250	1.59	1.944	6.	0.08	1.236	1.112	0.88	1.138	2.517	3.478
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	257	0.5	0.607	4.099	0.05	0.24	0.489	0.2	0.2	0.85	1.2
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	8	2.85	2.758	4.	1.2	0.824	0.908	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	197	0.1	0.148	0.7	0.05	0.011	0.104	0.05	0.05	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	123	0.11	0.14	0.72	0.01	0.011	0.105	0.04	0.06	0.2	0.29
00680p	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	199	4.	4.846	26.	0.5	12.757	3.572	1.5	2.3	6.	9.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	142	98.	100.521	213.	39.	940.549	30.668	62.3	77.75	122.	135.4
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	06/24/98-06/24/98	1	20.	20.	20.	0.	0.	**	**	**	**	
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	06/24/98-06/24/98	1	7.	7.	7.	0.	0.	**	**	**	**	
00940	CHLORIDE, TOTAL IN WATER (MG/L)	11/02/88-12/21/98	102	7.	7.755	23.	2.5	11.939	3.455	4.	5.	10.	12.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	101	9.	10.267	56.	5.	33.558	5.793	6.	7.	11.	15.8
00951	FLUORIDE, TOTAL (MG/L AS F)	01/17/89-04/12/93	30 ##	0.11	0.114	0.26	0.015	0.005	0.069	0.05	0.05	0.153	0.243
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/13/89-02/08/93	31	6.3	6.09	9.5	2.2	4.3	2.074	2.44	4.8	7.7	8.68
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/24/98-06/24/98	1	0.3	0.3	0.3	0.	0.	**	**	**	**	
01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-07/14/82	11 ##	1.	1.5	2.5	0.5	0.7	0.837	0.5	1.	2.5	2.5
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/15/79-07/22/96	4 ##	4.25	4.625	7.5	2.5	4.396	2.097	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS (MG/KG AS BE DRY WGT)	06/02/83-07/22/96	2 ##	1.725	1.725	2.5	0.95	1.201	1.096	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS Cd)	06/24/98-06/24/98	1 ##	0.05	0.05	0.05	0.	0.	**	**	**	**	
01027	CADMIUM, TOTAL (UG/L AS Cd)	04/18/71-07/14/82	15 ##	5.	4.767	10.	0.5	4.317	2.078	0.8	5.	5.	7.
01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	4 ##	0.435	0.888	2.5	0.18	1.173	1.083	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	4	33.5	41.75	74.8	25.2	504.943	22.471	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS Cr)	06/24/98-06/24/98	1	0.3	0.3	0.3	0.	0.	**	**	**	**	
01034	CHROMIUM, TOTAL (UG/L AS Cr)	04/08/70-07/14/82	24 ##	5.	12.708	90.	5.	323.868	17.996	5.	5.	10.	30.
01040	COPPER, DISSOLVED (UG/L AS Cu)	06/24/98-06/24/98	1	1.	1.	1.	0.	0.	**	**	**	**	
01042	COPPER, TOTAL (UG/L AS Cu)	04/08/70-07/14/82	24 ##	7.5	8.75	20.	5.	24.457	4.945	5.	5.	10.	20.
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS Cu DRY WGT)	08/15/79-07/22/96	4	32.	33.45	56.1	13.7	313.097	17.695	**	**	**	**
01045	IRON, TOTAL (UG/L AS Fe)	11/19/70-08/29/78	3	300.	233.333	300.	100.	13333.333	115.47	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS Fe)	06/24/98-06/24/98	1 ##	50.	50.	50.	0.	0.	**	**	**	**	
01049	LEAD, DISSOLVED (UG/L AS Pb)	06/24/98-06/24/98	1	0.2	0.2	0.2	0.	0.	**	**	**	**	
01051	LEAD, TOTAL (UG/L AS Pb)	11/19/70-07/14/82	21 ##	5.	5.007	14.	0.15	8.826	2.971	1.2	4.	5.	9.6
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS Pb DRY WGT)	08/15/79-07/22/96	4	30.2	33.1	58.	14.	364.707	19.097	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS Mn DRY WGT)	07/22/96-07/22/96	1	1430.	1430.	1430.	0.	0.	**	**	**	**	
01055	MANGANESE, TOTAL (UG/L AS Mn)	04/08/70-04/18/71	2	79.95	79.95	109.9	50.	1794.005	42.356	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS Mn)	06/24/98-06/24/98	1	14.	14.	14.	0.	0.	**	**	**	**	
01057	THALLIUM, DISSOLVED (UG/L AS Tl)	06/24/98-06/24/98	1 ##	0.1	0.1	0.1	0.	0.	**	**	**	**	
01065	NICKEL, DISSOLVED (UG/L AS Ni)	01/25/73-06/24/98	14 ##	50.	46.457	50.	0.4	175.726	13.256	25.2	50.	50.	50.
01067	NICKEL, TOTAL (UG/L AS Ni)	07/14/82-07/14/82	1 ##	5.	5.	5.	0.	0.	**	**	**	**	
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/15/79-07/22/96	4	16.5	14.275	18.7	5.4	37.583	6.13	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS Ag)	06/24/98-06/24/98	1 ##	0.05	0.05	0.05	0.	0.	**	**	**	**	
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS Ag DRY WGT)	07/02/91-07/22/96	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS Zn)	06/24/98-06/24/98	1	1.	1.	1.	0.	0.	**	**	**	**	
01092	ZINC, TOTAL (UG/L AS Zn)	09/20/67-07/14/82	25	10.	21.4	200.	5.	1536.5	39.198	5.	5.	20.	42.
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS Zn DRY WGT)	08/15/79-07/22/96	4	70.5	75.95	116.	46.8	851.21	29.176	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS Sb)	06/24/98-06/24/98	1 ##	0.05	0.05	0.05	0.	0.	**	**	**	**	
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS Sb DRY WGT)	07/22/96-07/22/96	1	13.	13.	13.	0.	0.	**	**	**	**	
01106	ALUMINUM, DISSOLVED (UG/L AS Al)	06/24/98-06/24/98	1	6.	6.	6.	0.	0.	**	**	**	**	
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS Al DRY WGT)	07/22/96-07/22/96	1	7740.	7740.	7740.	0.	0.	**	**	**	**	
01145	SELENIUM, DISSOLVED (UG/L AS Se)	06/24/98-06/24/98	1 ##	0.25	0.25	0.25	0.	0.	**	**	**	**	
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS Se DRY WGT)	06/02/83-07/22/96	2 ##	3.05	3.05	5.6	0.5	13.005	3.606	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS Fe DRY WGT)	07/22/96-07/22/96	1	26600.	26600.	26600.	26600.	0.	0.	**	**	**	**
31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	09/20/67-09/08/70	7	2400.	6217.143	23000.	270.	68205890.476	8258.686	**	**	**	**
31505	LOG COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	09/20/67-09/08/70	7	3.38	3.418	4.362	2.431	0.445	0.667	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	266	200.	752.068	20000.	50.	3383363.633	1839.392	50.	50.	600.	1630.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	266	2.301	2.359	4.301	1.699	0.375	0.612	1.699	1.699	2.778	3.212
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	266	2.301	2.359	4.301	1.699	0.375	0.612	1.699	1.699	2.778	3.212
32240	TANNIN AND LIGNIN (MG/L)	12/01/92-12/01/92	1	0.4	0.4	0.4	0.	0.	**	**	**	**	
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/16/82-01/18/83	2 ##	0.002	0.002	0.004	0.001	0.	0.002	**	**	**	**
34480	THALLIUM DRY WGT BOTMG/KG	06/02/83-06/02/83	1	1.9	1.9	1.9	0.	0.	**	**	**	**	
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL (UG/KG)	07/02/91-07/22/96	2 ##	15.003	15.003	30.	0.005	449.85	21.21	**	**	**	**
39062	CHLORDANE-CIS ISOMER, WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	
39065	CHLORDANE-TRANS ISOMER, WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	
39068	CHLORDANE-NONACHLOR, CIS ISO, WHOLE WTR (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	
39071	CHLORDANE-NONACHLOR, TRANS ISO, WHOLE WTR (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**	

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/14/82	3	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/02/83-07/22/96	3 ##	15.	21.673	50.	0.02	657.9	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/02/91-07/22/96	2 ##	7.75	7.75	15.	0.5	105.125	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	7.525	7.525	15.	0.05	111.751	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	7.525	7.525	15.	0.05	111.751	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	2 ##	32.75	32.75	65.	0.5	2080.125	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/02/91-07/22/96	2 ##	132.5	132.5	250.	15.	27612.5	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/14/82-07/14/82	1	0.	0.	0.	0.	0.	**	**	**	**
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/02/83-06/02/83	1	0.03	0.03	0.03	0.03	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/29/82-08/12/85	7	0.	0.014	0.1	0.	0.001	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	60	0.2	0.191	0.5	0.05	0.012	**	0.05	0.1	0.238
70507p	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	136	0.09	0.111	0.46	0.01	0.008	**	0.027	0.05	0.14
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/24/98-06/24/98	1 ##	0.1	0.1	0.1	0.1	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	23 ##	0.25	0.272	0.6	0.15	0.008	**	0.25	0.25	0.4
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/15/79-07/22/96	4	1.1	2.8	8.9	0.1	16.787	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/02/91-07/22/96	2 ##	27.5	27.5	50.	5.	1012.5	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/02/91-07/22/96	2 ##	40.	40.	50.	30.	200.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/18/92-06/20/94	23	2.4	3.761	12.1	1.1	9.616	**	1.3	1.8	5.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0162

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----					
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	26	1	0.04	6	1	0.17	14	0	0.00	6	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	53	1	0.02	17	0	0.00	20	1	0.05	16	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	81	0	0.00	25	0	0.00	31	0	0.00	25	0	0.00			
00300	OXYGEN, DISSOLVED	4.	214	0	0.00	64	0	0.00	90	0	0.00	60	0	0.00			
00400	PH	9.	297	24	0.08	91	12	0.13	122	8	0.07	84	4	0.05			
	Other-Lo Lim.	6.5	297	1	0.00	91	0	0.00	122	1	0.01	84	0	0.00			
00403	PH, LAB	9.	148	0	0.00	44	0	0.00	61	0	0.00	43	0	0.00			
	Other-Lo Lim.	6.5	148	1	0.01	44	0	0.00	61	0	0.00	43	1	0.02			
00615	NITRITE NITROGEN, TOTAL AS N	1.	257	0	0.00	74	0	0.00	107	0	0.00	76	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	250	0	0.00	71	0	0.00	103	0	0.00	76	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	10.	8	0	0.00	3	0	0.00	4	0	0.00	1	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	860.	102	0	0.00	28	0	0.00	43	0	0.00	31	0	0.00			
	Drinking Water	250.	102	0	0.00	28	0	0.00	43	0	0.00	31	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	101	0	0.00	28	0	0.00	42	0	0.00	31	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	30	0	0.00	9	0	0.00	14	0	0.00	7	0	0.00			
01000	ARSENIC, DISSOLVED	360.	1	0	0.00							1	0	0.00			
	Drinking Water	50.	1	0	0.00							1	0	0.00			
01002	ARSENIC, TOTAL	360.	11	0	0.00	6	0	0.00	3	0	0.00	2	0	0.00			
	Drinking Water	50.	11	0	0.00	6	0	0.00	3	0	0.00	2	0	0.00			
01025	CADMIUM, DISSOLVED	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01027	CADMIUM, TOTAL	3.9	3 &	1	0.33	2	0	0.00				1	1	1.00			
	Drinking Water	5.	3 &	1	0.33	2	0	0.00				1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

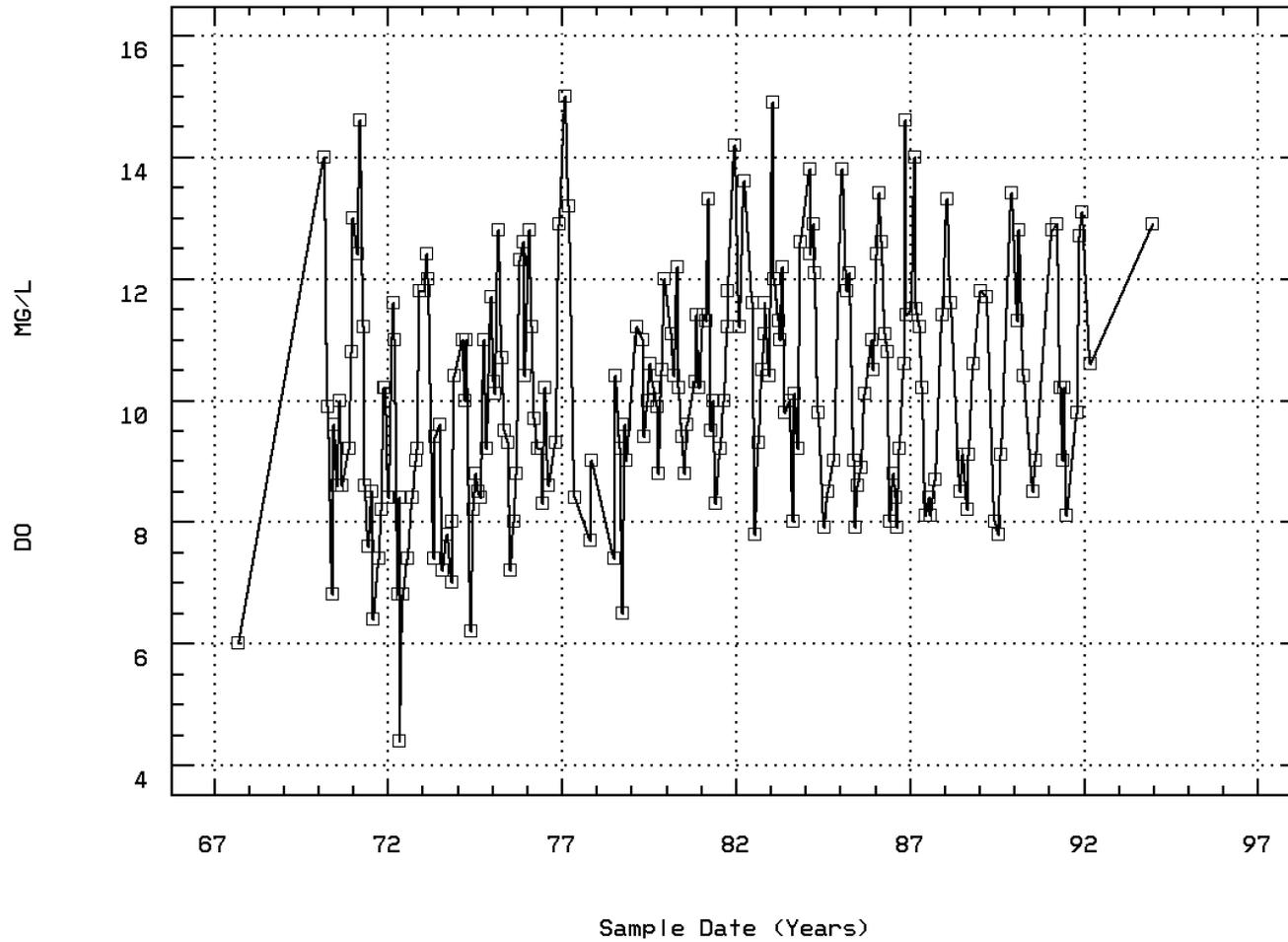
EPA Water Quality Criteria Analysis for Station: SHEN0162

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01030 CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	24	0	0.00	8	0	0.00	9	0	0.00	7	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	24	3	0.13	8	0	0.00	9	1	0.11	7	2	0.29			
	Drinking Water	1300.	24	0	0.00	8	0	0.00	9	0	0.00	7	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	21	0	0.00	8	0	0.00	9	0	0.00	4	0	0.00			
	Drinking Water	15.	21	0	0.00	8	0	0.00	9	0	0.00	4	0	0.00			
01057 THALLIUM, DISSOLVED	Fresh Acute	1400.	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	14	0	0.00	5	0	0.00	4	0	0.00	5	0	0.00			
	Drinking Water	100.	14	0	0.00	5	0	0.00	4	0	0.00	5	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
	Drinking Water	100.	1	0	0.00	1	0	0.00									
01075 SILVER, DISSOLVED	Fresh Acute	4.1	1	0	0.00							1	0	0.00			
	Drinking Water	100.	1	0	0.00							1	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	25	1	0.04	9	1	0.11	9	0	0.00	7	0	0.00			
	Drinking Water	5000.	25	0	0.00	9	0	0.00	9	0	0.00	7	0	0.00			
01095 ANTIMONY, DISSOLVED	Fresh Acute	88.	1	0	0.00							1	0	0.00			
	Drinking Water	6.	1	0	0.00							1	0	0.00			
01145 SELENIUM, DISSOLVED	Fresh Acute	20.	1	0	0.00							1	0	0.00			
	Drinking Water	50.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	7	5	0.71	4	3	0.75				3	2	0.67			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	266	142	0.53	76	47	0.62	111	49	0.44	79	46	0.58			
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	2	0	0.00	2	0	0.00									
	Drinking Water	1.	2	0	0.00	2	0	0.00									
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	2	0	0.00	2	0	0.00									
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	2	0	0.00	2	0	0.00									
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	2	0	0.00	2	0	0.00									
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	3	0	0.00	3	0	0.00									
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
	Drinking Water	2.	2	0	0.00	2	0	0.00									
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	2	0	0.00	2	0	0.00									
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	2	0	0.00	2	0	0.00									
	Drinking Water	2.	2	0	0.00	2	0	0.00									
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	2	0	0.00									
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00	1	0	0.00									
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	2	0	0.00									
	Drinking Water	1.	2	0	0.00	2	0	0.00									
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	7	1	0.14	4	1	0.25				3	0	0.00			
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	23	0	0.00	8	0	0.00	9	0	0.00	6	0	0.00			
	Drinking Water	2.	23	0	0.00	8	0	0.00	9	0	0.00	6	0	0.00			
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	23	0	0.00	5	0	0.00	9	0	0.00	9	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station: SHEN0162 Parameter Code: 00300

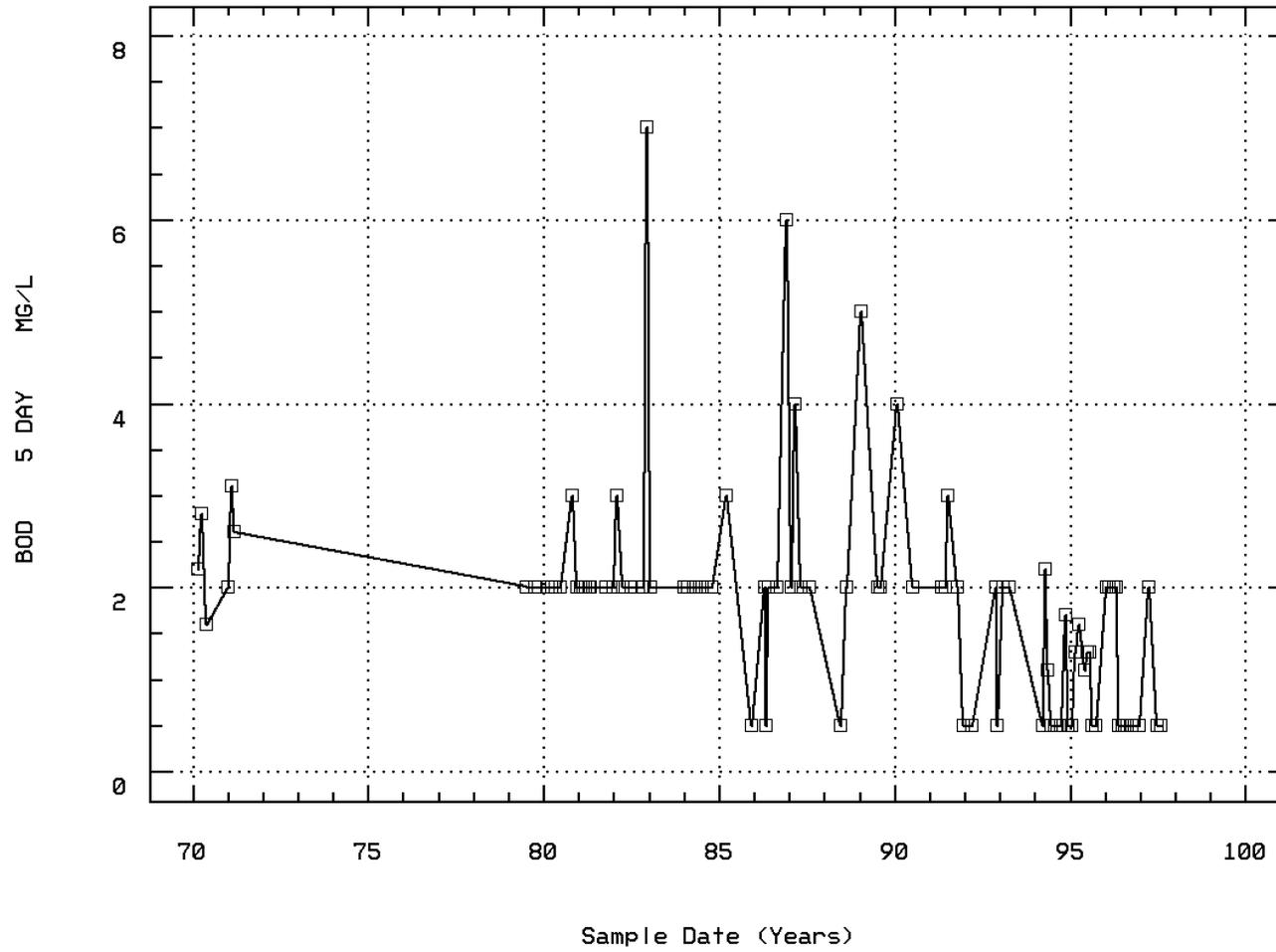
OXYGEN, DISSOLVED



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00310

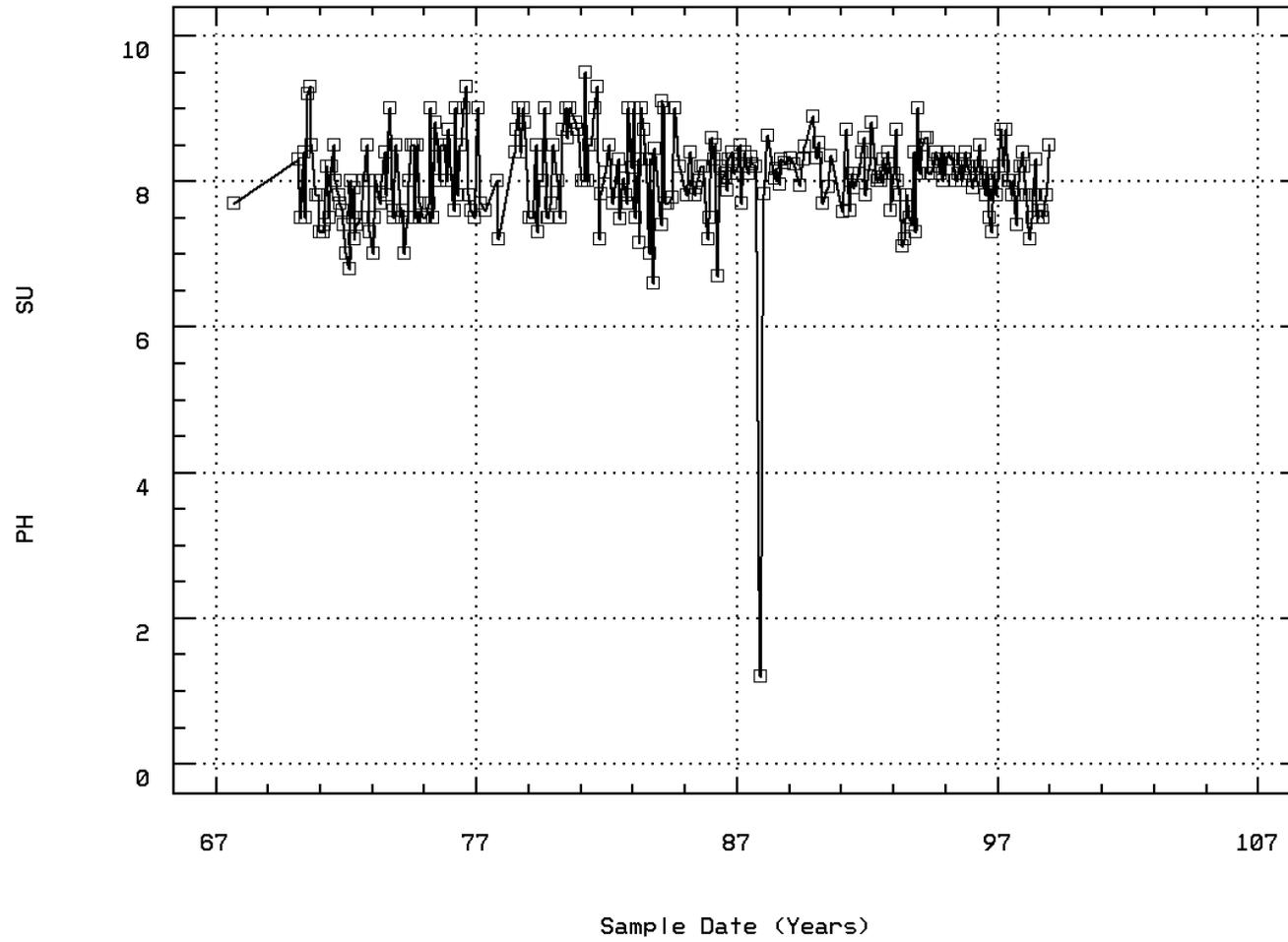
BOD, 5 DAY, 20 DEG C



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00400

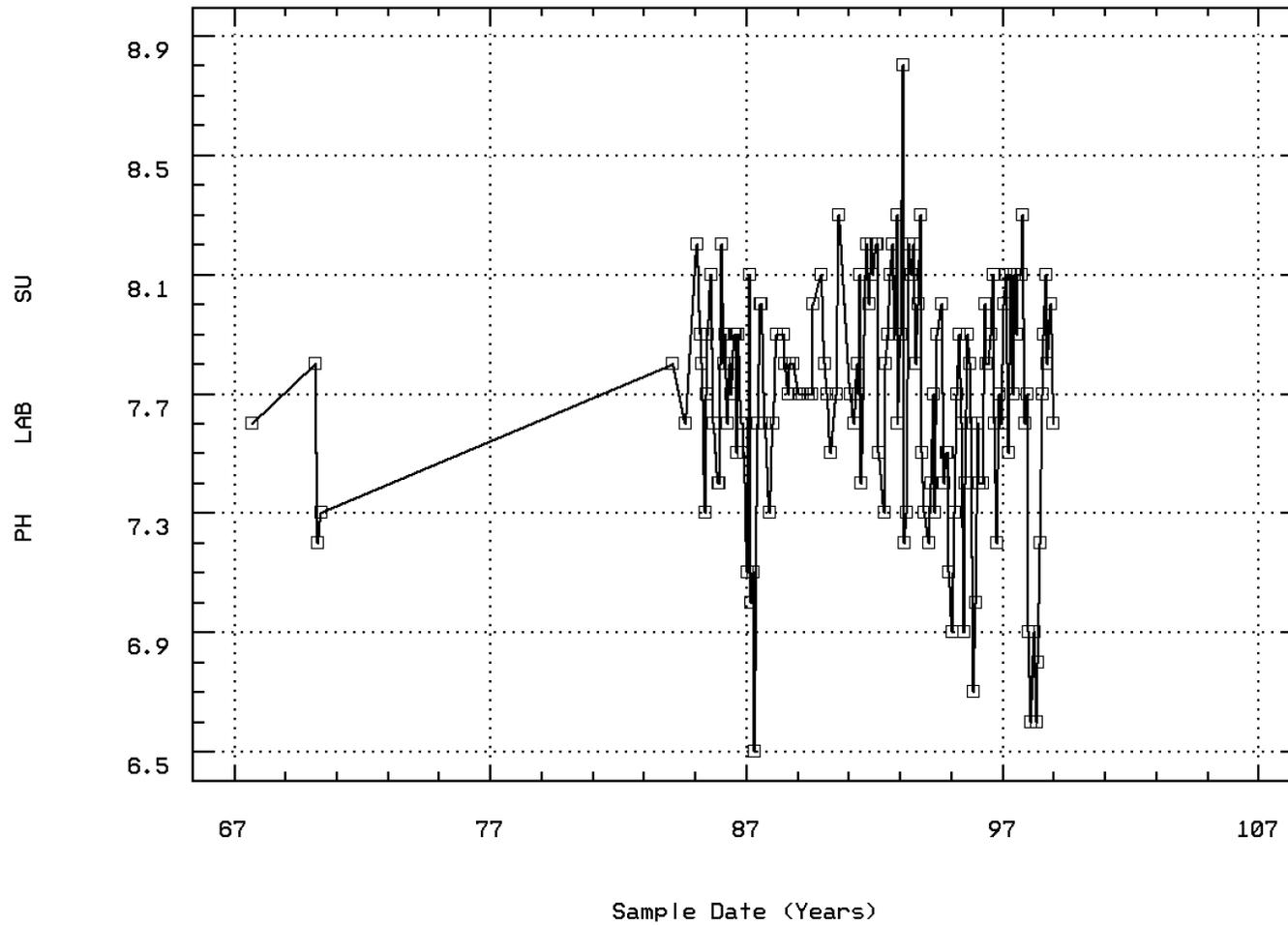
PH (STANDARD UNITS)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00403

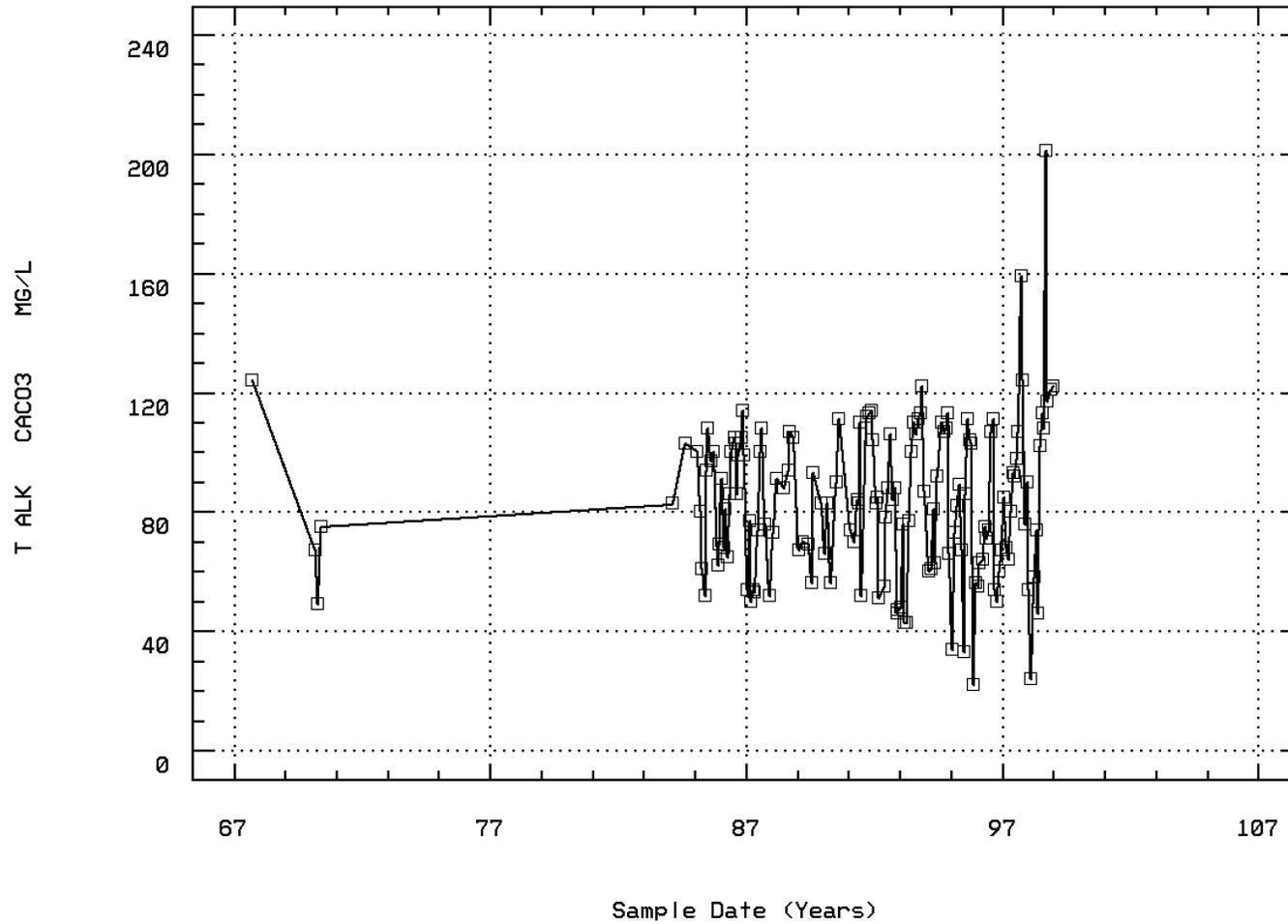
PH, LAB, STANDARD UNITS



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00410

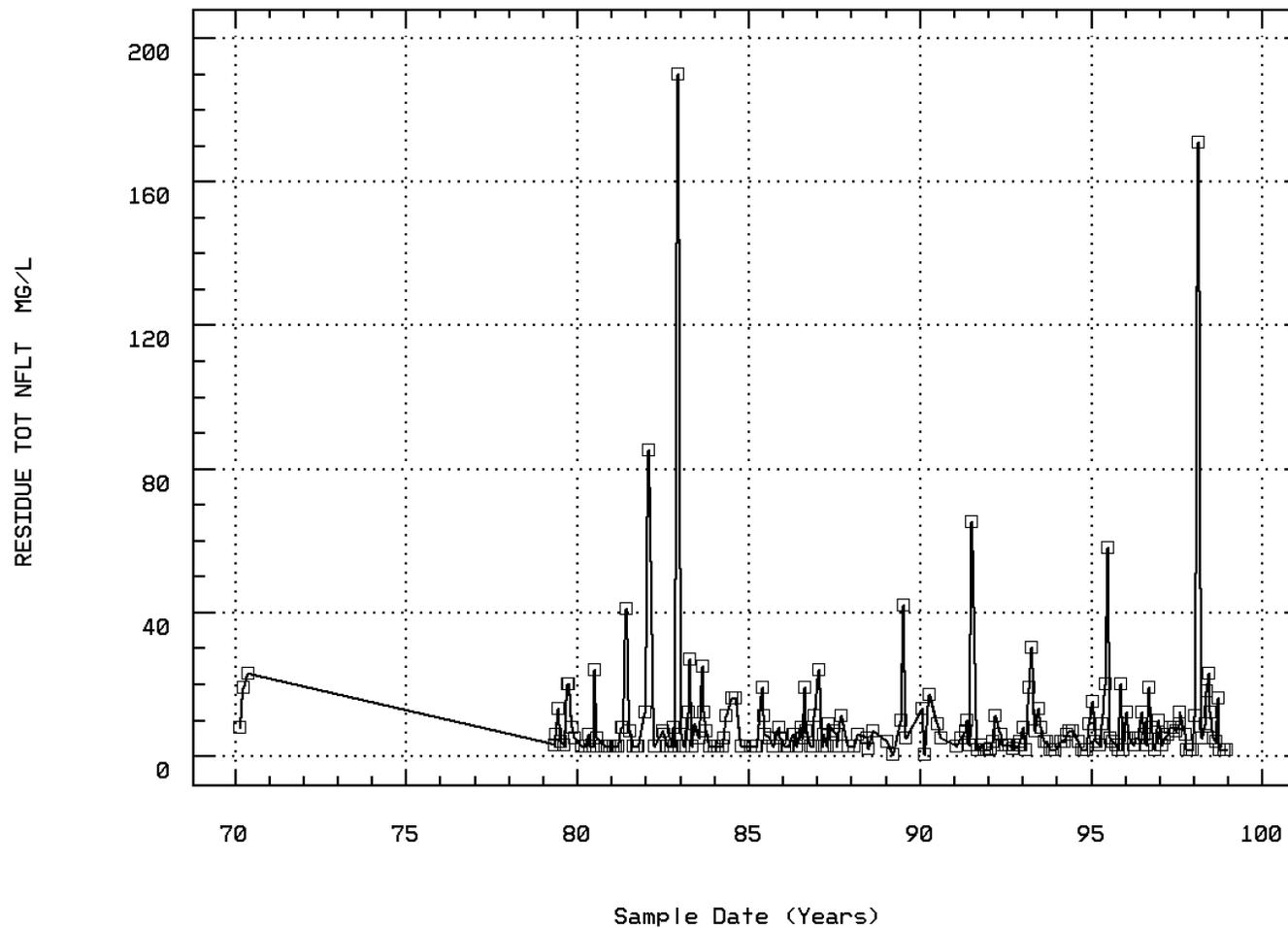
ALKALINITY, TOTAL (MG/L AS CaCO3)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00530

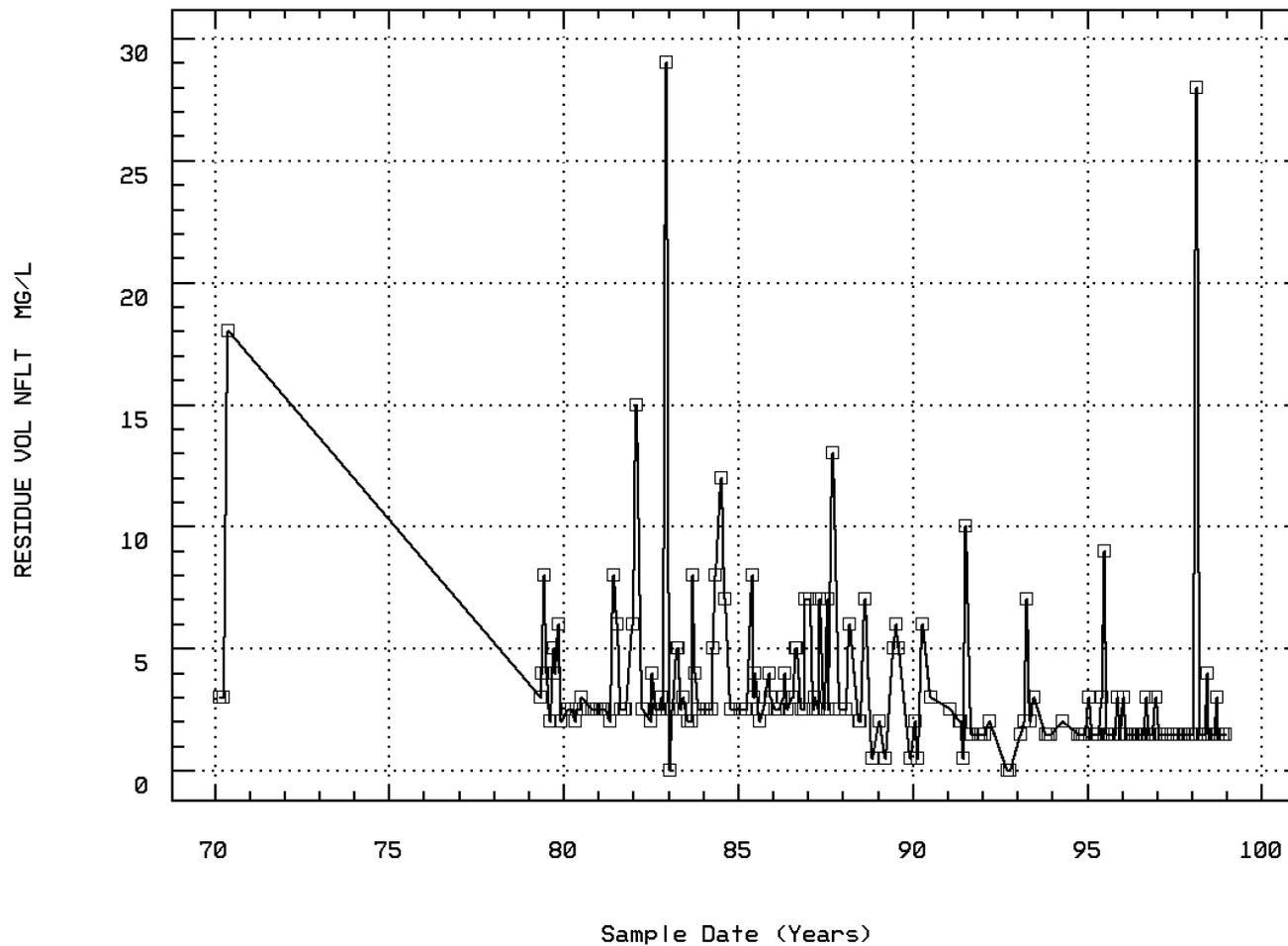
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00535

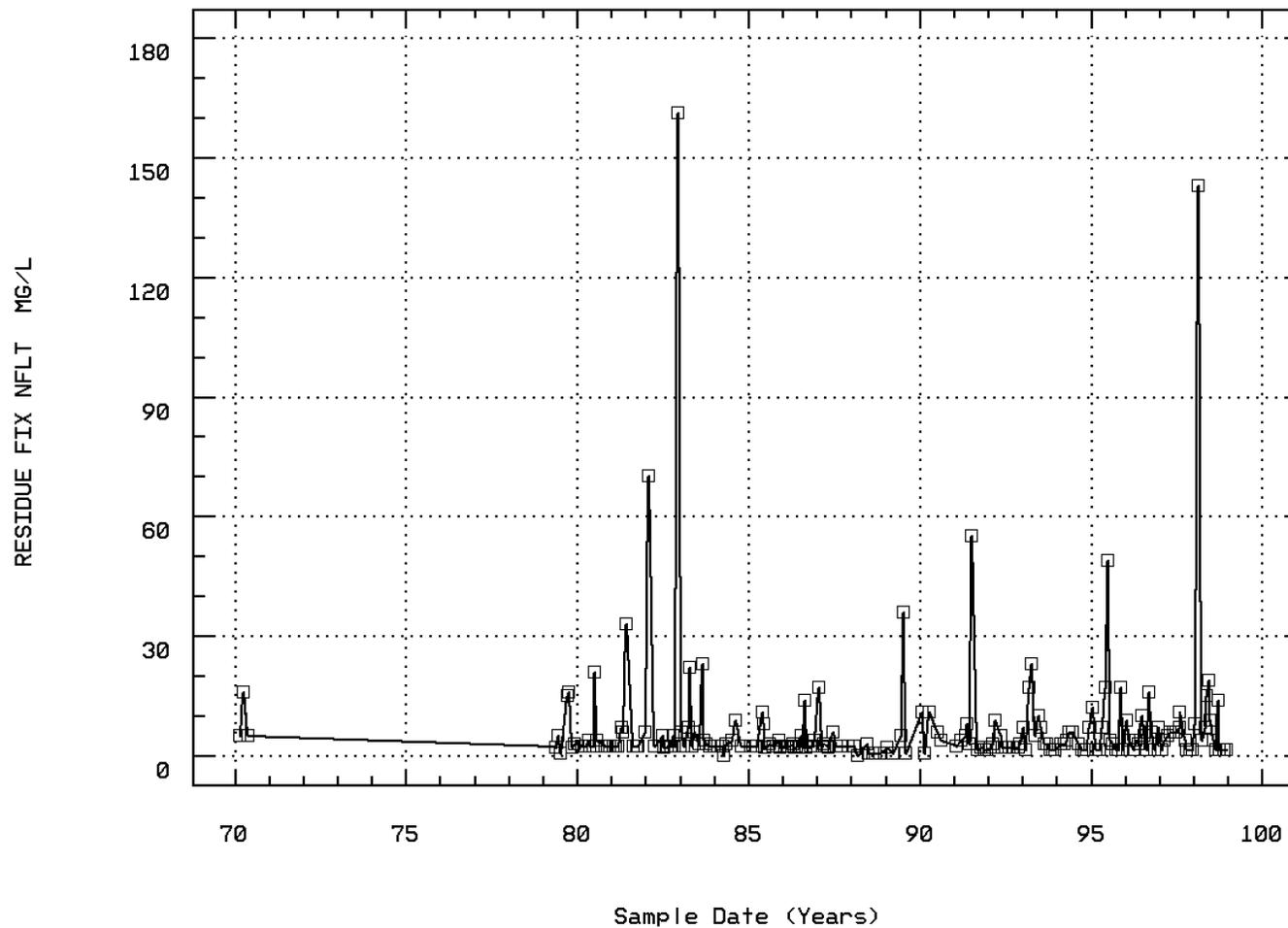
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00540

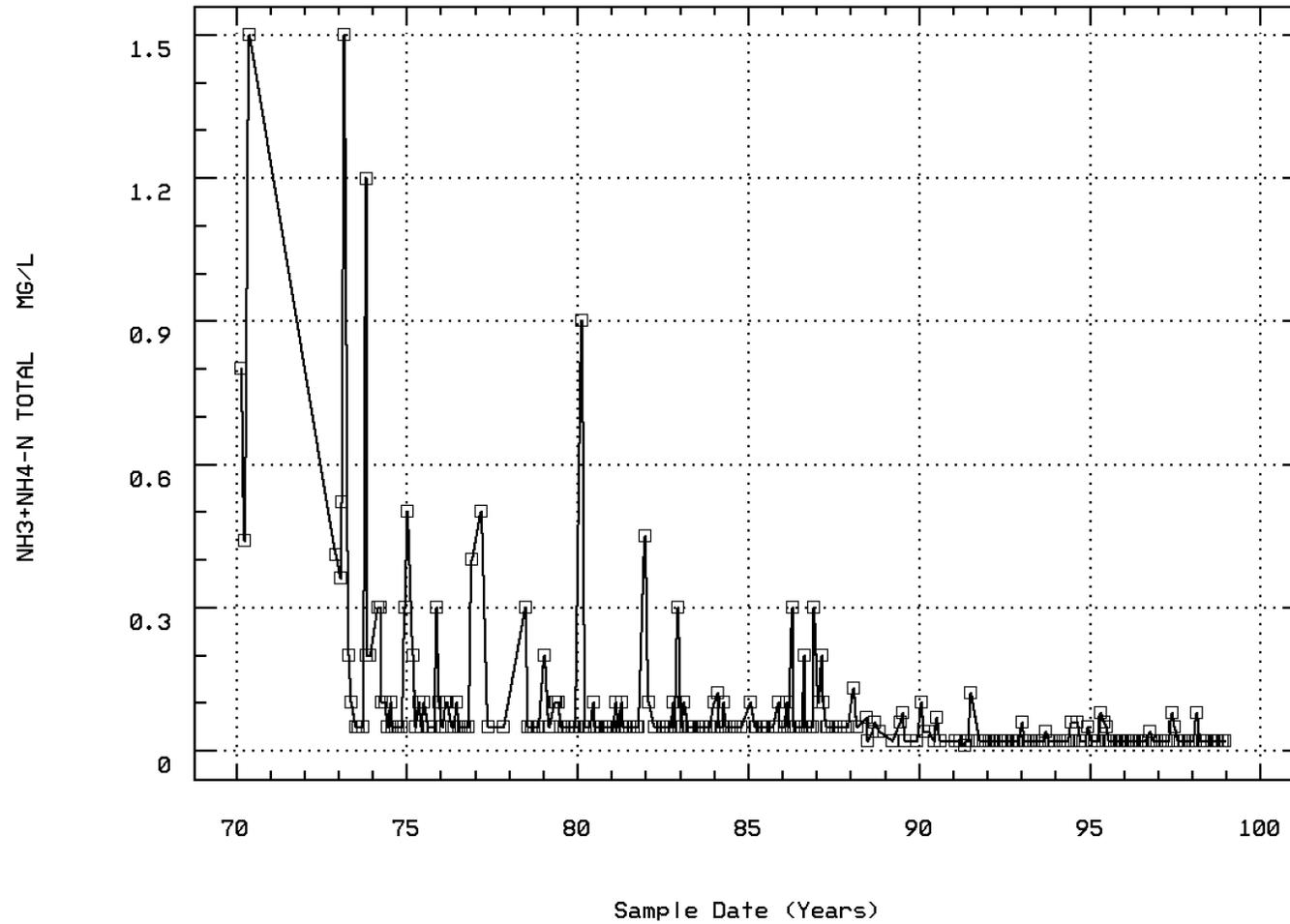
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00610

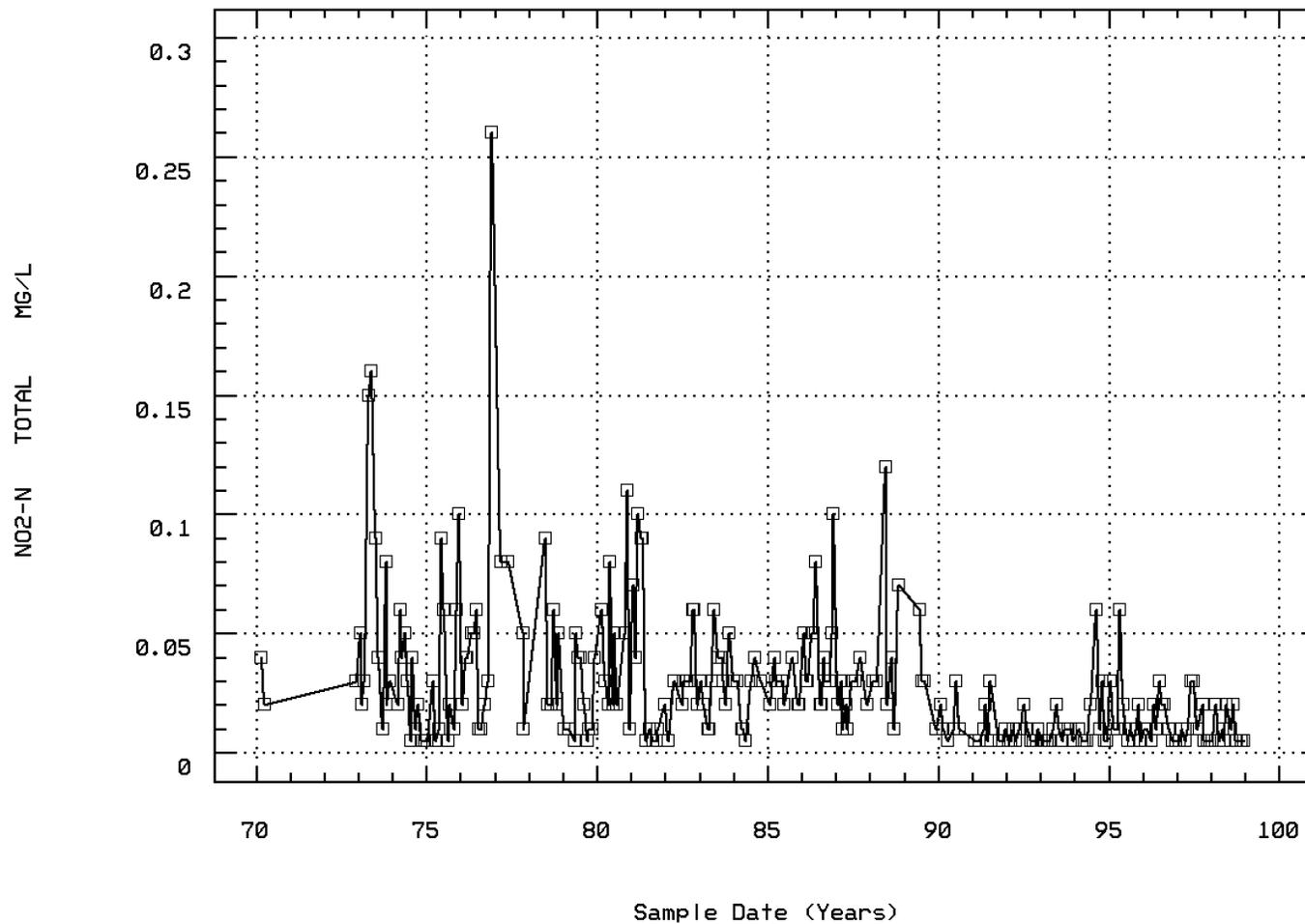
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00615

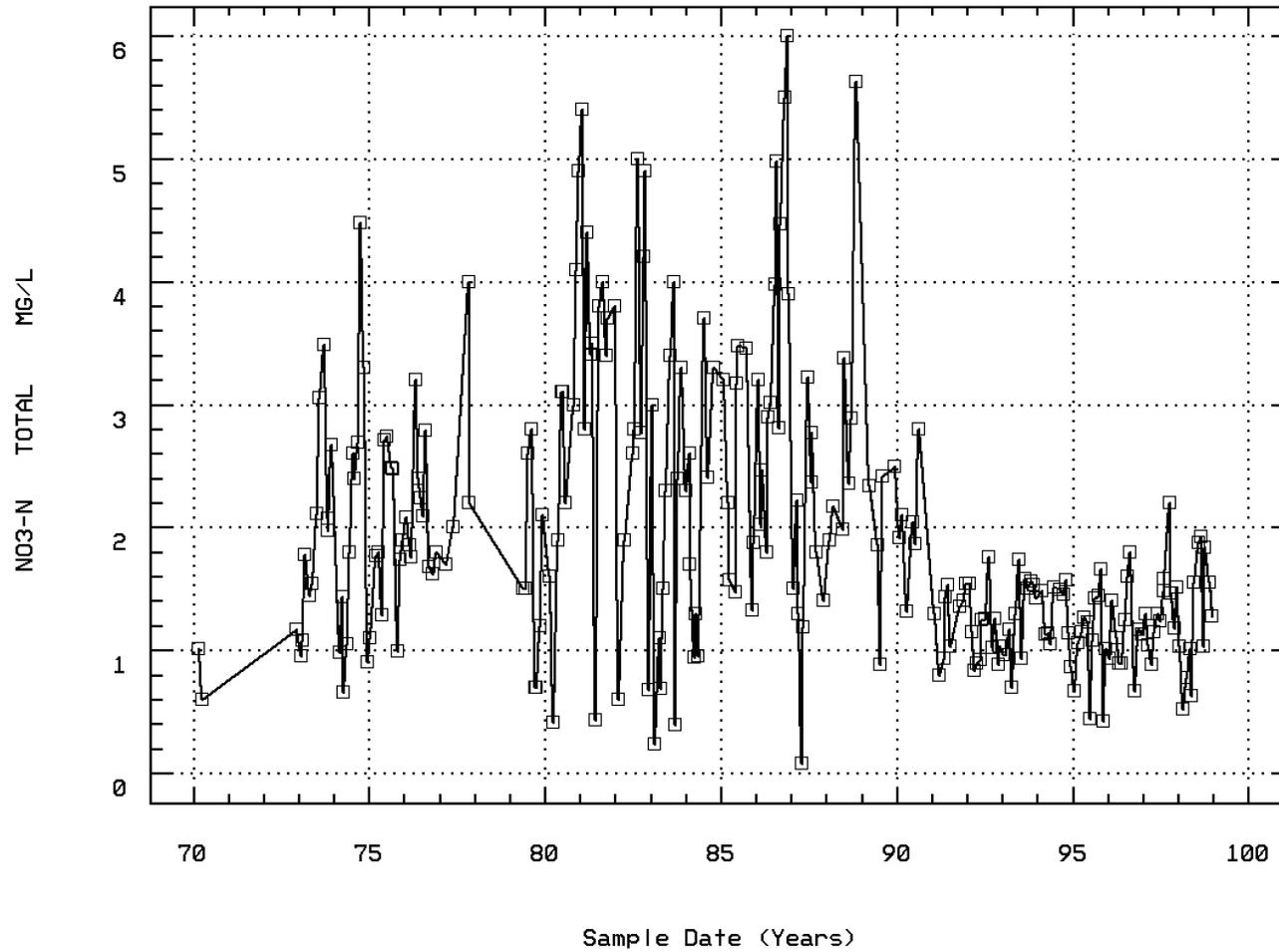
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00620

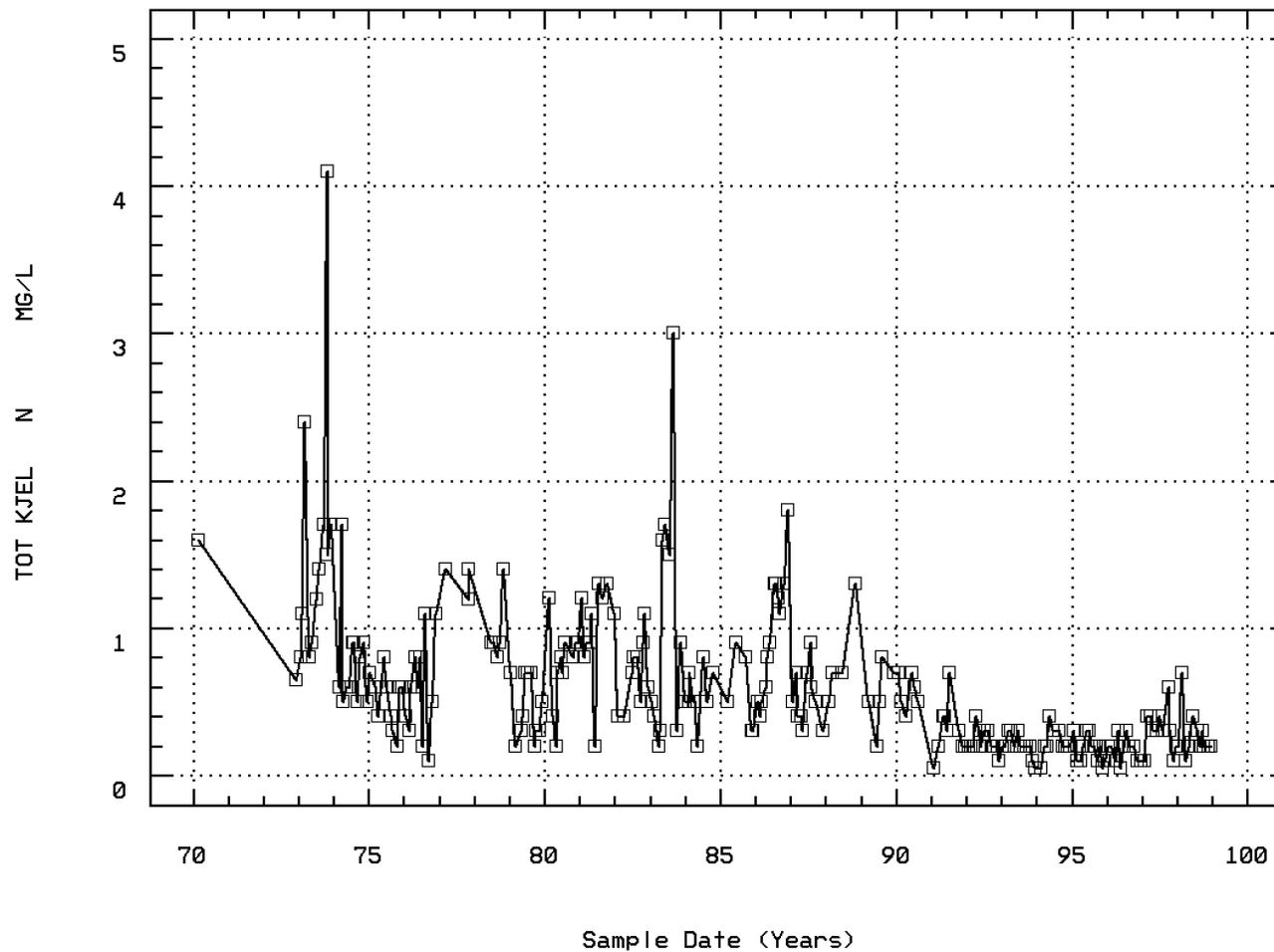
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00625

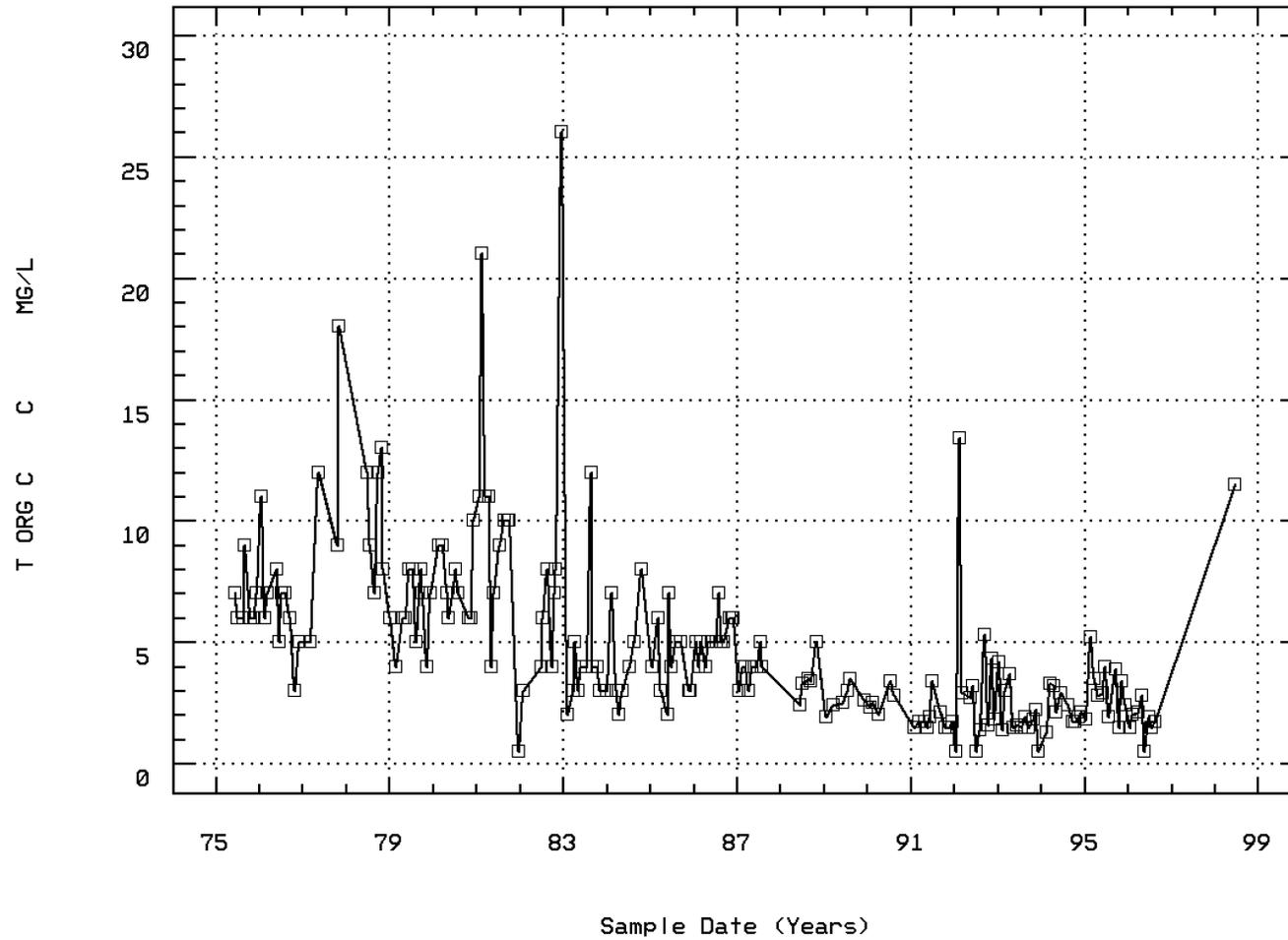
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00680

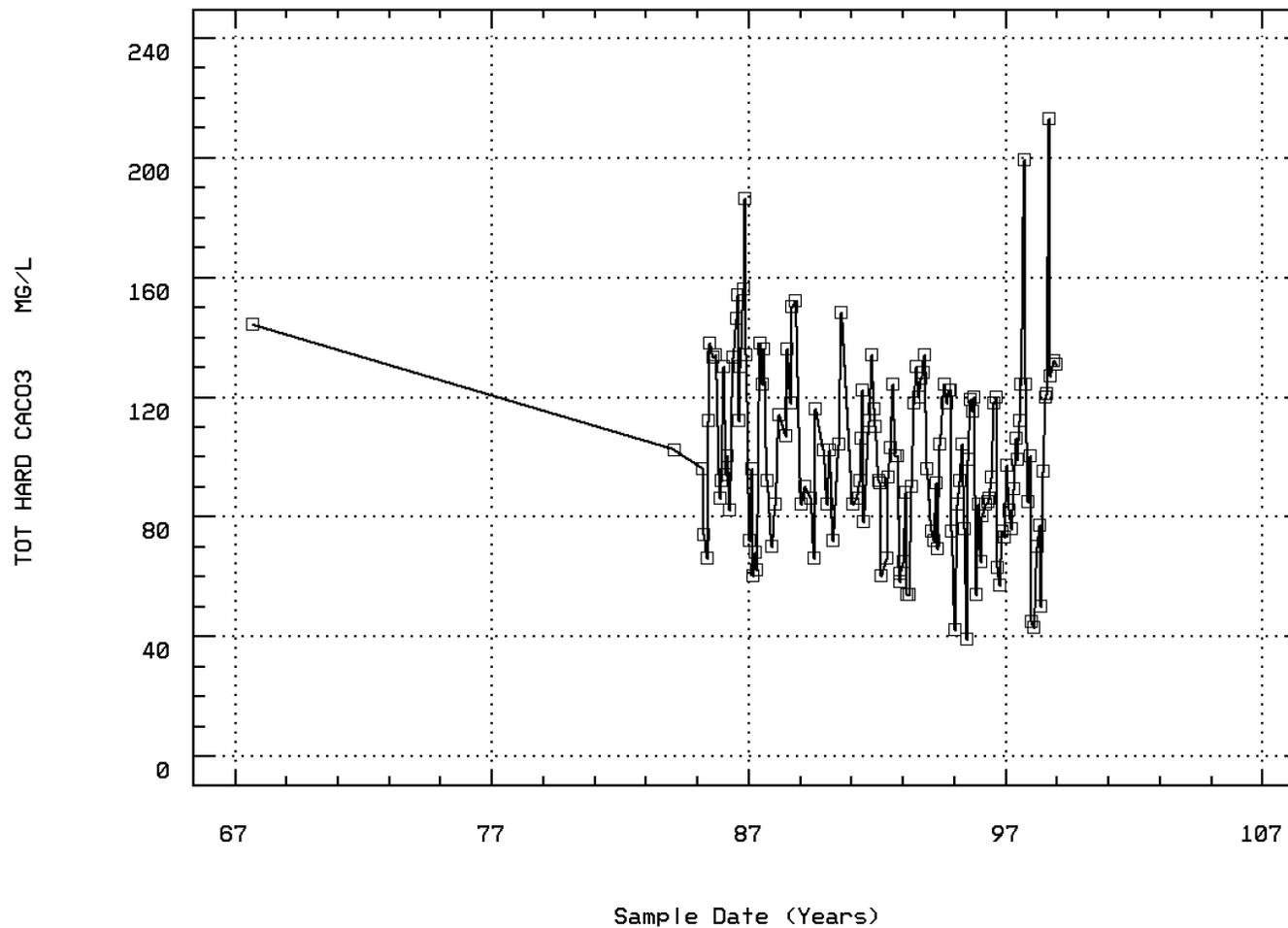
CARBON, TOTAL ORGANIC (MG/L AS C)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00900

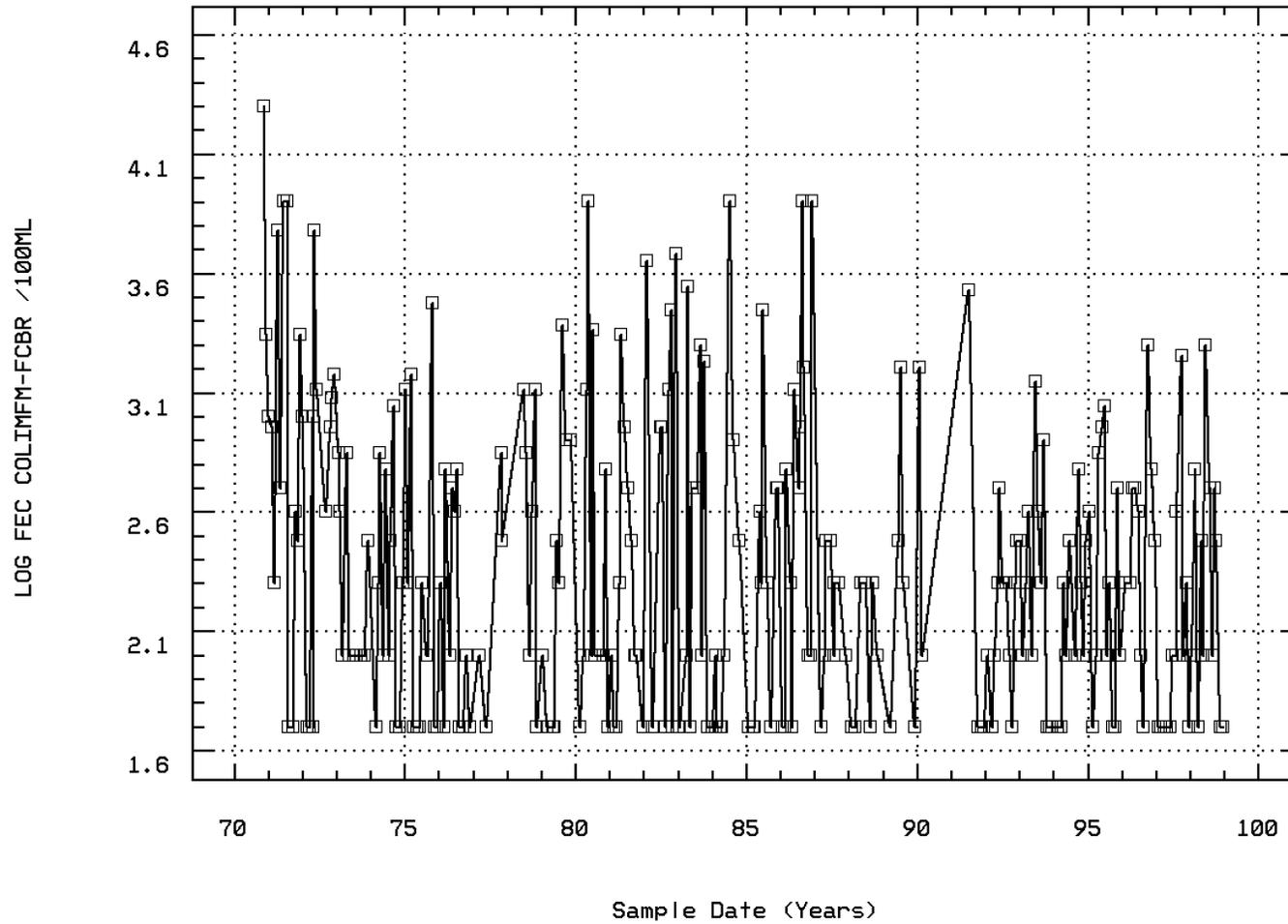
HARDNESS, TOTAL (MG/L AS CaCO3)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 31616

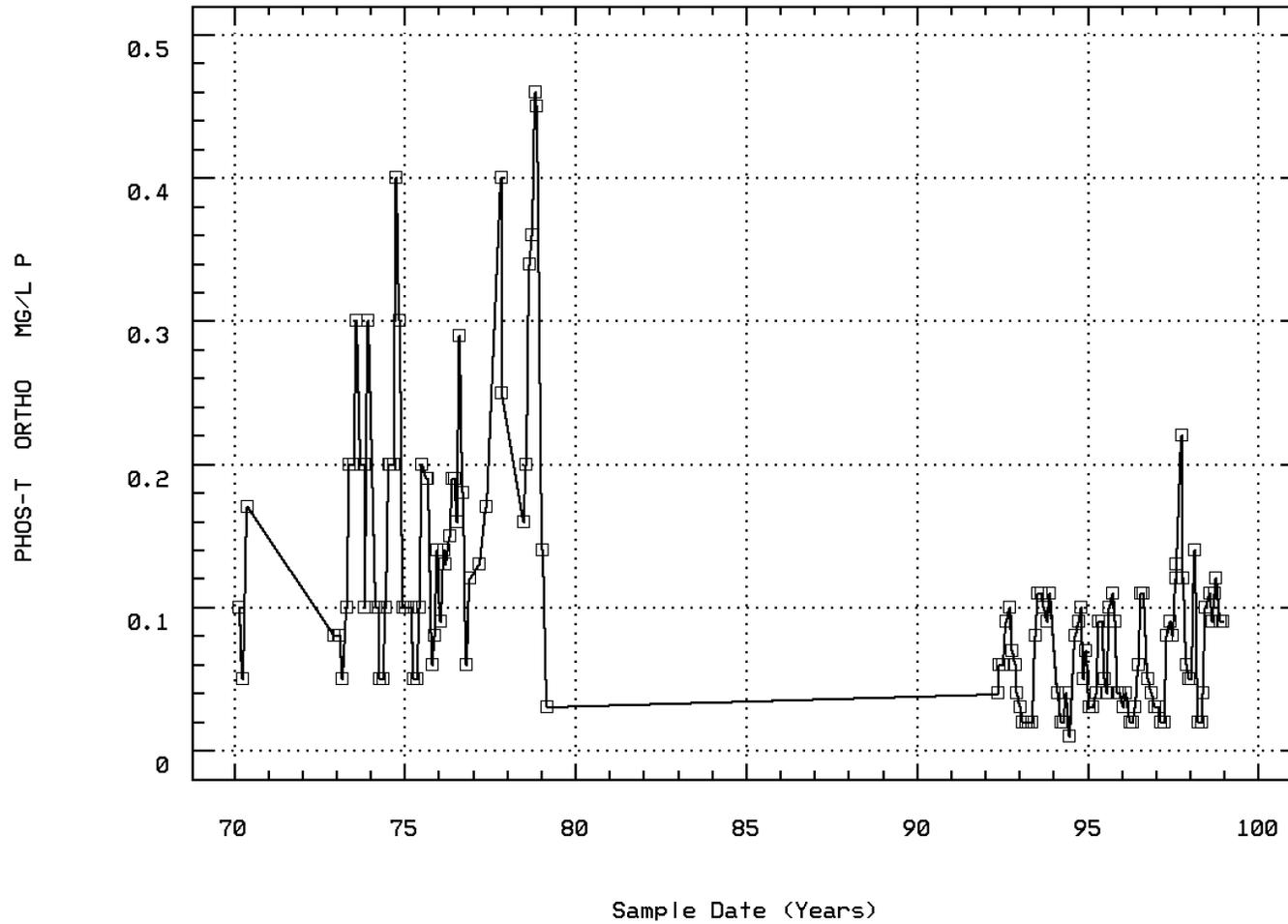
LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 70507

PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



RT. 778 AT HARRISONBURG

Annual Analysis for 1967 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	1	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	1	124.	124.	124.	124.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	1	144.	144.	144.	144.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	9	18.9	16.422	25.6	6.7	55.074	7.421	6.7	9.4	23.05	25.6
00060	FLOW, STREAM, MEAN DAILY CFS	03/02/70-09/20/73	9	108.	162.778	348.	62.	11342.444	106.501	62.	68.	253.	348.
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	9	9.6	9.722	14.	6.8	3.864	1.966	6.8	8.6	10.4	14.
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	3	2.2	2.2	2.8	1.6	0.36	0.6	**	**	**	**
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	9	8.3	8.256	9.3	7.5	0.453	0.673	7.5	7.65	8.85	9.3
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	9	8.3	7.92	9.3	7.5	0.58	0.761	7.5	7.65	8.85	9.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	9	0.005	0.012	0.032	0.001	0.	0.013	0.001	0.002	0.024	0.032
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	3	7.3	7.433	7.8	7.2	0.103	0.321	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	3	7.3	7.366	7.8	7.2	0.11	0.332	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	3	0.05	0.043	0.063	0.016	0.001	0.024	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	3	67.	63.667	75.	49.	177.333	13.317	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	3	19.	16.667	23.	8.	60.333	7.767	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	3	3.	8.	18.	3.	75.	8.66	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	3	5.	8.667	16.	5.	40.333	6.351	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	3	0.8	0.913	1.5	0.44	0.291	0.539	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	2	0.03	0.03	0.04	0.02	0.	0.014	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	2	0.805	0.805	1.009	0.6	0.084	0.289	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	3	1.	1.2	1.599	1.	0.12	0.346	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	2	11100.	11100.	20000.	2200.	158420000.	12586.501	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	2	3.822	3.822	4.301	3.342	0.459	0.678	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			6633.25								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	3	0.15	0.167	0.25	0.1	0.006	0.076	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	3	0.1	0.107	0.17	0.05	0.004	0.06	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	12	15.85	14.275	25.	5.	45.131	6.718	5.18	6.425	19.725	23.68
00060	FLOW, STREAM, MEAN DAILY CFS	03/02/70-09/20/73	12	213.	263.75	620.	94.	24901.477	157.802	100.	142.25	385.	562.1
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	12	9.4	9.858	14.6	6.4	6.375	2.525	6.7	7.75	12.1	14.12
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	3	2.6	2.567	3.1	2.	0.303	0.551	**	**	**	**
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	12	7.65	7.742	8.5	7.3	0.161	0.401	7.3	7.4	8.15	8.41
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	12	7.647	7.605	8.5	7.3	0.181	0.426	7.3	7.4	8.15	8.41
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.023	0.025	0.05	0.003	0.	0.017	0.004	0.007	0.04	0.05
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	700.	2300.	8000.	50.	9792272.727	3129.261	50.	225.	5050.	8000.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	2.827	2.863	3.903	1.699	0.593	0.77	1.699	2.345	3.669	3.903
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			729.754								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	12	16.15	13.983	20.	4.4	31.858	5.644	4.4	10.15	18.3	20.
00060	FLOW, STREAM, MEAN DAILY CFS	03/02/70-09/20/73	12	280.5	369.167	910.	96.	52683.424	229.529	120.6	243.75	514.75	829.9
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	12	8.4	8.6	11.8	4.4	4.655	2.157	5.12	6.95	10.55	11.74
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	12	7.5	7.592	8.5	6.8	0.244	0.494	6.86	7.225	8.	8.35
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	12	7.5	7.363	8.5	6.8	0.302	0.549	6.86	7.225	8.	8.35
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.032	0.043	0.158	0.003	0.002	0.046	0.005	0.01	0.06	0.141
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	1	0.41	0.41	0.41	0.41	0.	0.	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	1	1.169	1.169	1.169	1.169	0.	0.	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	1	0.65	0.65	0.65	0.65	0.	0.	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	1000.	1222.727	6000.	50.	2791181.818	1670.683	50.	50.	1300.	5100.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	3.	2.709	3.778	1.699	0.496	0.705	1.699	1.699	3.114	3.658
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			511.851								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	11	16.7	14.745	24.4	4.4	51.867	7.202	4.86	6.7	21.1	24.18
00060	FLOW, STREAM, MEAN DAILY CFS	03/02/70-09/20/73	9	268.	272.667	560.	78.	26316.	162.222	78.	108.5	389.5	560.
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	11	9.4	9.364	12.4	7.	4.167	2.041	7.04	7.4	11.8	12.32
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	11	7.8	7.909	9.	7.	0.311	0.558	7.1	7.5	8.4	8.9
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	11	7.8	7.639	9.	7.	0.391	0.625	7.1	7.5	8.4	8.9
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	11	0.016	0.023	0.1	0.001	0.001	0.028	0.001	0.004	0.032	0.086
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.2	0.403	1.5	0.05	0.244	0.494	0.05	0.05	0.52	1.44
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.04	0.062	0.16	0.01	0.003	0.052	0.012	0.02	0.09	0.158
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	1.979	2.015	3.489	0.95	0.632	0.795	0.976	1.449	2.669	3.403
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	11	1.399	1.599	4.099	0.8	0.914	0.956	0.8	0.9	1.699	3.759
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	100.	270.	700.	100.	62333.333	249.666	100.	100.	475.	700.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	2.	2.277	2.845	2.	0.139	0.373	2.	2.	2.663	2.845
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			189.207								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.186	0.4	0.05	0.014	0.116	0.05	0.05	0.3	0.38
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	11	0.2	0.165	0.3	0.05	0.008	0.088	0.056	0.08	0.2	0.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	11	17.8	15.727	24.4	4.4	43.262	6.577	4.96	11.1	21.7	24.12
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	11	9.2	9.455	11.7	6.2	2.719	1.649	6.6	8.4	11.	11.56
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	11	7.6	7.8	8.5	7.	0.256	0.506	7.1	7.5	8.5	8.5
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	11	7.6	7.577	8.5	7.	0.31	0.557	7.1	7.5	8.5	8.5
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	11	0.025	0.026	0.1	0.003	0.001	0.027	0.003	0.003	0.032	0.086
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.1	0.132	0.3	0.05	0.012	0.11	0.05	0.05	0.3	0.3
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.02	0.026	0.06	0.005	0.	0.019	0.005	0.005	0.04	0.058
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	1.799	2.027	4.479	0.66	1.412	1.188	0.708	0.98	2.689	4.243
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	11	0.6	0.773	1.699	0.5	0.122	0.349	0.5	0.5	0.9	1.539
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	200.	313.636	1100.	50.	117545.455	342.849	50.	50.	600.	1020.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	2.301	2.258	3.041	1.699	0.235	0.485	1.699	1.699	2.778	3.002
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			181.238								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.195	0.4	0.05	0.009	0.096	0.06	0.1	0.2	0.38

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	11	0.1	0.164	0.4	0.05	0.012	0.11	0.05	0.1	0.2	0.38

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	12	15.3	14.783	23.9	4.4	53.242	7.297	5.24	8.075	22.625	23.9
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	12	10.2	10.167	12.8	7.2	3.121	1.767	7.44	8.925	11.9	12.74
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	12	8.25	8.183	9.	7.5	0.302	0.549	7.5	7.55	8.65	8.94
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	12	8.182	7.906	9.	7.5	0.385	0.621	7.5	7.55	8.65	8.94
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.007	0.012	0.032	0.001	0.	0.013	0.001	0.002	0.029	0.032
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.1	0.141	0.5	0.05	0.02	0.143	0.05	0.05	0.2	0.46
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.02	0.036	0.1	0.005	0.001	0.036	0.005	0.005	0.06	0.098
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	1.799	1.909	2.739	0.99	0.394	0.627	1.012	1.289	2.489	2.733
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	11	0.6	0.527	0.8	0.2	0.032	0.179	0.22	0.4	0.6	0.78
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	7	6.	6.714	9.	6.	1.238	1.113	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	100.	554.167	3000.	50.	851571.97	922.807	50.	50.	1025.	2550.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	2.	2.239	3.477	1.699	0.432	0.658	1.699	1.699	2.911	3.387
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			173.25								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.155	0.4	0.05	0.01	0.101	0.05	0.1	0.2	0.36
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	11	0.1	0.115	0.2	0.05	0.003	0.057	0.05	0.06	0.19	0.198

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	11	15.6	15.173	27.8	2.8	66.164	8.134	2.8	10.	22.8	26.8
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	10	9.5	10.14	12.9	8.3	2.694	1.641	8.33	9.05	11.6	12.89
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	11	8.	8.236	9.3	7.5	0.423	0.65	7.52	7.6	9.	9.24
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	11	8.	7.92	9.3	7.5	0.533	0.73	7.52	7.6	9.	9.24
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	11	0.01	0.012	0.032	0.001	0.	0.011	0.001	0.001	0.025	0.03
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	11 ##	0.05	0.095	0.4	0.05	0.011	0.104	0.05	0.05	0.1	0.34
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.04	0.054	0.26	0.01	0.005	0.07	0.01	0.02	0.05	0.22
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	2.079	2.137	3.199	1.619	0.245	0.495	1.631	1.759	2.399	3.117
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	11	0.6	0.591	1.099	0.1	0.113	0.336	0.12	0.3	0.8	1.099
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	10	6.5	6.5	11.	3.	4.5	2.121	3.2	5.	7.25	10.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	100.	245.455	600.	50.	53727.273	231.791	50.	50.	500.	600.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	2.	2.178	2.778	1.699	0.217	0.466	1.699	1.699	2.699	2.778
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			150.542								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.186	0.3	0.05	0.006	0.078	0.06	0.1	0.2	0.3
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	11	0.15	0.155	0.29	0.06	0.004	0.061	0.066	0.12	0.19	0.27

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	5	10.5	11.18	25.	1.5	87.637	9.361	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	5	9.	10.66	15.	7.7	10.478	3.237	**	**	**	**
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	5	7.7	7.9	9.	7.2	0.46	0.678	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	5	7.7	7.623	9.	7.2	0.556	0.746	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	5	0.02	0.024	0.063	0.001	0.001	0.024	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	3##	0.05	0.2	0.5	0.05	0.068	0.26	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	4	0.065	0.055	0.08	0.01	0.001	0.033	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	4	2.1	2.475	4.	1.699	1.077	1.038	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	4	1.299	1.249	1.399	1.	0.037	0.191	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	4	10.5	11.	18.	5.	30.	5.477	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	4	200.	287.5	700.	50.	87291.667	295.452	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	4	2.239	2.255	2.845	1.699	0.257	0.507	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			180.01									
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	4	0.25	0.25	0.4	0.1	0.017	0.129	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	4	0.21	0.238	0.4	0.13	0.014	0.119	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	7	22.	21.057	26.2	14.5	25.426	5.042	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	7	9.2	8.757	10.4	6.5	1.8	1.341	**	**	**	**
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	7	8.8	8.757	9.	8.4	0.073	0.27	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	7	8.8	8.682	9.	8.4	0.079	0.282	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	7	0.002	0.002	0.004	0.001	0.	0.001	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	6##	0.05	0.092	0.3	0.05	0.01	0.102	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	6	0.035	0.043	0.09	0.02	0.001	0.029	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	6	0.9	0.983	1.4	0.8	0.046	0.214	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	6	10.5	10.167	13.	7.	6.167	2.483	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	6	550.	641.667	1300.	50.	314416.667	560.729	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	6	2.724	2.562	3.114	1.699	0.35	0.592	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			365.036									
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	6	0.3	0.3	0.5	0.1	0.02	0.141	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	6	0.35	0.328	0.46	0.16	0.016	0.125	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	11	17.2	14.864	22.5	4.	40.319	6.35	4.6	9.1	19.	22.4
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	9	235.	215.	345.	113.	6241.25	79.002	113.	135.	270.5	345.
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	10	10.35	10.36	12.	8.8	0.845	0.919	8.86	9.775	11.05	11.92
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	8	1.	1.25	2.	1.	0.214	0.463	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	9	8.	9.333	14.	2.	14.75	3.841	2.	7.5	13.	14.
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	11	7.7	7.909	9.	7.3	0.299	0.547	7.34	7.5	8.5	8.9
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	11	7.7	7.691	9.	7.3	0.351	0.592	7.34	7.5	8.5	8.9
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	11	0.02	0.02	0.05	0.001	0.	0.016	0.001	0.003	0.032	0.046
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	9	6.	9.111	20.	3.	47.611	6.9	3.	3.5	16.5	20.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	9	4.	4.222	8.	2.	3.694	1.922	2.	2.5	5.5	8.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	9	2.	5.056	16.	0.5	36.903	6.075	0.5	1.	10.	16.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	11##	0.05	0.077	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.18
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.01	0.022	0.05	0.005	0.	0.017	0.005	0.01	0.04	0.048
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9	1.5	1.567	2.8	0.7	0.605	0.778	0.7	0.85	2.35	2.8
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	11	0.4	0.455	0.7	0.2	0.045	0.211	0.2	0.3	0.7	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	9	0.1	0.117	0.2	0.05	0.004	0.066	0.05	0.05	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	9	0.09	0.116	0.2	0.04	0.004	0.063	0.04	0.06	0.185	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	11	6.	6.273	8.	4.	2.218	1.489	4.	5.	8.	8.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	9	200.	527.778	2400.	50.	585069.444	764.898	50.	800.	2400.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	9	2.301	2.34	3.38	1.699	0.386	0.621	1.699	2.903	3.38
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		218.857								
70505	PHOSPHORUS, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	2	0.085	0.085	0.14	0.03	0.006	0.078	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	10	13.5	16.06	29.2	7.	60.16	7.756	7.08	9.45	23.4
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	10	345.	312.2	416.	175.	6847.956	82.752	176.9	244.25	369.25
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	10	10.25	10.36	12.2	8.8	1.	1.	8.86	9.55	11.175
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	10	2.	1.7	3.	1.	0.456	0.675	1.	1.	2.9
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	10	10.	8.95	16.	0.5	23.803	4.879	0.75	4.5	12.5
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	9	8.7	8.556	9.	7.5	0.243	0.493	7.5	8.3	8.9
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	9	8.7	8.224	9.	7.5	0.366	0.605	7.5	8.3	8.9
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	9	0.002	0.006	0.032	0.001	0.	0.01	0.001	0.001	0.006
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	10 ##	2.5	5.25	24.	2.5	45.014	6.709	2.5	2.5	22.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	10 ##	2.5	2.35	3.	1.	0.281	0.53	1.1	2.375	2.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	10 ##	2.5	4.65	21.	2.5	33.392	5.779	2.5	2.5	19.3
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	10 ##	0.05	0.14	0.9	0.05	0.072	0.267	0.05	0.05	0.063
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	10	0.04	0.045	0.11	0.01	0.001	0.032	0.011	0.02	0.065
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	10	2.6	2.531	4.9	0.41	1.906	1.381	0.469	1.45	3.35
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	10	0.8	0.75	1.2	0.2	0.078	0.28	0.22	0.625	0.9
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	10	0.15	0.165	0.3	0.05	0.008	0.088	0.055	0.1	0.225
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	10	0.135	0.165	0.32	0.05	0.009	0.095	0.051	0.082	0.253
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	10	7.	7.5	10.	6.	2.056	1.434	6.	9.	9.9
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	100.	1270.	8000.	50.	6139555.556	2477.813	50.	87.5	1550.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	2.	2.455	3.903	1.699	0.603	0.777	1.699	1.925	3.176
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		285.421								7430.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	11	14.5	14.191	25.	0.	59.389	7.706	1.4	7.5	22.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	11	397.	387.909	523.	95.	13657.291	116.864	135.8	353.	514.2
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	11	11.2	10.927	14.2	8.3	3.118	1.766	8.48	9.5	11.8
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	11	2.	1.636	2.	1.	0.255	0.505	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	11	14.	12.364	18.	2.	25.255	5.025	2.6	10.	16.
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	11	8.12	8.358	9.5	7.2	0.472	0.687	7.324	8.	9.
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	11	8.12	7.948	9.5	7.2	0.657	0.81	7.324	8.	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	11	0.008	0.011	0.063	0.	0.	0.018	0.	0.001	0.01
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	11 ##	2.5	8.273	41.	2.5	128.668	11.343	2.5	2.5	35.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	11 ##	2.5	3.455	8.	1.	4.723	2.173	1.2	2.5	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	11 ##	2.5	6.182	33.	1.	82.814	9.1	1.3	2.5	6.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	11 ##	0.05	0.095	0.45	0.05	0.014	0.119	0.05	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.02	0.04	0.1	0.005	0.002	0.039	0.005	0.005	0.09
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	3.7	3.513	5.4	0.43	1.482	1.217	0.904	3.4	4.
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	11	1.1	1.	1.3	0.2	0.098	0.313	0.32	0.9	1.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	11	0.3	0.286	0.7	0.05	0.025	0.158	0.08	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	11	0.27	0.285	0.72	0.02	0.03	0.172	0.05	0.18	0.35

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	11	10.	9.5	21.	0.5	25.75	5.074	1.2	7.	11.	19.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	100.	413.636	2200.	50.	418545.455	646.951	50.	500.	1940.	
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	2.	2.261	3.342	1.699	0.304	0.552	1.699	1.699	2.699	3.265
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			182.378								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	9	13.	14.478	24.5	4.5	52.929	7.275	4.5	8.2	22.5	24.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	9	324.	288.222	394.	110.	12101.194	110.005	110.	173.	383.	394.
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	9	11.1	10.789	13.6	7.8	2.609	1.615	7.8	9.85	11.6	13.6
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	9	2.	2.333	7.	1.	3.5	1.871	1.	1.	2.5	7.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	9	14.	30.444	162.	7.	2466.778	49.667	7.	10.	21.5	162.
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	9	8.03	8.077	9.	7.48	0.226	0.476	7.48	7.7	8.4	9.
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	9	8.03	7.897	9.	7.48	0.262	0.512	7.48	7.7	8.4	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	9	0.009	0.013	0.033	0.001	0.	0.01	0.001	0.004	0.02	0.033
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	9	6.	34.	190.	2.5	4136.875	64.319	2.5	2.5	46.5	190.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	9	2.5	7.	29.	2.	84.875	9.213	2.	2.5	9.5	29.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	9	2.5	28.111	161.	2.	2973.486	54.53	2.	2.5	37.5	161.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	9##	0.05	0.089	0.3	0.05	0.007	0.082	0.05	0.05	0.1	0.3
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9	0.03	0.032	0.06	0.005	0.	0.018	0.005	0.02	0.045	0.06
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9	2.77	2.828	5.	0.6	2.674	1.635	0.6	1.29	4.55	5.
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	9	0.7	0.689	1.1	0.4	0.056	0.237	0.4	0.45	0.85	1.1
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	9	0.3	0.256	0.4	0.05	0.011	0.104	0.05	0.2	0.325	0.4
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	9	0.23	0.213	0.3	0.08	0.005	0.073	0.08	0.16	0.28	0.3
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	9	6.	7.444	26.	1.	54.028	7.35	1.	3.5	8.	26.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	9	900.	1705.556	4800.	50.	3533402.778	1879.735	50.	50.	3650.	4800.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	9	2.954	2.767	3.681	1.699	0.712	0.844	1.699	1.699	3.55	3.681
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			584.483								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	11	15.	14.3	24.2	2.2	58.93	7.677	2.76	9.	24.	24.16
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	11	245.	241.545	349.	95.	6428.673	80.179	102.2	203.	323.	346.2
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	11	11.	11.009	14.9	8.	3.579	1.892	8.24	9.8	12.2	14.44
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	10	1.	1.1	2.	1.	0.1	0.316	1.	1.	1.9	1.9
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	11	7.	7.545	14.	3.	11.273	3.357	3.	5.	9.	13.6
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	11	8.3	8.027	9.	6.6	0.689	0.83	6.68	7.15	8.7	9.
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	11	8.3	7.364	9.	6.6	1.173	1.083	6.68	7.15	8.7	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	11	0.005	0.043	0.251	0.001	0.006	0.077	0.001	0.002	0.071	0.221
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	11	7.	10.045	27.	2.5	74.173	8.612	2.5	2.5	12.	26.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	11	2.5	3.318	8.	0.	4.464	2.113	0.4	2.	5.	7.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	11	4.	7.409	23.	2.5	58.291	7.635	2.5	2.5	7.	22.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	11##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.03	0.031	0.06	0.01	0.	0.016	0.01	0.02	0.04	0.058
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	2.3	2.029	4.	0.24	1.736	1.317	0.27	0.69	3.3	3.88
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	11	0.9	1.036	3.	0.2	0.733	0.856	0.22	0.3	1.6	2.74
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	11	0.12	0.156	0.4	0.05	0.013	0.112	0.05	0.05	0.2	0.38
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	11	0.12	0.142	0.29	0.05	0.007	0.083	0.052	0.06	0.19	0.286
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	11	4.	4.091	12.	1.	8.091	2.844	1.2	3.	4.	10.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	300.	855.	3500.	1373027.778	1171.763	50.	50.	1775.	3350.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	2.349	2.457	3.544	1.699	0.528	1.699	1.699	3.248	3.52
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		286.444								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	8	12.9	13.425	20.	4.	30.965	5.565	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	9	211.	218.444	345.	125.	6285.778	79.283	125.	139.5	291.
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	8	10.95	10.8	13.8	7.9	5.086	2.255	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	9	2.	1.778	2.	1.	0.194	0.441	1.	1.5	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	9	5.	6.111	14.	1.	15.861	3.983	1.	3.5	9.
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	8	7.99	8.235	9.1	7.4	0.485	0.697	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	8	7.941	7.88	9.1	7.4	0.629	0.793	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	8	0.011	0.013	0.04	0.001	0.	0.014	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	2	7.7	7.7	7.8	7.6	0.02	0.141	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	2	7.689	7.689	7.8	7.6	0.02	0.142	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	2	0.02	0.02	0.025	0.016	0.	0.007	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	2	93.	93.	103.	83.	200.	14.142	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	9##	2.5	6.722	16.	2.5	35.319	5.943	2.5	2.5	13.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	9##	2.5	4.944	12.	2.5	11.653	3.414	2.5	2.5	7.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	9##	2.5	3.167	9.	0.	5.875	2.424	0.	2.5	3.5
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	9##	0.05	0.069	0.12	0.05	0.001	0.029	0.05	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9	0.03	0.024	0.04	0.005	0.	0.012	0.005	0.01	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9	2.3	2.133	3.7	0.94	0.981	0.99	0.94	1.125	2.95
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	9	0.5	0.544	0.8	0.2	0.03	0.174	0.2	0.5	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	9	0.11	0.153	0.4	0.05	0.015	0.124	0.05	0.05	0.25
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	9	0.11	0.113	0.29	0.03	0.007	0.082	0.03	0.04	0.15
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	9	3.	4.	8.	1.	5.25	2.291	1.	2.5	6.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	1	102.	102.	102.	102.	0.	0.	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	9	100.	1055.556	8000.	50.	6841527.778	2615.631	50.	50.	550.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	9	2.	2.231	3.903	1.699	0.568	0.754	1.699	1.699	2.69
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		170.224								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	10	13.05	13.76	24.5	0.1	52.872	7.271	0.99	9.375	19.525
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	10	241.5	238.1	332.	164.	4239.433	65.111	164.2	173.5	291.25
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	10	10.3	10.37	13.8	7.9	3.396	1.843	7.97	8.825	11.875
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	10	1.	1.15	3.	0.5	0.447	0.669	0.55	1.	2.8
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	10	6.	5.3	9.	2.	6.9	2.627	2.	2.	7.25
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	9	7.9	7.889	8.4	7.2	0.139	0.372	7.2	7.65	8.2
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	9	7.9	7.735	8.4	7.2	0.165	0.406	7.2	7.65	8.2
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	9	0.013	0.018	0.063	0.004	0.	0.019	0.004	0.006	0.024
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	10	7.75	7.73	8.2	7.3	0.093	0.306	7.31	7.4	7.95
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	10	7.747	7.638	8.2	7.3	0.103	0.321	7.31	7.4	7.95
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	10	0.018	0.023	0.05	0.006	0.	0.015	0.006	0.011	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	10	87.	82.3	108.	52.	400.678	20.017	52.9	61.75	100.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	5.	6.4	19.	2.5	27.489	5.243	2.5	2.5	8.75
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	2.75	3.4	8.	2.	3.044	1.745	2.05	2.5	4.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	2.5	4.	11.	2.	9.222	3.037	2.	2.375	5.	10.7
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	9 ##	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9	0.03	0.028	0.04	0.02	0.	0.008	0.02	0.02	0.035	0.04
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9	2.2	2.418	3.48	1.33	0.816	0.903	1.33	1.52	3.33	3.48
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	7	0.8	0.686	1.	0.3	0.098	0.313	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	7	0.2	0.221	0.4	0.05	0.015	0.122	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	9	0.1	0.129	0.29	0.05	0.006	0.078	0.05	0.07	0.185	0.29
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	10	4.	4.2	7.	2.	2.4	1.549	2.1	3.	5.25	6.9
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	9	96.	103.444	138.	66.	729.278	27.005	66.	80.	133.5	138.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	200.	480.	2800.	50.	698444.444	835.73	50.	50.	500.	2570.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	2.301	2.285	3.447	1.699	0.352	0.593	1.699	1.699	2.699	3.372
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			192.535								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	13	15.	13.592	24.3	2.2	54.459	7.38	3.72	6.9	21.	23.3
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	13	315.	305.308	392.	184.	5022.231	70.868	189.6	254.5	375.	391.6
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	13	10.8	10.708	14.6	7.9	4.662	2.159	7.94	8.6	12.5	14.12
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	13	1.	1.577	6.	0.5	1.994	1.412	0.7	1.	2.	4.4
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	13	9.	10.231	16.	6.	10.026	3.166	6.4	7.5	13.	15.6
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	13	8.2	8.11	8.6	6.7	0.221	0.47	7.172	8.025	8.35	8.56
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	13	8.2	7.669	8.6	6.7	0.431	0.657	7.172	8.025	8.35	8.56
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	13	0.006	0.021	0.2	0.003	0.003	0.054	0.003	0.004	0.009	0.125
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	13	7.8	7.762	8.2	7.5	0.041	0.202	7.5	7.6	7.9	8.08
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	13	7.8	7.721	8.2	7.5	0.043	0.207	7.5	7.6	7.9	8.08
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	13	0.016	0.019	0.032	0.006	0.	0.008	0.009	0.013	0.025	0.032
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	13	99.	92.462	114.	65.	216.769	14.723	66.2	83.5	104.	110.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	13	5.	5.923	19.	2.5	22.785	4.773	2.5	2.5	7.5	15.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	13	3.	3.462	7.	2.5	1.978	1.406	2.5	2.5	4.5	6.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	13	2.5	3.615	14.	2.	10.465	3.235	2.	2.25	3.5	10.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	13 ##	0.05	0.104	0.3	0.05	0.009	0.097	0.05	0.05	0.15	0.3
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	13	0.04	0.045	0.1	0.02	0.001	0.023	0.02	0.03	0.05	0.092
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	13	3.2	3.619	6.	1.8	1.74	1.319	1.888	2.64	4.725	5.8
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	13	1.	0.977	1.8	0.4	0.169	0.411	0.44	0.55	1.3	1.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	13	0.3	0.277	0.4	0.05	0.015	0.122	0.05	0.2	0.4	0.4
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	13	0.22	0.202	0.34	0.07	0.011	0.104	0.074	0.085	0.295	0.34
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	13	5.	5.231	7.	4.	0.692	0.832	4.	5.	6.	6.6
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	131.5	129.75	186.	82.	862.932	29.376	85.6	103.	152.	177.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	13	500.	1650.	8000.	50.	8195416.667	2862.764	50.	75.	1450.	8000.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	13	2.699	2.612	3.903	1.699	0.62	0.787	1.699	1.849	3.159	3.903
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			409.083								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	10	12.7	14.	26.	5.5	67.831	8.236	5.53	6.325	23.6	25.88
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	10	202.	220.3	311.	149.	4373.344	66.131	149.9	165.5	305.75	310.7
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	10	10.7	10.31	14.	8.1	3.828	1.956	8.1	8.325	11.5	13.75
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	10	1.	1.6	4.	1.	0.933	0.966	1.	1.	2.	3.8
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	10	9.	10.8	24.	4.	36.4	6.033	4.2	6.	14.	23.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	10	8.2	7.507	8.5	1.2	4.956	2.226	1.85	8.	8.348	8.49
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	10	8.2	2.2	8.5	1.2	36.25	6.021	1.85	8.	8.347	8.49
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	10	0.006	6309.58	63095.734	0.003398107080.257	19952.621	0.003	0.005	0.011	56786.163	
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	10	7.45	7.43	8.1	6.5	0.271	0.521	6.55	7.075	8.	8.09
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	10	7.425	7.153	8.1	6.5	0.357	0.597	6.55	7.075	8.	8.09
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	10	0.038	0.07	0.316	0.008	0.009	0.093	0.008	0.01	0.085	0.295
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	10	64.	69.8	108.	50.	441.067	21.002	50.2	52.75	82.75	107.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	6.	7.3	24.	2.5	43.456	6.592	2.5	2.5	9.5	22.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	10##	2.75	4.95	13.	2.5	12.358	3.515	2.5	2.5	7.	12.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	10##	2.5	4.3	17.	2.	21.178	4.602	2.05	2.5	3.75	15.9
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	10##	0.05	0.075	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.19
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	10	0.025	0.024	0.04	0.01	0.	0.01	0.01	0.018	0.03	0.039
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	10	1.65	1.785	3.22	0.08	0.81	0.9	0.191	1.273	2.47	3.175
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	10	0.5	0.53	0.9	0.3	0.038	0.195	0.3	0.375	0.7	0.88
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	10	0.1	0.125	0.3	0.05	0.007	0.082	0.05	0.05	0.2	0.29
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	10	0.07	0.093	0.2	0.03	0.004	0.061	0.03	0.045	0.155	0.197
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	8	4.	3.875	5.	3.	0.411	0.641	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	10	82.	91.8	138.	60.	941.733	30.688	60.2	66.5	127.	137.8
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	8	150.	168.75	300.	50.	9241.071	96.13	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	8	2.151	2.157	2.477	1.699	0.076	0.275	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			143.519								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	7	11.2	12.457	22.2	1.9	61.443	7.839	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	7	300.	307.143	405.	204.	5087.476	71.327	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	7	9.1	10.057	13.3	8.2	3.483	1.866	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	6	1.	1.083	2.	0.5	0.242	0.492	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	7	12.	11.	16.	7.	10.	3.162	**	**	**	**
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	7	8.16	8.161	8.63	7.82	0.07	0.265	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	7	8.16	8.099	8.63	7.82	0.075	0.274	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	7	0.007	0.008	0.015	0.002	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	7	7.8	7.786	7.9	7.6	0.011	0.107	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	7	7.8	7.774	7.9	7.6	0.012	0.108	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	7	0.016	0.017	0.025	0.013	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	6	92.5	93.	107.	73.	154.	12.41	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	7	2.5	3.5	7.	1.	6.083	2.466	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	7	2.	3.	7.	0.5	6.25	2.5	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	7##	0.5	1.071	3.	0.	1.369	1.17	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	7	0.05	0.059	0.13	0.02	0.001	0.035	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	7	0.03	0.046	0.12	0.01	0.001	0.038	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	7	2.36	2.901	5.63	1.9	1.726	1.314	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	7	1.	0.886	1.3	0.5	0.071	0.267	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	7	0.2	0.15	0.2	0.05	0.004	0.065	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	7	0.11	0.096	0.13	0.05	0.001	0.029	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	5	3.4	3.52	5.	2.4	0.877	0.936	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	7	118.	123.	152.	84.	603.667	24.57	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	1	56.	56.	56.	56.	0.	0.	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	8	150.	131.25	200.	50.	5669.643	75.297	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	8	2.151	2.038	2.301	1.699	0.089	0.298	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			109.051								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	9	21.	16.444	21.8	6.	53.245	7.297	6.	7.1	21.45	21.8
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	4	211.5	221.5	256.	207.	535.	23.13	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	2	198.	198.	234.	162.	2592.	50.912	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	9	9.1	9.633	13.4	7.8	4.473	2.115	7.8	7.9	11.75	13.4
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	6	1.5	2.	5.	1.	2.4	1.549	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	6	7.5	7.917	17.	0.5	35.842	5.987	**	**	**	**
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	9	8.29	8.317	8.89	7.94	0.084	0.29	7.94	8.085	8.48	8.89
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	9	8.29	8.239	8.89	7.94	0.091	0.302	7.94	8.085	8.48	8.89
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	9	0.005	0.006	0.011	0.001	0.	0.004	0.001	0.003	0.009	0.011
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	6	7.7	7.817	8.1	7.7	0.034	0.183	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	6	7.7	7.788	8.1	7.7	0.035	0.186	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	6	0.02	0.016	0.02	0.008	0.	0.006	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	6	69.5	73.	93.	56.	170.	13.038	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	6	4.5	10.417	42.	0.5	251.042	15.844	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	6	3.5	3.167	6.	0.5	6.067	2.463	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	6	1.5	7.5	36.	0.5	197.8	14.064	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	5 ##	0.02	0.04	0.08	0.02	0.001	0.028	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	4	0.03	0.033	0.06	0.01	0.	0.021	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	5	2.34	1.998	2.49	0.88	0.452	0.672	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	5	0.5	0.54	0.8	0.2	0.053	0.23	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	5	0.1	0.09	0.1	0.05	0.001	0.022	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	5	0.06	0.05	0.07	0.02	0.001	0.023	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	6	2.55	2.65	3.5	1.9	0.299	0.547	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	6	88.	90.667	116.	66.	289.067	17.002	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	5	6.	6.2	8.	5.	1.7	1.304	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	5	18.	17.6	21.	13.	8.8	2.966	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	5	200.	440.	1600.	50.	431750.	657.077	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	5	2.301	2.276	3.204	1.699	0.392	0.626	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			188.818								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	5	8.1	10.34	22.6	2.3	58.993	7.681	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	5	225.	228.8	305.	171.	2695.2	51.915	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	5	10.4	10.4	12.8	8.5	3.035	1.742	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	5	1.	1.8	4.	1.	1.7	1.304	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	5	6.	7.	11.	4.	8.5	2.915	**	**	**	**
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	5	8.32	8.164	8.53	7.7	0.117	0.342	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	5	8.32	8.054	8.53	7.7	0.132	0.363	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	5	0.005	0.009	0.02	0.003	0.	0.007	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	5	7.7	7.8	8.3	7.5	0.09	0.3	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	5	7.7	7.733	8.3	7.5	0.096	0.309	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	5	0.02	0.018	0.032	0.005	0.	0.01	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	5	83.	81.2	111.	56.	458.7	21.417	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	5	9.	8.9	17.	0.5	42.05	6.485	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	5	2.	2.5	6.	0.5	4.75	2.179	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	5	6.	6.5	11.	0.5	20.75	4.555	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	6	0.04	0.048	0.1	0.02	0.001	0.031	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	6	0.01	0.014	0.03	0.005	0.	0.009	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	6	1.98	2.008	2.8	1.32	0.227	0.477	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	6	0.55	0.567	0.7	0.4	0.015	0.121	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	6	0.1	0.125	0.2	0.05	0.004	0.061	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	6	0.06	0.07	0.12	0.04	0.001	0.033	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	5	2.5	2.6	3.4	2.	0.285	0.534	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	5	102.	102.	148.	72.	836.	28.914	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	5	8.	7.6	10.	5.	4.3	2.074	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	5	16.	17.	24.	12.	19.	4.359	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	2	850.	850.	1600.	100.	1125000.	1060.66	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	2	2.602	2.602	3.204	2.	0.725	0.851	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			400.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	10	14.4	14.08	22.8	2.6	46.046	6.786	3.07	7.975	20.375	22.61
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	10	238.5	227.7	289.	147.	2489.344	49.893	150.4	184.75	271.	287.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	9	10.2	10.978	13.1	8.1	3.659	1.913	8.1	9.4	12.85	13.1
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	9	1.	1.5	3.	0.5	0.625	0.791	0.5	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	10	6.	8.35	30.	0.5	68.447	8.273	0.75	3.75	10.5	28.2
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	10	8.05	8.079	8.7	7.58	0.151	0.388	7.582	7.75	8.45	8.69
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	10	8.047	7.943	8.7	7.58	0.171	0.414	7.582	7.75	8.45	8.69
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	10	0.009	0.011	0.026	0.002	0.	0.009	0.002	0.004	0.018	0.026
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	10	7.9	7.88	8.2	7.4	0.077	0.278	7.42	7.675	8.125	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	10	7.889	7.798	8.2	7.4	0.085	0.291	7.42	7.675	8.125	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	10	0.013	0.016	0.04	0.006	0.	0.011	0.006	0.008	0.021	0.038
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	10	94.	91.6	114.	52.	482.711	21.971	53.8	73.	112.25	113.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	3.	10.	65.	1.5	381.111	19.522	1.5	1.5	7.75	59.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	10 ##	1.5	2.35	10.	0.5	7.558	2.749	0.55	1.	2.125	9.25
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	2.75	8.4	55.	1.5	272.267	16.501	1.5	1.5	5.75	50.3
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	9 ##	0.02	0.03	0.12	0.01	0.001	0.034	0.01	0.02	0.02	0.12
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9 ##	0.005	0.011	0.03	0.005	0.	0.009	0.005	0.005	0.015	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	9	1.36	1.258	1.54	0.8	0.073	0.27	0.8	0.98	1.48	1.54
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	9	0.3	0.306	0.7	0.05	0.034	0.184	0.05	0.2	0.4	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	9	0.1	0.1	0.2	0.05	0.002	0.043	0.05	0.075	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	9	0.07	0.061	0.1	0.01	0.001	0.035	0.01	0.02	0.09	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	10	1.7	1.85	3.4	1.5	0.336	0.58	1.5	1.5	1.95	3.27
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	10	108.	104.	134.	78.	335.111	18.306	78.6	85.5	117.5	132.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	7.	7.2	10.	4.	5.067	2.251	4.1	5.	9.25	10.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	12.5	12.	18.	8.	9.556	3.091	8.	9.5	14.	17.6
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	4 ##	50.	887.5	3400.	50.	2805625.	1675.	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	4 ##	1.699	2.157	3.531	1.699	0.84	0.916	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			143.581								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	10	14.9	14.6	21.7	6.8	36.56	6.046	6.83	8.6	20.7	21.63
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	11	212.	213.	388.	128.	6463.6	80.397	128.	141.	256.	371.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	9	9.9	10.056	11.7	8.4	1.47	1.213	8.4	8.85	11.2	11.7
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	1	10.6	10.6	10.6	10.6	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	10	1.	1.	2.	0.5	0.167	0.408	0.5	0.875	1.	1.9
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	11	7.	9.545	30.	4.	55.673	7.461	4.	5.	11.	26.8
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	10	8.1	8.158	8.8	7.6	0.097	0.312	7.64	8.	8.325	8.76
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	10	8.1	8.064	8.8	7.6	0.107	0.327	7.64	8.	8.325	8.76

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	10	0.008	0.009	0.025	0.002	0.	0.006	0.002	0.005	0.01	0.024
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	11	7.9	7.909	8.3	7.3	0.109	0.33	7.34	7.6	8.2	8.28
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	11	7.9	7.787	8.3	7.3	0.125	0.354	7.34	7.6	8.2	8.28
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	11	0.013	0.016	0.05	0.005	0.	0.014	0.005	0.006	0.025	0.046
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	11	83.	73.727	106.	46.	413.618	20.338	46.2	51.	88.	102.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	11	3.	3.818	11.	1.	7.364	2.714	1.2	2.	4.	10.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	11	1.	0.955	2.	0.	0.323	0.568	0.	1.	1.	1.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	11	2.	3.	9.	1.	5.	2.236	1.2	2.	3.	8.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12 ##	0.008	0.008	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.017
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12	1.09	1.15	1.76	0.84	0.08	0.283	0.852	0.898	1.26	1.694
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	12	0.2	0.233	0.4	0.1	0.006	0.078	0.13	0.2	0.3	0.37
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.104	0.2	0.05	0.002	0.05	0.05	0.063	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	4	0.04	0.048	0.07	0.04	0.	0.015	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	11	2.7	3.418	13.4	0.5	13.182	3.631	0.5	1.4	4.3	11.78
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	11	92.	86.182	124.	58.	471.964	21.725	58.4	61.	100.	119.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	11	5.	5.091	7.	4.	1.091	1.044	4.	4.	6.	6.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	11	9.	9.455	13.	7.	3.273	1.809	7.	8.	11.	12.6
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	200.	181.818	500.	50.	17136.364	130.906	50.	100.	200.	460.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	2.301	2.162	2.699	1.699	0.097	0.312	1.699	2.	2.301	2.655
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	11	2.301	2.162	2.699	1.699	0.097	0.312	1.699	2.	2.301	2.655
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	8	0.06	0.065	0.1	0.04	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	11	13.9	14.836	24.	4.3	50.781	7.126	4.8	6.9	21.6	23.88
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	228.5	216.75	281.	116.	4010.568	63.329	119.	151.5	278.25	281.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	11	9.4	10.391	13.8	7.8	3.649	1.91	7.98	8.8	12.1	13.48
00300	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	1	12.9	12.9	12.9	12.9	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	12	1.	1.167	2.	1.	0.152	0.389	1.	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	4.5	4.542	10.	1.	5.657	2.378	1.45	2.5	6.	8.8
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	12	7.8	7.858	9.	7.1	0.368	0.607	7.13	7.325	8.325	8.91
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	12	7.8	7.573	9.	7.1	0.457	0.676	7.13	7.325	8.325	8.91
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.016	0.027	0.079	0.001	0.001	0.026	0.001	0.005	0.048	0.075
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	12	7.95	7.883	8.8	7.2	0.234	0.484	7.23	7.35	8.2	8.65
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	12	7.947	7.663	8.8	7.2	0.287	0.536	7.23	7.35	8.2	8.65
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.011	0.022	0.063	0.002	0.	0.021	0.003	0.006	0.045	0.059
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	93.5	86.333	122.	43.	831.333	28.833	43.	55.	110.75	119.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	5.5	8.25	30.	1.5	75.568	8.693	1.5	1.5	11.75	26.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	1.5	2.	7.	1.	2.818	1.679	1.	1.	2.	5.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	4.	6.75	23.	1.5	47.386	6.884	1.5	1.5	9.25	21.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	12 ##	0.02	0.025	0.06	0.02	0.	0.012	0.02	0.02	0.02	0.054
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12 ##	0.008	0.008	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.017
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12	1.36	1.279	1.74	0.7	0.108	0.328	0.769	0.96	1.553	1.692
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	12	0.2	0.204	0.3	0.05	0.006	0.075	0.065	0.2	0.275	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.1	0.2	0.05	0.003	0.052	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	12	1.7	2.067	4.2	0.5	1.117	1.057	0.77	1.5	2.8	4.05
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	107.	100.25	134.	54.	905.114	30.085	54.	70.75	127.5	132.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	7.	7.167	10.	4.	4.879	2.209	4.	5.25	9.	10.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	11	11.	10.364	15.	6.	6.655	2.58	6.4	8.	12.	14.4
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	200.	337.5	1400.	50.	159147.727	398.933	50.	62.5	400.	1220.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	2.301	2.286	3.146	1.699	0.232	0.482	1.699	1.774	2.602	3.073
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	2.301	2.286	3.146	1.699	0.232	0.482	1.699	1.774	2.602	3.073
	GEOMETRIC MEAN =			193.102									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	11	0.08	0.065	0.11	0.02	0.002	0.042	0.02	0.02	0.11	0.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	12	16.	14.867	24.6	1.8	49.897	7.064	3.45	9.8	21.575	24.57
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/15/94-12/21/98	5	2.5	3.24	7.3	1.8	5.263	2.294	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	10	218.5	219.1	282.	152.	2612.989	51.117	153.	167.25	270.5	281.3
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	12	10.5	10.717	13.9	7.9	3.071	1.752	8.17	9.55	12.225	13.63
00310 BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	10##	0.75	0.95	2.2	0.5	0.352	0.593	0.5	0.5	1.25	2.15
00340 COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	10	8.	8.	18.	2.5	18.611	4.314	2.5	5.875	9.25	17.2
00400p PH (STANDARD UNITS)	09/20/67-12/21/98	12	8.25	8.275	8.6	8.	0.044	0.209	8.03	8.1	8.475	8.6
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	12	8.247	8.232	8.6	8.	0.046	0.214	8.03	8.1	8.475	8.6
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.006	0.006	0.01	0.003	0.	0.003	0.003	0.003	0.008	0.009
00403 PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	10	7.45	7.5	8.	7.1	0.084	0.291	7.11	7.275	7.75	7.99
00403 CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	10	7.447	7.422	8.	7.1	0.091	0.302	7.11	7.275	7.75	7.99
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	10	0.036	0.038	0.079	0.01	0.	0.022	0.01	0.018	0.053	0.078
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	10	86.5	86.1	113.	60.	502.322	22.413	60.1	62.5	108.5	112.7
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	4.	4.55	9.	1.5	6.969	2.64	1.5	1.5	7.	8.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	1.25	1.3	2.	1.	0.122	0.35	1.	1.	1.5	1.95
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	10	3.	3.65	7.	1.5	4.169	2.042	1.5	1.5	6.	6.9
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	10##	0.02	0.031	0.06	0.02	0.	0.018	0.02	0.02	0.053	0.06
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	10##	0.008	0.016	0.06	0.005	0.	0.018	0.005	0.005	0.023	0.057
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	10	1.295	1.282	1.57	0.86	0.06	0.245	0.879	1.11	1.495	1.564
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	10	0.2	0.225	0.4	0.05	0.008	0.092	0.065	0.2	0.3	0.39
00665 PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	10	0.1	0.09	0.2	0.05	0.002	0.046	0.05	0.05	0.1	0.19
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	10	2.1	2.26	3.3	1.3	0.458	0.677	1.34	1.7	2.975	3.29
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	10	97.5	97.2	124.	69.	542.4	23.289	69.3	74.25	122.	123.8
00940 CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	10.	9.6	17.	5.	12.933	3.596	5.1	6.75	11.5	16.6
00945 SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	8.	8.3	11.	6.	3.122	1.767	6.1	7.	10.25	11.
31616p FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	150.	200.	600.	50.	28333.333	168.325	50.	87.5	300.	570.
31616p LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	2.151	2.173	2.778	1.699	0.125	0.353	1.699	1.925	2.477	2.748
31616p GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	150.	200.	600.	50.	28333.333	168.325	50.	87.5	300.	570.
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	10	0.045	0.052	0.1	0.01	0.001	0.032	0.011	0.02	0.083	0.099

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	12	11.25	13.775	25.	2.2	45.791	6.767	3.76	9.95	19.3	24.4
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/15/94-12/21/98	12	4.95	9.442	46.	1.5	154.304	12.422	1.59	2.15	12.325	36.85
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	225.	234.25	480.	98.	9728.023	98.631	99.8	191.25	279.	423.6
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	11	9.8	9.945	14.	7.6	3.441	1.855	7.74	8.4	11.	13.46
00310 BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	11	1.	1.009	1.6	0.5	0.139	0.373	0.5	0.5	1.3	1.54
00340 COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	6.5	5.792	10.	2.5	9.612	3.1	2.5	2.5	8.	10.
00400p PH (STANDARD UNITS)	09/20/67-12/21/98	12	8.25	8.217	8.4	8.	0.02	0.14	8.	8.1	8.3	8.4
00400p CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	12	8.247	8.195	8.4	8.	0.02	0.142	8.	8.1	8.3	8.4
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.006	0.006	0.01	0.004	0.	0.002	0.004	0.005	0.008	0.01
00403 PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	12	7.5	7.392	7.9	6.7	0.181	0.425	6.76	6.925	7.775	7.9
00403 CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	12	7.489	7.203	7.9	6.7	0.22	0.469	6.76	6.925	7.775	7.9
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.032	0.063	0.2	0.013	0.004	0.061	0.013	0.017	0.119	0.177
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	77.5	71.667	111.	22.	894.242	29.904	25.3	39.5	99.5	108.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	4.5	12.	58.	1.5	256.5	16.016	1.5	3.	18.75	46.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	12 ##	1.5	2.5	9.	1.5	4.636	2.153	1.5	1.5	3.	7.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	3.5	9.708	49.	1.5	188.839	13.742	1.5	1.5	15.75	39.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	12 ##	0.02	0.031	0.08	0.02	0.	0.021	0.02	0.02	0.043	0.074
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12	0.01	0.016	0.06	0.005	0.	0.016	0.005	0.006	0.02	0.051
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12	1.115	1.071	1.66	0.42	0.151	0.389	0.426	0.755	1.383	1.594
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	12	0.2	0.179	0.3	0.05	0.008	0.089	0.065	0.1	0.275	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.079	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	12	2.85	2.858	5.2	1.	1.466	1.211	1.15	1.825	3.8	4.84
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	88.	85.667	120.	39.	808.242	28.43	39.9	59.5	112.25	119.7
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	9.	8.417	13.	3.	9.72	3.118	3.3	5.5	11.	12.4
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	8.	8.083	11.	5.	3.174	1.782	5.3	6.5	9.75	10.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	150.	354.167	1100.	50.	135662.879	368.324	50.	62.5	650.	1040.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	2.151	2.295	3.041	1.699	0.262	0.512	1.699	1.774	2.809	3.015
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			197.231								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	12	0.045	0.062	0.11	0.03	0.001	0.03	0.03	0.04	0.09	0.107

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	13	13.6	13.869	25.7	0.3	72.602	8.521	1.82	6.2	22.5	25.14
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/15/94-12/21/98	12	5.3	7.358	25.	3.2	37.235	6.102	3.2	3.775	9.	20.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	175.5	192.75	289.	132.	2372.023	48.703	136.5	161.75	220.75	284.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	12	10.45	10.108	13.5	6.8	4.917	2.217	6.83	8.175	11.95	13.2
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	11 ##	0.5	1.091	2.	0.5	0.541	0.735	0.5	0.5	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	5.	5.208	10.	0.5	10.703	3.271	1.1	2.5	9.	9.7
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	13	8.	7.954	8.5	7.3	0.096	0.31	7.38	7.8	8.15	8.38
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	13	8.	7.84	8.5	7.3	0.11	0.332	7.38	7.8	8.15	8.38
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	13	0.01	0.014	0.05	0.003	0.	0.013	0.004	0.007	0.016	0.043
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	12	7.65	7.675	8.1	7.2	0.069	0.263	7.26	7.45	7.875	8.07
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	12	7.647	7.602	8.1	7.2	0.075	0.274	7.26	7.45	7.875	8.07
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.023	0.025	0.063	0.008	0.	0.016	0.009	0.013	0.036	0.056
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	65.5	70.917	111.	50.	377.902	19.44	51.2	56.25	74.75	109.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	5.5	7.458	19.	1.5	25.157	5.016	1.95	3.5	11.5	16.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	12 ##	1.5	1.875	3.	1.5	0.46	0.678	1.5	1.5	2.625	3.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	4.5	5.708	16.	1.5	18.521	4.304	1.5	1.875	8.5	14.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	11 ##	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.036
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	0.01	0.013	0.03	0.005	0.	0.008	0.005	0.005	0.02	0.028
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	11	1.13	1.166	1.8	0.67	0.111	0.333	0.714	0.89	1.4	1.76
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	11	0.2	0.177	0.3	0.05	0.007	0.082	0.06	0.1	0.2	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	11 ##	0.05	0.086	0.2	0.05	0.004	0.06	0.05	0.05	0.1	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	8	1.8	1.75	2.8	0.5	0.429	0.655	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	82.	83.25	120.	57.	389.114	19.726	58.8	67.	91.25	119.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	6.	7.333	18.	2.5	20.742	4.554	2.5	4.25	9.75	16.5
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	7.	7.417	10.	6.	1.72	1.311	6.	7.	7.75	10.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	350.	485.	2000.	50.	316694.444	562.756	55.	175.	525.	1860.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	10	2.54	2.486	3.301	1.699	0.198	0.444	1.729	2.226	2.719	3.249
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			306.008								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	11	0.04	0.049	0.11	0.02	0.001	0.032	0.02	0.03	0.06	0.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	12	16.1	14.4	22.6	3.3	53.865	7.339	3.57	6.675	21.175	22.54
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/15/94-12/21/98	12	5.65	5.433	8.	2.4	2.562	1.601	2.67	4.2	6.575	7.73
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	220.	233.167	385.	166.	3383.606	58.169	171.1	194.25	254.5	353.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	12	10.4	10.775	14.5	7.9	5.853	2.419	7.99	8.4	13.175	14.2
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	12 ##	1.	1.	2.	0.5	0.136	0.369	0.5	1.	1.	1.7
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	6.5	7.333	14.	2.5	13.106	3.62	2.5	5.25	9.75	13.7
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	12	8.1	8.117	8.7	7.4	0.14	0.374	7.52	7.85	8.35	8.7
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	12	8.089	7.971	8.7	7.4	0.163	0.404	7.52	7.85	8.35	8.7
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.008	0.011	0.04	0.002	0.	0.01	0.002	0.005	0.014	0.033
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	12	8.05	7.933	8.3	7.5	0.062	0.25	7.53	7.7	8.1	8.24
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	12	8.047	7.864	8.3	7.5	0.068	0.26	7.53	7.7	8.1	8.24
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.009	0.014	0.032	0.005	0.	0.008	0.006	0.008	0.02	0.03
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	91.	94.667	159.	64.	682.061	26.116	65.2	77.	104.75	148.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	6.	5.708	12.	1.5	11.248	3.354	1.5	1.875	8.	11.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	12 ##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	12	4.5	4.583	11.	1.5	8.356	2.891	1.5	1.5	6.	9.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	12 ##	0.02	0.028	0.08	0.02	0.	0.019	0.02	0.02	0.02	0.071
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12	0.01	0.012	0.03	0.005	0.	0.009	0.005	0.005	0.018	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12	1.3	1.36	2.2	0.88	0.112	0.335	0.928	1.158	1.503	2.014
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	12	0.3	0.308	0.6	0.1	0.019	0.138	0.1	0.225	0.4	0.54
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.142	0.3	0.05	0.006	0.076	0.05	0.1	0.2	0.27
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	99.5	107.75	199.	76.	1060.75	32.569	77.8	86.	121.	176.5
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	8.	8.5	15.	5.	8.818	2.97	5.3	6.	10.5	14.1
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	8.5	8.5	12.	6.	2.818	1.679	6.3	7.	9.75	11.4
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12 ##	75.	250.	1800.	50.	248636.364	498.634	50.	50.	175.	1380.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12 ##	1.849	2.029	3.255	1.699	0.233	0.483	1.699	1.699	2.226	3.059
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			106.991								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	12	0.08	0.085	0.22	0.02	0.003	0.057	0.02	0.035	0.12	0.193

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	13	19.	15.415	24.2	3.7	58.855	7.672	3.82	6.9	21.95	23.52
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/15/94-12/21/98	12	4.65	14.908	115.	1.3	1014.601	31.853	1.36	2.	11.675	85.24
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	1	200.	200.	200.	200.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	258.	235.417	431.	76.	10483.538	102.389	88.9	145.25	301.	395.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	13	9.	9.877	13.4	6.4	4.775	2.185	7.08	8.35	12.05	13.08
00310	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	12 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	7.5	7.125	13.	2.5	12.688	3.562	2.5	3.125	9.	12.7
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	13	7.8	7.777	8.5	7.2	0.134	0.365	7.32	7.5	8.	8.42
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	13	7.8	7.657	8.5	7.2	0.149	0.386	7.32	7.5	8.	8.42
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	13	0.016	0.022	0.063	0.003	0.	0.016	0.004	0.011	0.032	0.051
00403	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	12	7.4	7.342	8.1	6.6	0.321	0.566	6.6	6.825	7.875	8.07
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	12	7.355	7.051	8.1	6.6	0.413	0.643	6.6	6.825	7.875	8.07
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	12	0.044	0.089	0.251	0.008	0.009	0.092	0.009	0.013	0.15	0.251
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	105.	95.	201.	24.	2236.364	47.29	30.6	55.	120.	177.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	13	9.	21.423	171.	1.5	2066.869	45.463	1.5	2.75	17.	111.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	13 ##	1.5	3.846	28.	1.5	53.266	7.298	1.5	1.5	2.25	18.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	13	7.	17.615	143.	1.5	1452.673	38.114	1.5	1.5	14.5	93.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	12 ##	0.02	0.025	0.08	0.02	0.	0.017	0.02	0.02	0.02	0.062
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12 ##	0.005	0.01	0.02	0.005	0.	0.007	0.005	0.005	0.018	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	12	1.155	1.253	1.93	0.52	0.244	0.494	0.553	0.838	1.768	1.915
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	12	0.2	0.275	0.7	0.1	0.024	0.154	0.13	0.2	0.3	0.61
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.125	0.3	0.05	0.005	0.072	0.05	0.1	0.175	0.27
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	1	11.5	11.5	11.5	11.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0162

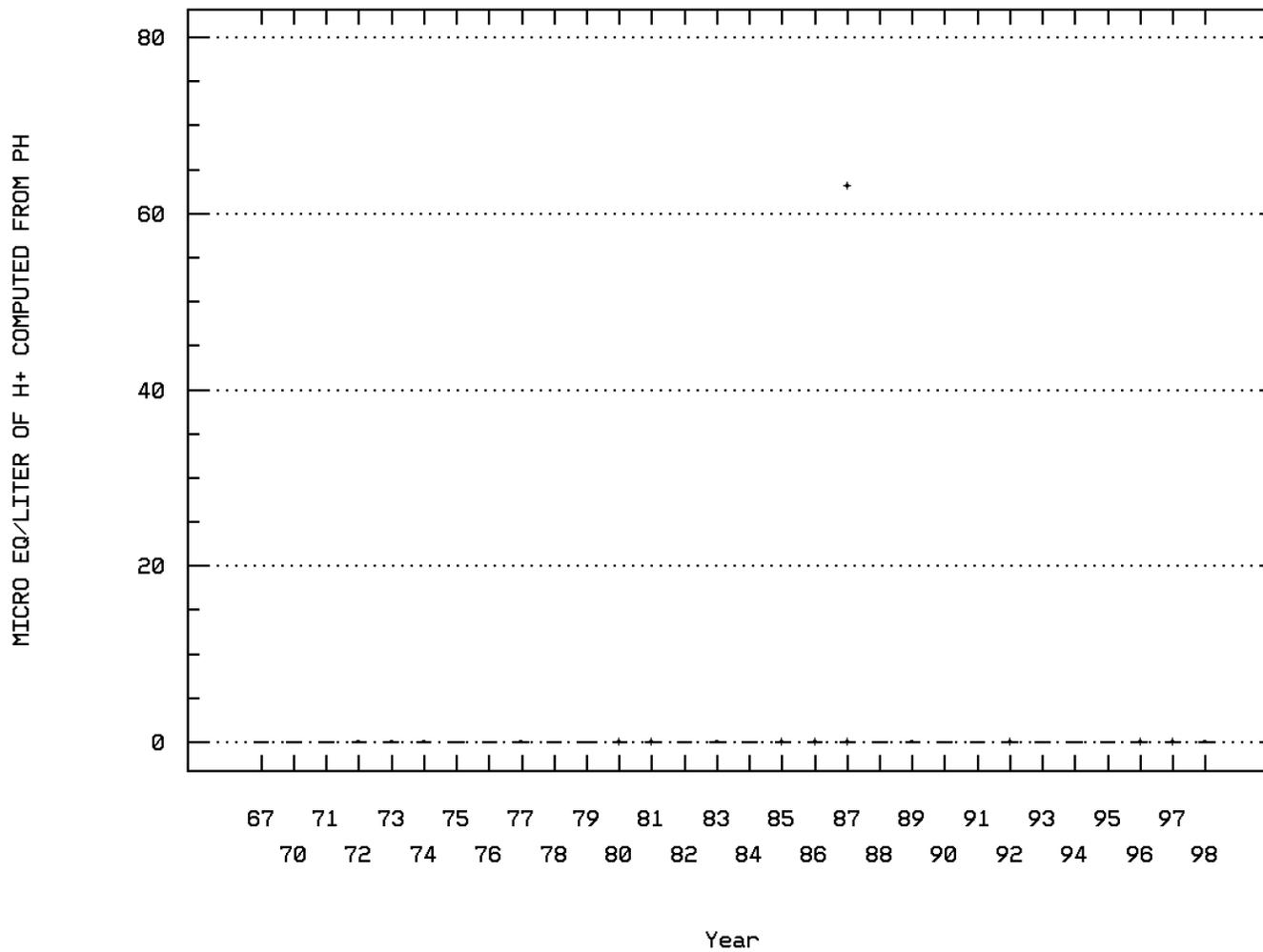
Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	12	107.5	102.	213.	43.	2409.455	49.086	43.6	55.	130.	188.7
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	9.	8.167	13.	2.5	13.015	3.608	2.5	5.25	11.5	12.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	8.	8.25	11.	5.	3.841	1.96	5.3	6.25	10.	10.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	200.	387.5	2000.	50.	297784.091	545.696	50.	62.5	500.	1580.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	12	2.239	2.294	3.301	1.699	0.27	0.519	1.699	1.774	2.699	3.144
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			196.799								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	12	0.09	0.082	0.14	0.02	0.002	0.04	0.02	0.043	0.11	0.134

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0162 Parameter Code: 00400

MICRO EQ/LITER OF H+ COMPUTED FROM PH

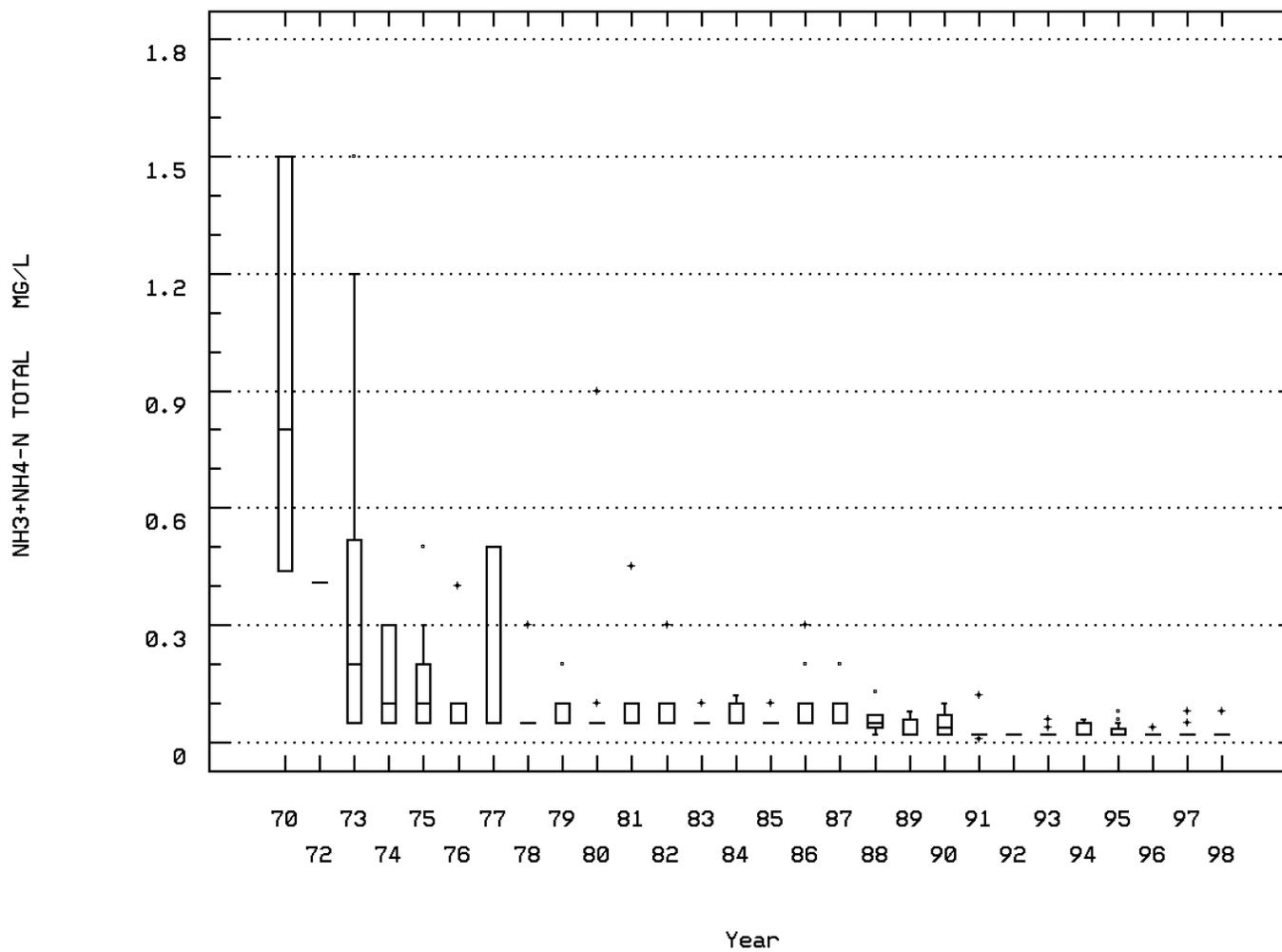
(X 1000)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00610

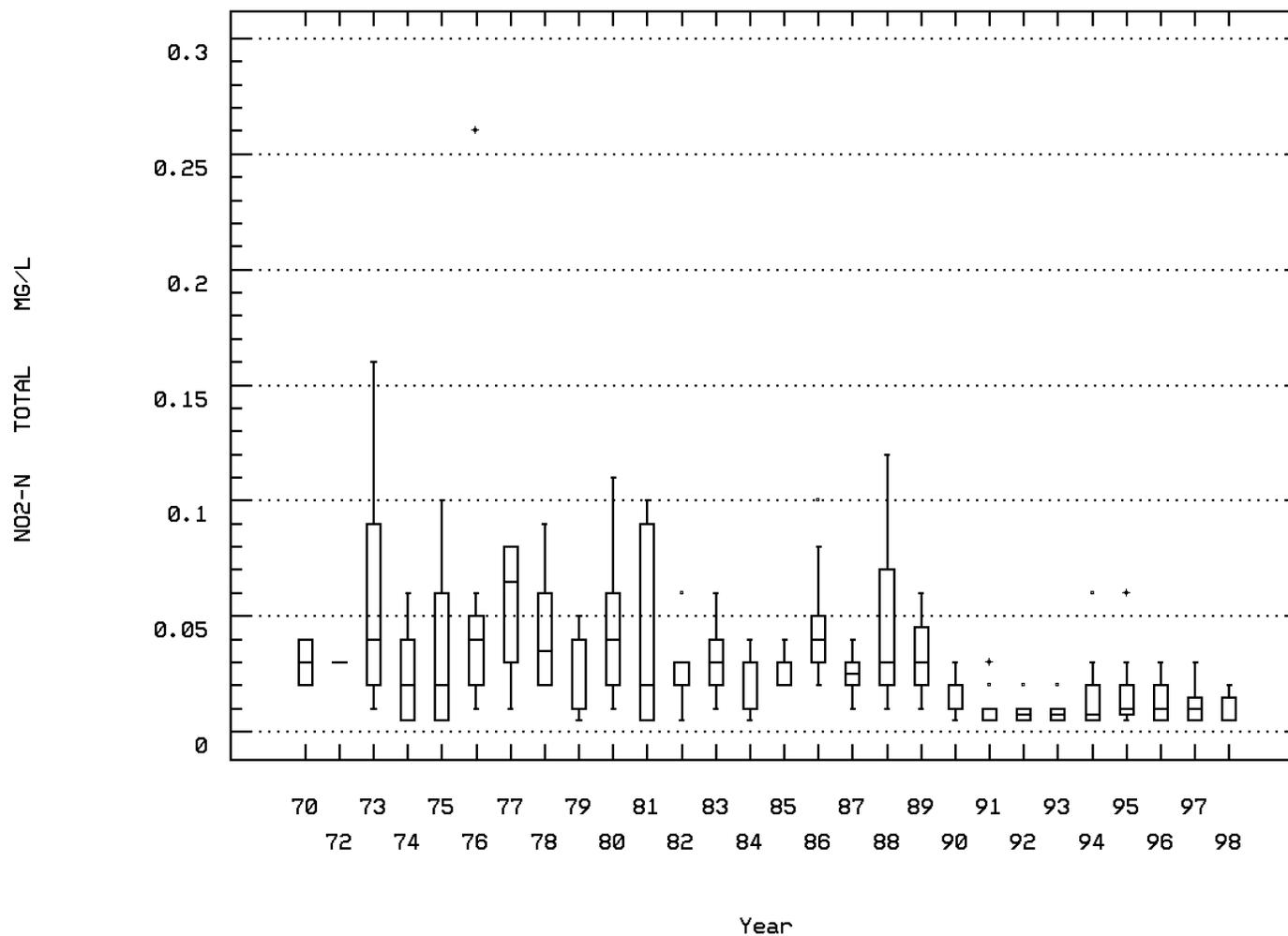
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00615

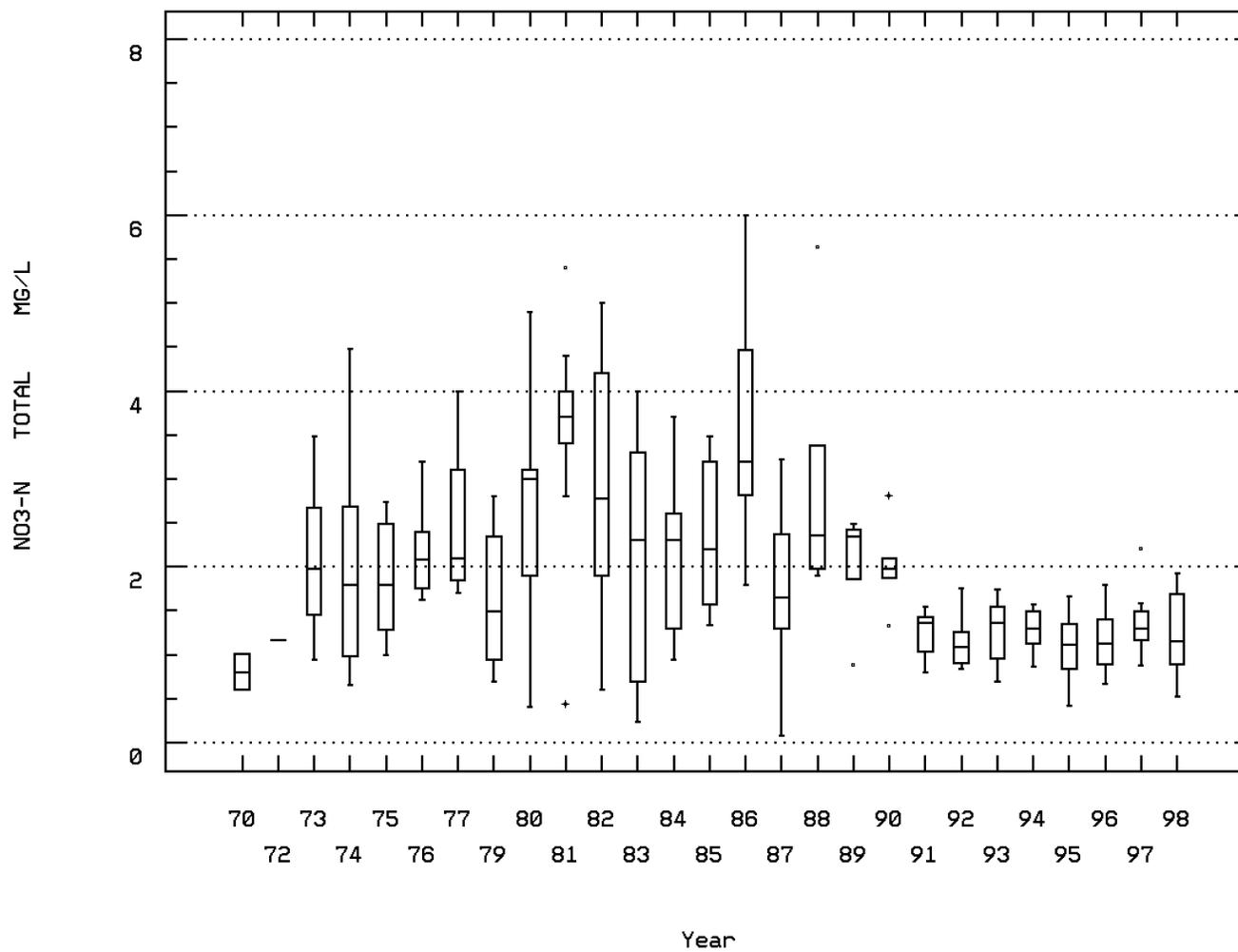
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00620

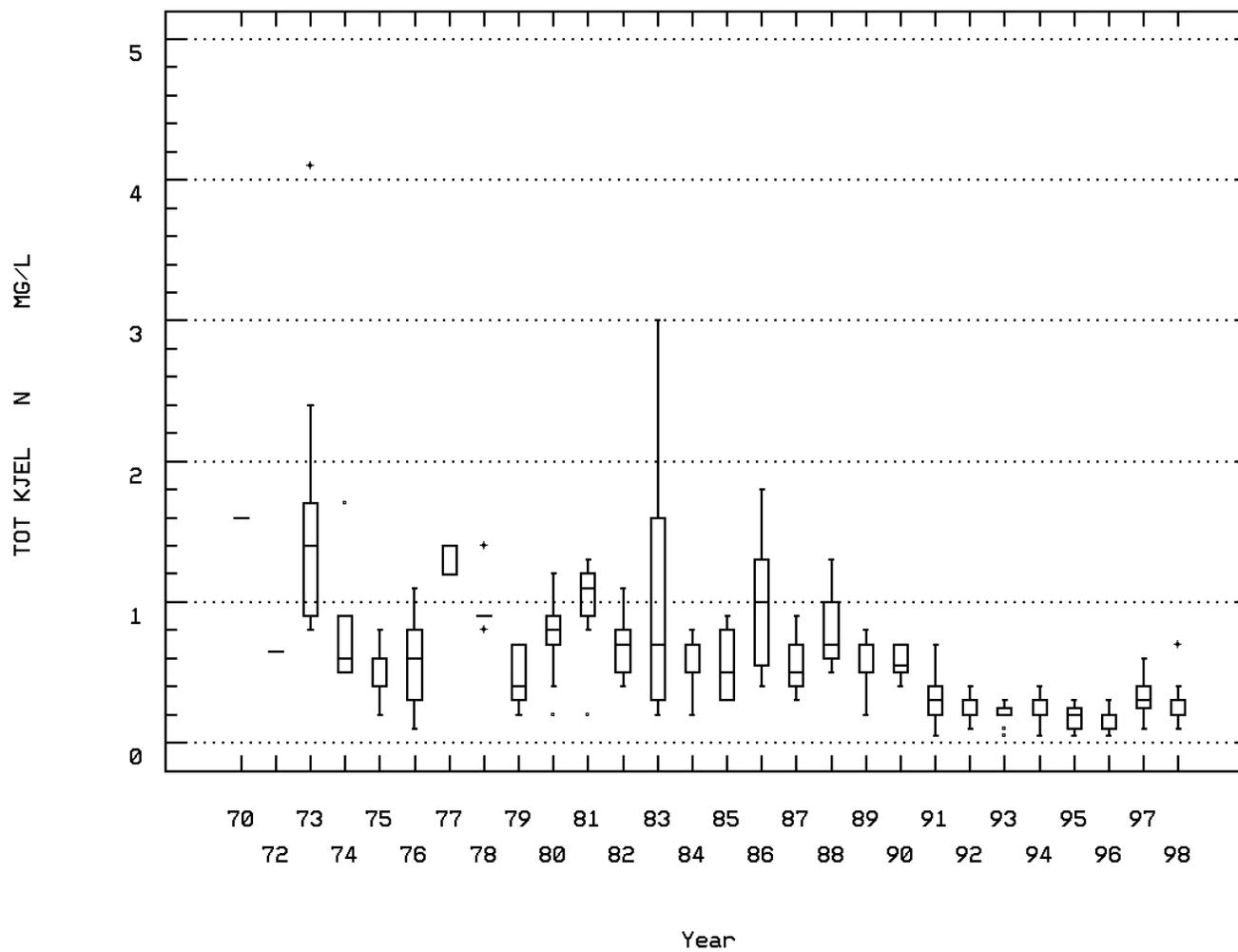
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00625

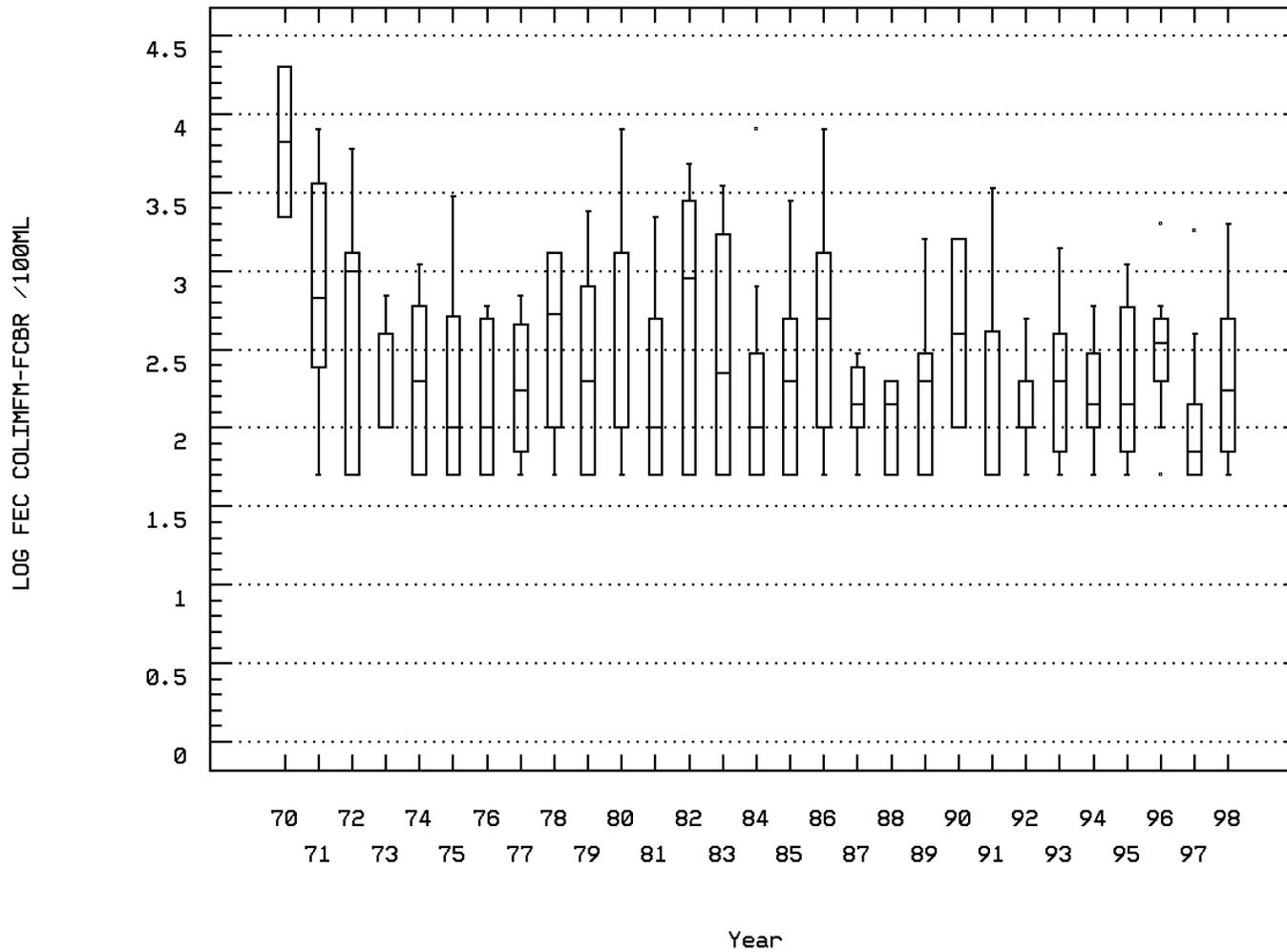
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 31616

LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



RT. 778 AT HARRISONBURG

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	91	21.8	20.94	29.2	2.3	19.408	4.405	16.	19.5	23.9	25.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	33	331.	326.394	523.	113.	6990.184	83.607	228.4	289.5	376.	426.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	28	272.5	261.357	431.	132.	4184.09	64.685	147.	229.	289.	319.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	25	8.5	8.608	9.9	6.4	0.72	0.848	7.4	8.2	9.35	9.64
00300p	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	64	8.8	8.828	11.8	6.	1.288	1.135	7.4	8.1	9.525	10.3
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	59	1.	1.141	3.	0.5	0.257	0.507	0.5	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	61	9.	9.098	30.	0.5	24.79	4.979	2.5	6.	12.	14.
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	91	8.1	8.134	9.3	6.6	0.285	0.534	7.5	7.8	8.48	9.
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	91	8.1	7.812	9.3	6.6	0.39	0.625	7.5	7.8	8.48	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	91	0.008	0.015	0.251	0.001	0.001	0.029	0.001	0.003	0.016	0.032
00403p	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	44	7.9	7.855	8.3	7.2	0.066	0.257	7.45	7.7	8.075	8.2
00403p	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	44	7.9	7.775	8.3	7.2	0.073	0.27	7.45	7.7	8.075	8.2
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	44	0.013	0.017	0.063	0.005	0.	0.012	0.006	0.008	0.02	0.036
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	43	106.	102.233	201.	50.	639.23	25.283	64.	93.	111.	121.2
00500	RESIDUE, TOTAL (MG/L)	03/02/70-08/10/92	12	165.5	162.417	219.	98.	1654.811	40.679	98.6	133.	196.	218.7
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-08/10/92	12	40.5	114.167	900.	20.	61428.697	247.848	23.3	36.75	57.	652.2
00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-08/10/92	12	113.5	120.	180.	56.	1339.636	36.601	63.2	98.5	143.5	179.4
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	61	5.	8.598	65.	1.	108.532	10.418	2.	3.	9.	19.8
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	61	2.5	3.164	13.	0.	7.098	2.664	1.	1.5	4.	7.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	61	3.	6.008	55.	0.5	81.971	9.054	1.	2.	5.5	15.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	74 ##	0.05	0.046	0.2	0.02	0.001	0.027	0.02	0.02	0.05	0.06
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	74	0.02	0.022	0.09	0.005	0.	0.016	0.005	0.01	0.03	0.04
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	71	2.399	2.382	5.	0.39	1.158	1.076	1.022	1.5	3.059	3.944
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	74	0.6	0.684	3.	0.1	0.233	0.483	0.2	0.3	1.	1.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	58	0.2	0.198	0.4	0.05	0.009	0.097	0.1	0.1	0.3	0.31
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	36	0.195	0.188	0.35	0.04	0.007	0.086	0.07	0.11	0.268	0.299
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	59	5.	5.112	12.	0.5	7.907	2.812	1.5	3.3	7.	9.
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	43	121.	122.023	213.	57.	825.88	28.738	83.6	112.	134.	149.2
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	28	10.	9.304	17.	2.5	10.988	3.315	4.9	7.	11.	13.2
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	28	10.	11.143	24.	6.	13.09	3.618	7.9	9.25	12.	16.2
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-07/14/82	9	20.	35.556	200.	5.	3871.528	62.222	5.	7.5	25.	200.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	76	200.	840.789	8000.	50.	2646380.702	1626.77	50.	100.	800.	2090.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	76	2.301	2.474	3.903	1.699	0.353	0.594	1.699	2.	2.903	3.319
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			297.968								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	16	0.2	0.256	0.4	0.1	0.008	0.089	0.17	0.2	0.3	0.4
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	38	0.12	0.16	0.4	0.04	0.007	0.086	0.078	0.1	0.2	0.304

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	121	7.4	8.171	21.1	0.	16.931	4.115	2.9	5.5	10.55	14.4
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	39	256.	270.718	472.	110.	8888.839	94.281	166.	193.	353.	405.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	41	201.	213.317	480.	76.	5743.972	75.789	128.	168.	269.5	297.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	31	12.1	12.026	14.5	9.4	1.797	1.341	10.16	11.	13.2	13.88
00300p	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	90	11.45	11.456	15.	7.	2.924	1.71	9.02	10.375	12.8	13.76
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	79	1.	1.625	7.	0.5	1.37	1.17	1.	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	80	7.	9.856	162.	1.	328.159	18.115	2.5	4.	10.	16.
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	122	8.1	8.029	9.5	1.2	0.661	0.813	7.4	7.675	8.5	8.77
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	122	8.1	3.286	9.5	1.2	23.337	4.831	7.4	7.675	8.5	8.77
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	122	0.008	517.194	63095.734	0.	32631718.572	5712.418	0.002	0.003	0.021	0.04
00403p	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	61	7.6	7.657	8.8	6.6	0.183	0.428	7.02	7.4	7.95	8.2
00403p	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	61	7.6	7.44	8.8	6.6	0.231	0.48	7.02	7.4	7.95	8.2
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	61	0.025	0.036	0.251	0.002	0.002	0.045	0.006	0.011	0.04	0.096
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	61	76.	77.115	122.	22.	600.837	24.512	47.2	60.	95.	113.
00500	RESIDUE, TOTAL (MG/L)	03/02/70-08/10/92	15	142.	142.8	232.	100.	1047.314	32.362	101.8	121.	162.	192.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-08/10/92	15	35.	37.8	68.	24.	110.171	10.496	24.	34.	44.	54.2
00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-08/10/92	15	108.	105.	164.	76.	596.286	24.419	77.8	84.	119.	144.2
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	81 ##	2.5	10.068	190.	0.5	847.198	29.107	1.5	2.25	7.	12.8
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	81 ##	2.5	3.037	29.	0.	20.38	4.514	1.	1.5	2.5	5.6
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	81 ##	2.5	8.086	161.	0.	599.33	24.481	1.5	1.5	4.	10.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	106 ##	0.05	0.133	1.5	0.02	0.054	0.231	0.02	0.02	0.1	0.372
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	107	0.02	0.028	0.26	0.005	0.001	0.033	0.005	0.005	0.03	0.06
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	103	1.56	1.956	6.	0.24	1.515	1.231	0.888	1.13	2.22	3.96
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	107	0.5	0.613	4.099	0.05	0.322	0.567	0.1	0.2	0.9	1.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	79	0.1	0.142	0.7	0.05	0.013	0.115	0.05	0.05	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	50	0.095	0.139	0.72	0.01	0.016	0.126	0.04	0.058	0.19	0.3
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	82	4.	5.026	26.	0.5	19.8	4.45	1.5	1.9	6.	10.7
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	59	91.	93.881	186.	42.	870.899	29.511	58.	75.	114.	134.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	43	7.	7.535	23.	2.5	13.195	3.633	4.	5.	9.	11.6
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	42	9.	10.786	56.	5.	63.538	7.971	6.	7.	11.	16.7
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-07/14/82	9 ##	5.	13.889	60.	5.	323.611	17.989	5.	5.	15.	60.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	111	100.	682.883	20000.	50.	4577886.159	2139.6	50.	50.	500.	1460.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	111	2.	2.249	4.301	1.699	0.378	0.615	1.699	1.699	2.699	3.164
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	111	2.	2.249	4.301	1.699	0.378	0.615	1.699	1.699	2.699	3.164
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	28	0.2	0.182	0.5	0.05	0.015	0.123	0.05	0.063	0.275	0.4
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	57	0.08	0.105	0.46	0.02	0.01	0.1	0.03	0.04	0.115	0.26

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-12/21/98	86	17.2	16.837	25.	7.2	21.328	4.618	10.28	13.	20.525	22.92
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-06/24/98	32	208.5	218.781	377.	95.	6060.564	77.85	126.8	154.25	272.5	349.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	29	194.	194.31	304.	98.	2178.436	46.674	119.	164.	226.5	254.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	25	9.1	9.7	12.4	6.9	2.51	1.584	7.78	8.55	11.3	11.86
00300p	OXYGEN, DISSOLVED MG/L	09/20/67-12/14/93	60	9.55	9.557	13.6	4.4	3.113	1.764	7.4	8.3	10.95	12.06
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/02/70-12/21/98	62	1.	1.31	2.8	0.5	0.317	0.563	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	60	7.	7.667	18.	0.5	15.387	3.923	2.5	6.	10.	14.
00400p	PH (STANDARD UNITS)	09/20/67-12/21/98	84	8.	8.003	9.	6.7	0.238	0.488	7.35	7.7	8.3	8.65
00400p	CONVERTED PH (STANDARD UNITS)	09/20/67-12/21/98	84	8.	7.727	9.	6.7	0.316	0.562	7.35	7.7	8.3	8.65
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	84	0.01	0.019	0.2	0.001	0.001	0.028	0.002	0.005	0.02	0.045
00403p	PH, LAB, STANDARD UNITS SU	09/20/67-12/21/98	43	7.7	7.558	8.2	6.5	0.166	0.408	6.9	7.3	7.8	8.1
00403p	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-12/21/98	43	7.7	7.334	8.2	6.5	0.218	0.467	6.9	7.3	7.8	8.1
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-12/21/98	43	0.02	0.046	0.316	0.006	0.004	0.063	0.008	0.016	0.05	0.126
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	43	74.	72.953	110.	33.	306.474	17.506	50.2	61.	86.	97.6
00500	RESIDUE, TOTAL (MG/L)	03/02/70-08/10/92	13	138.	142.308	239.	100.	1249.897	35.354	102.	117.	154.	210.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-08/10/92	13	42.	40.385	78.	14.	319.59	17.877	17.2	24.5	51.5	71.2
00510	RESIDUE, TOTAL FIXED (MG/L)	03/02/70-08/10/92	13	95.	101.923	161.	59.	682.244	26.12	65.8	87.	115.	150.6
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-12/21/98	63	7.	9.921	58.	0.5	95.098	9.752	2.5	4.	12.	21.8
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-12/21/98	63	2.5	3.19	18.	0.5	8.02	2.832	1.	1.5	4.	7.6
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-12/21/98	63	5.	7.079	49.	0.	64.639	8.04	2.	2.5	7.	16.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-12/21/98	78 ##	0.05	0.084	1.5	0.01	0.032	0.178	0.02	0.02	0.073	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	76	0.02	0.033	0.16	0.005	0.001	0.034	0.005	0.01	0.05	0.083
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-12/21/98	76	1.3	1.519	3.5	0.08	0.599	0.774	0.681	1.	1.89	2.936
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-12/21/98	76	0.4	0.523	1.7	0.05	0.123	0.351	0.2	0.3	0.7	0.93
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	60	0.1	0.109	0.3	0.05	0.006	0.074	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	37	0.07	0.093	0.3	0.02	0.004	0.067	0.028	0.045	0.12	0.204
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-06/24/98	58	3.25	4.321	12.	0.5	7.74	2.78	1.69	2.4	6.	8.1
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-12/21/98	40	87.5	87.2	138.	39.	457.395	21.387	62.4	72.	102.75	117.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	31	6.	6.661	18.	2.5	8.29	2.879	4.	5.	7.	10.6
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	31	8.	8.774	18.	6.	9.847	3.138	6.	7.	9.	13.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

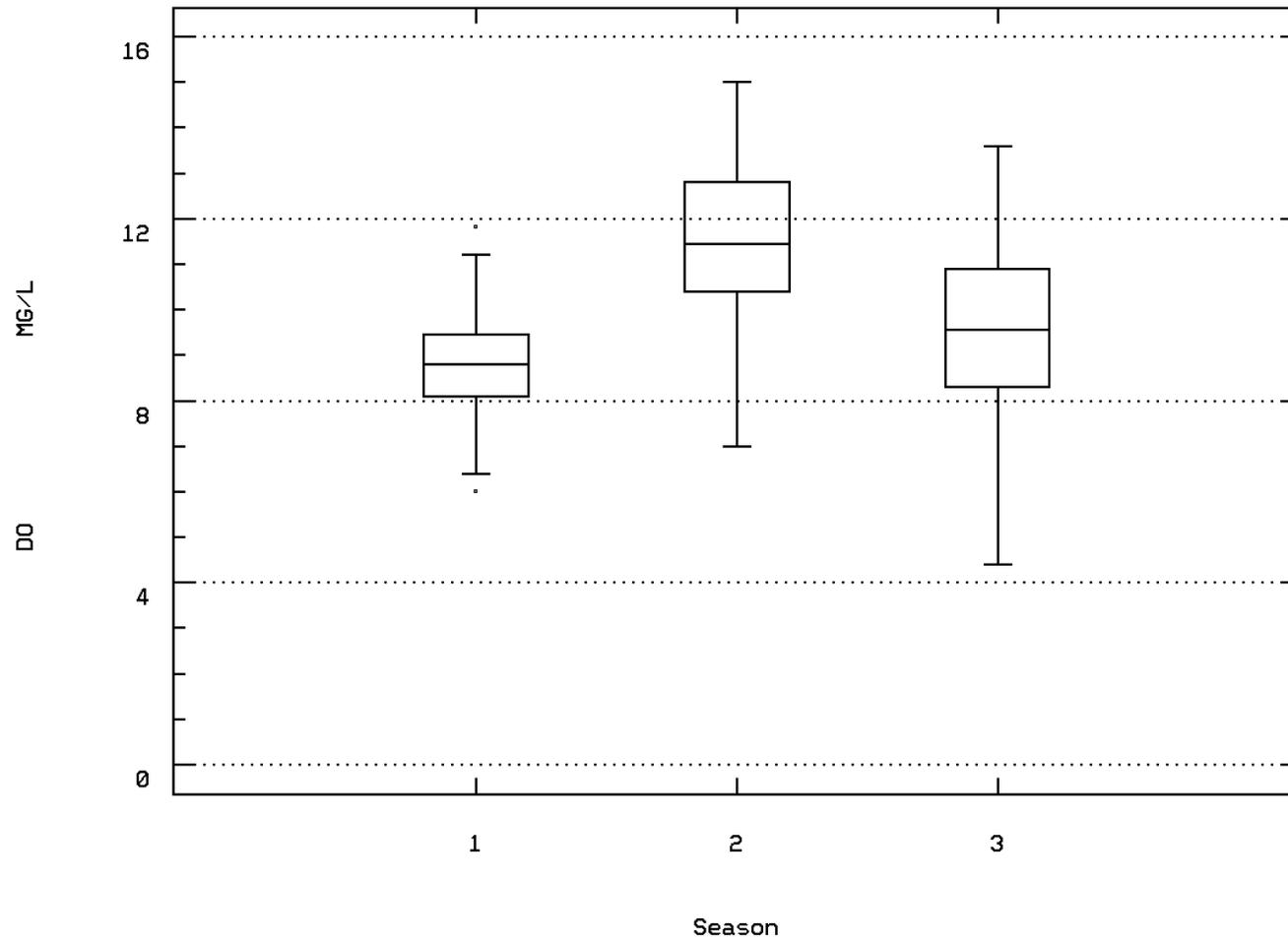
Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0162

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-07/14/82	7	10.	12.857	30.	5.	82.143	9.063	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	79	200.	763.924	8000.	50.	2479547.225	1574.658	50.	100.	700.	1400.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-12/21/98	79	2.301	2.403	3.903	1.699	0.369	0.607	1.699	2.	2.845	3.146
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			252.834								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	16	0.1	0.141	0.25	0.05	0.004	0.064	0.05	0.1	0.2	0.215
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-12/21/98	41	0.05	0.074	0.2	0.01	0.003	0.055	0.02	0.025	0.1	0.17

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0162 Parameter Code: 00300

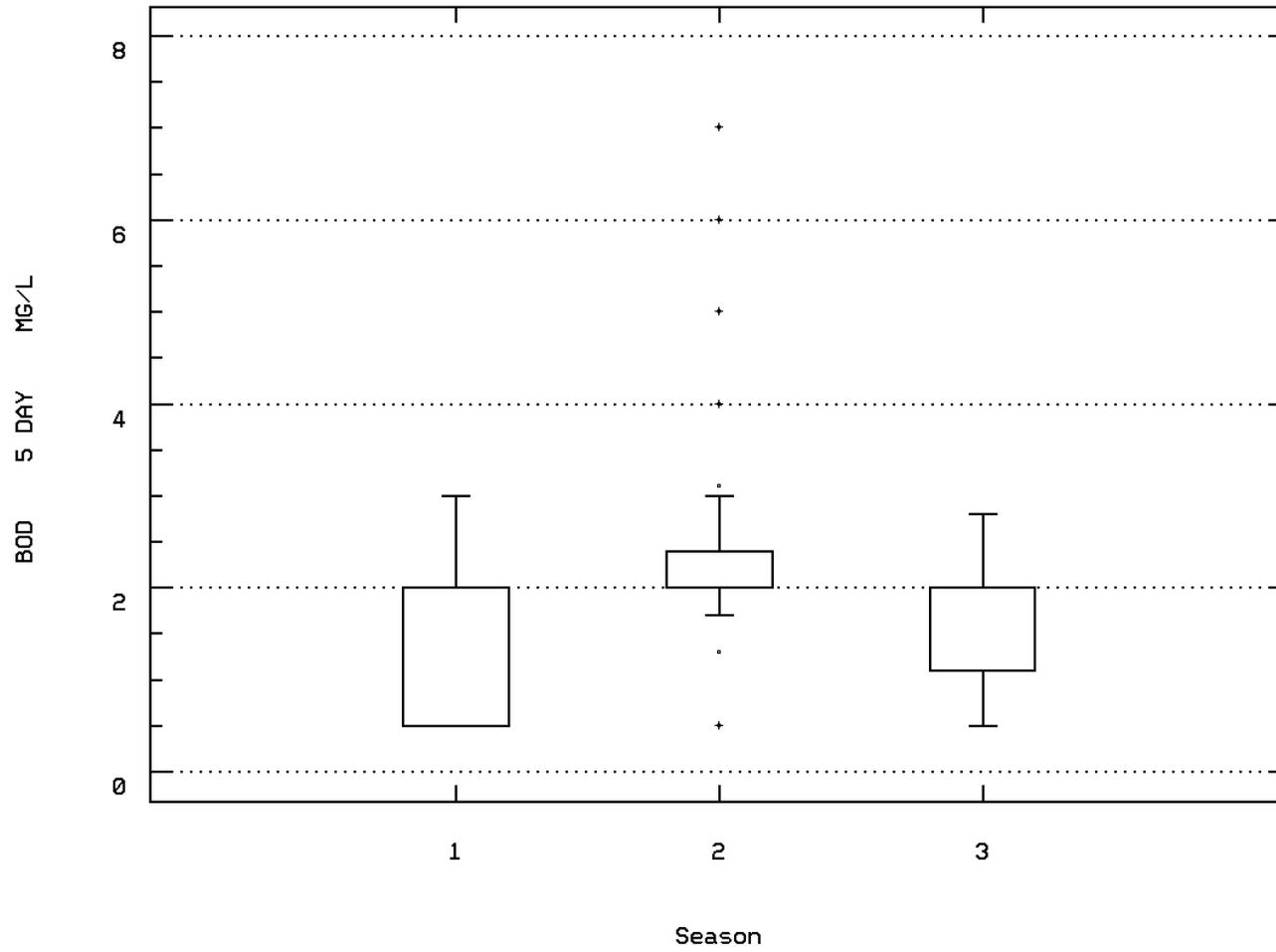
OXYGEN, DISSOLVED



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00310

BOD, 5 DAY, 20 DEG C

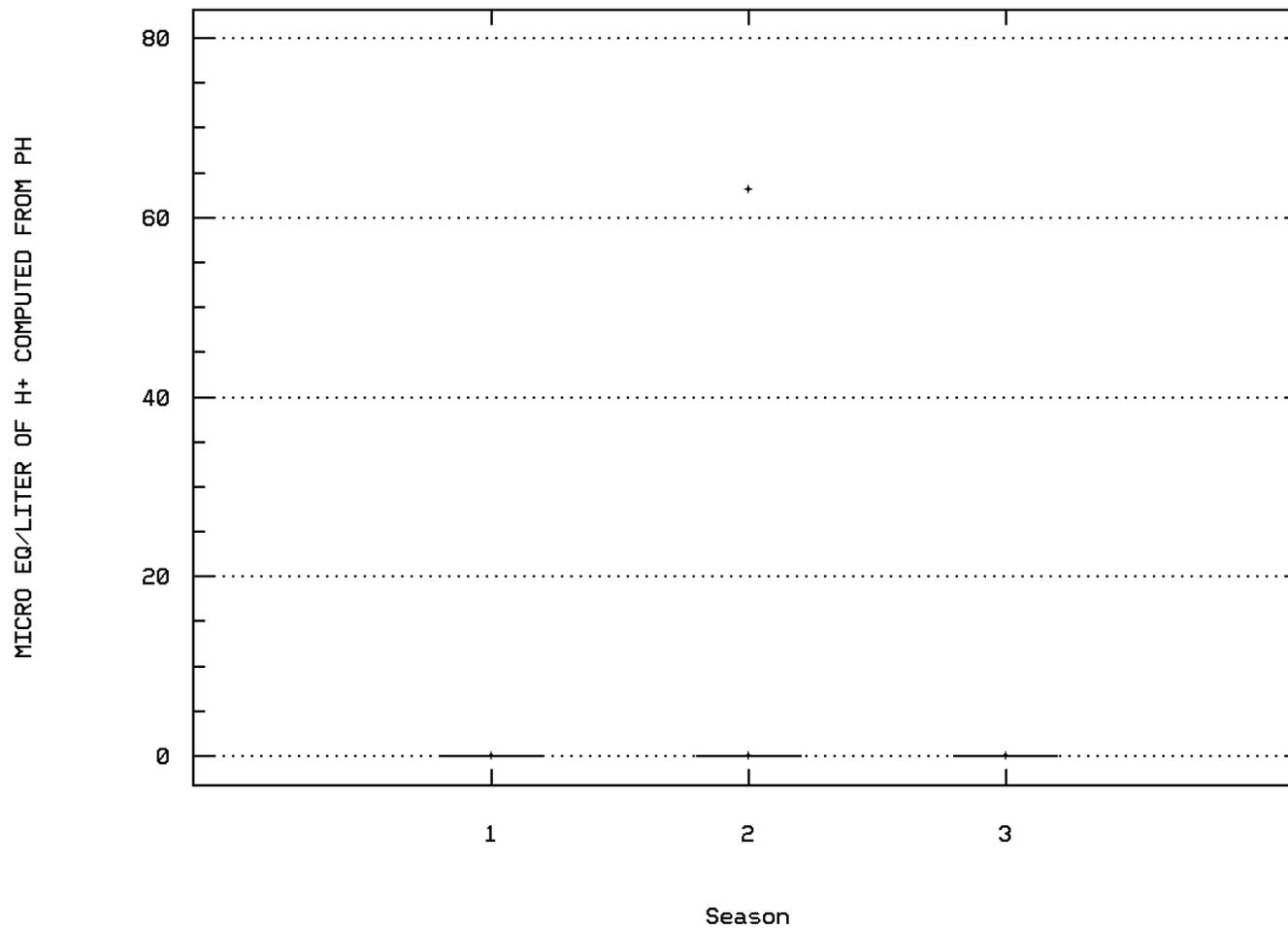


RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00400

MICRO EQ/LITER OF H+ COMPUTED FROM PH

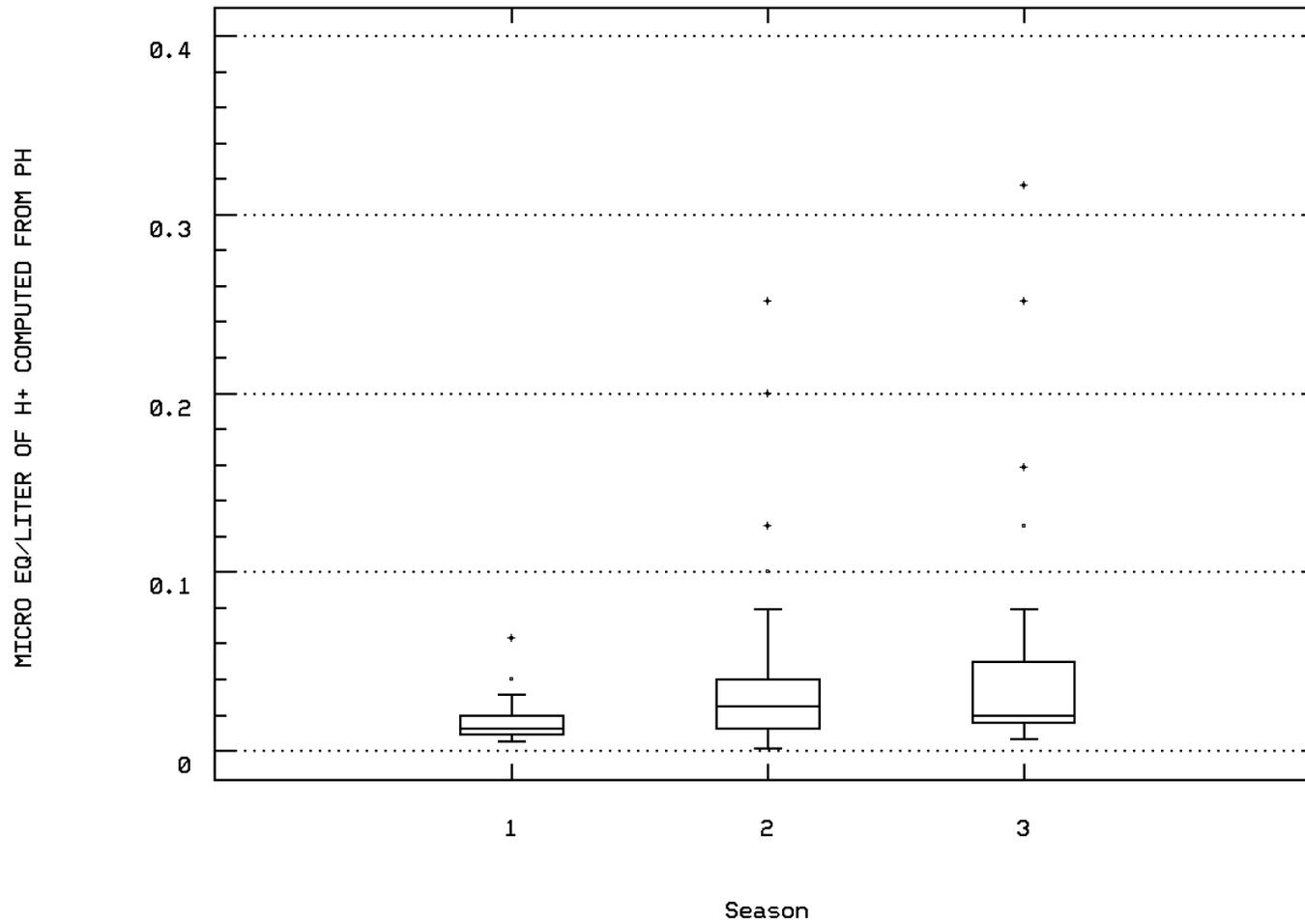
(X 1000)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00403

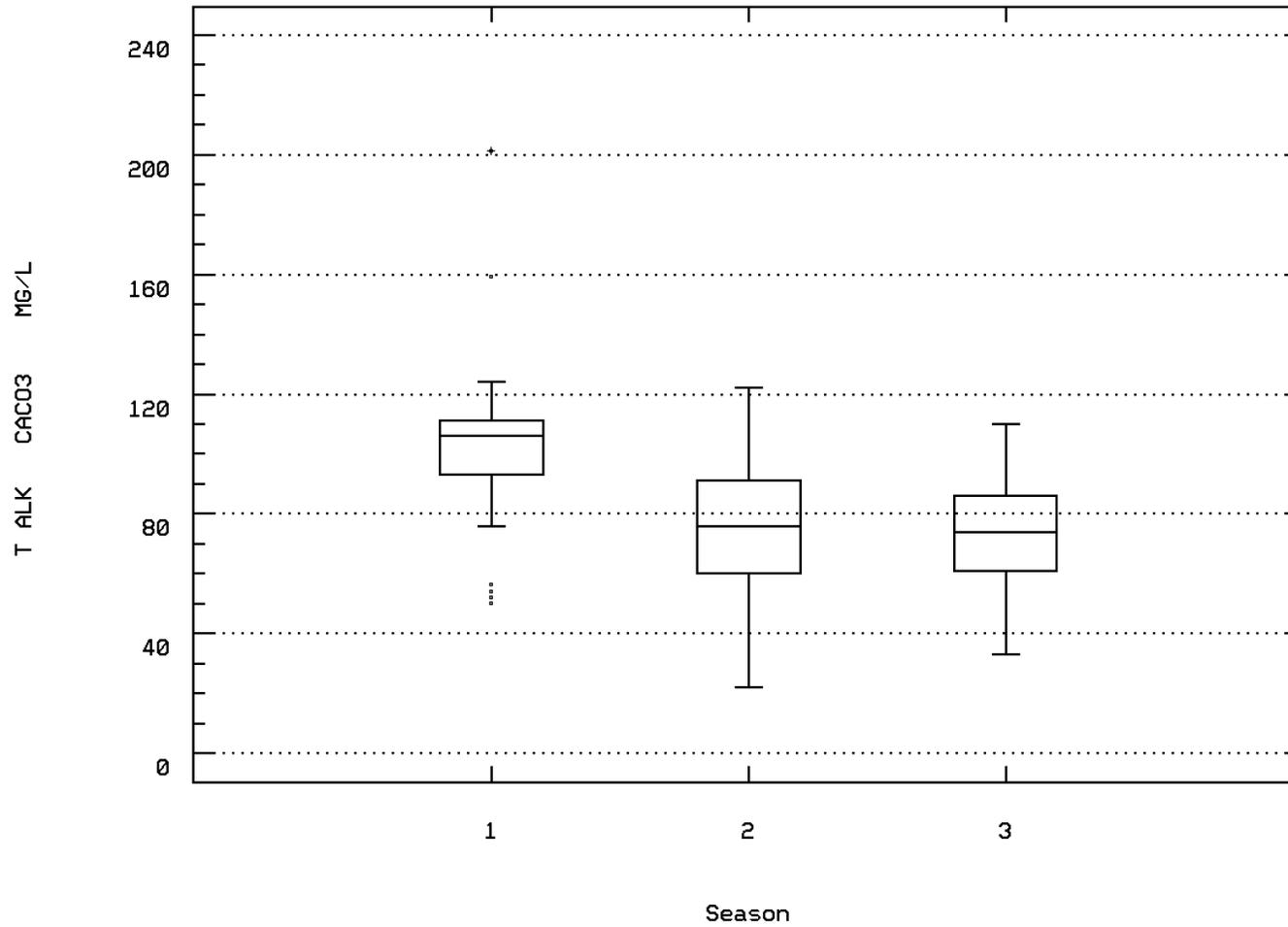
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00410

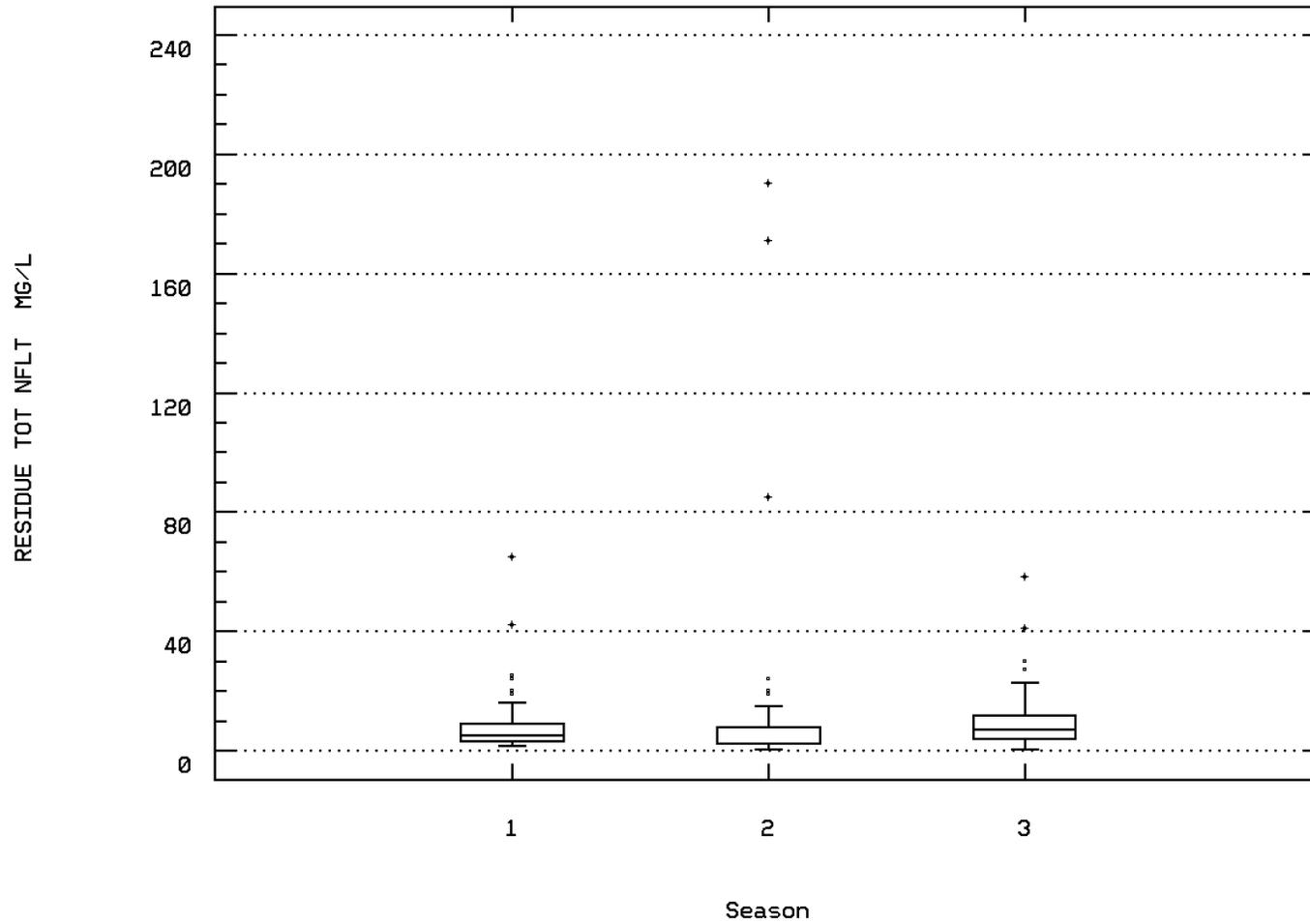
ALKALINITY, TOTAL (MG/L AS CaCO3)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00530

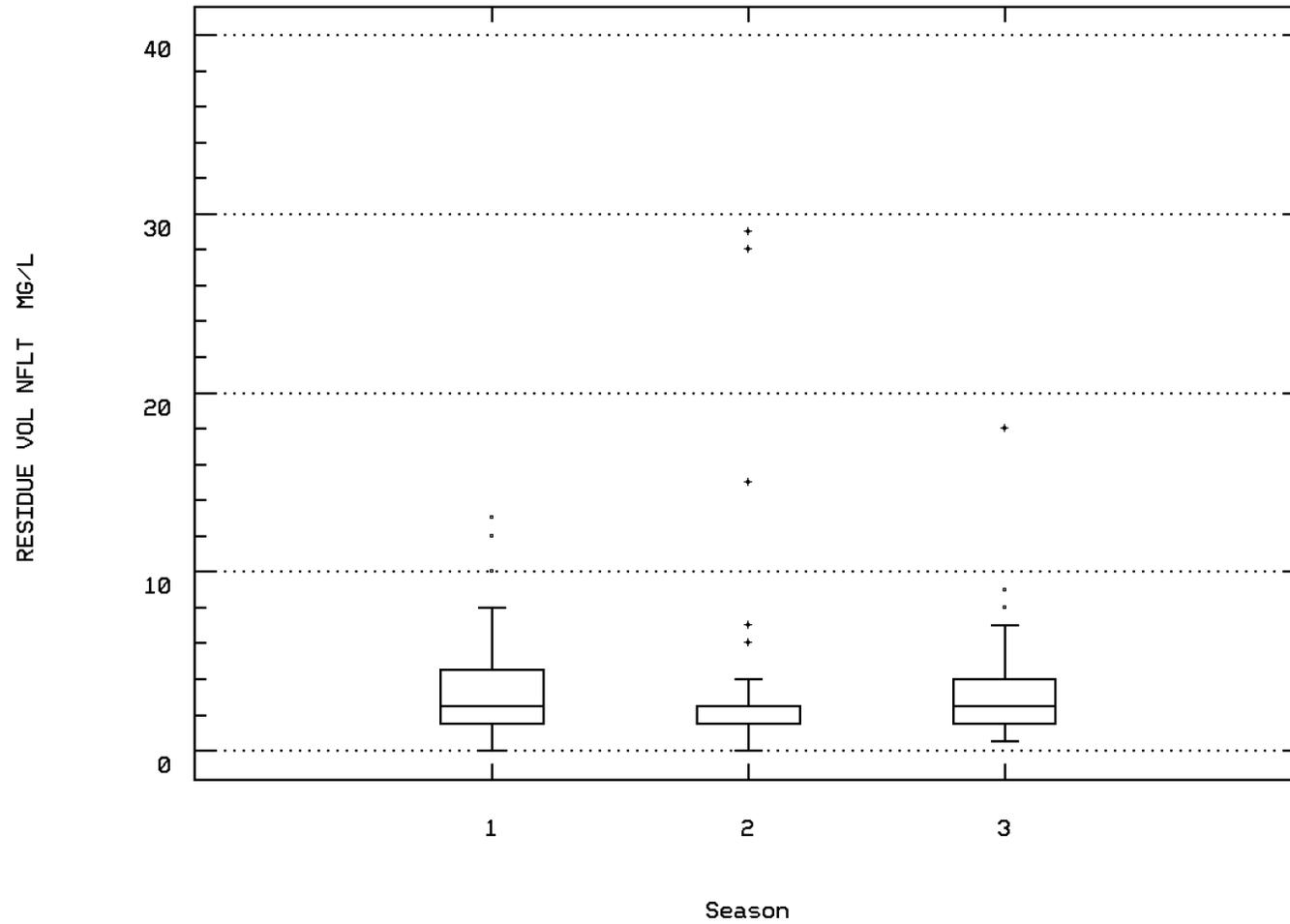
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00535

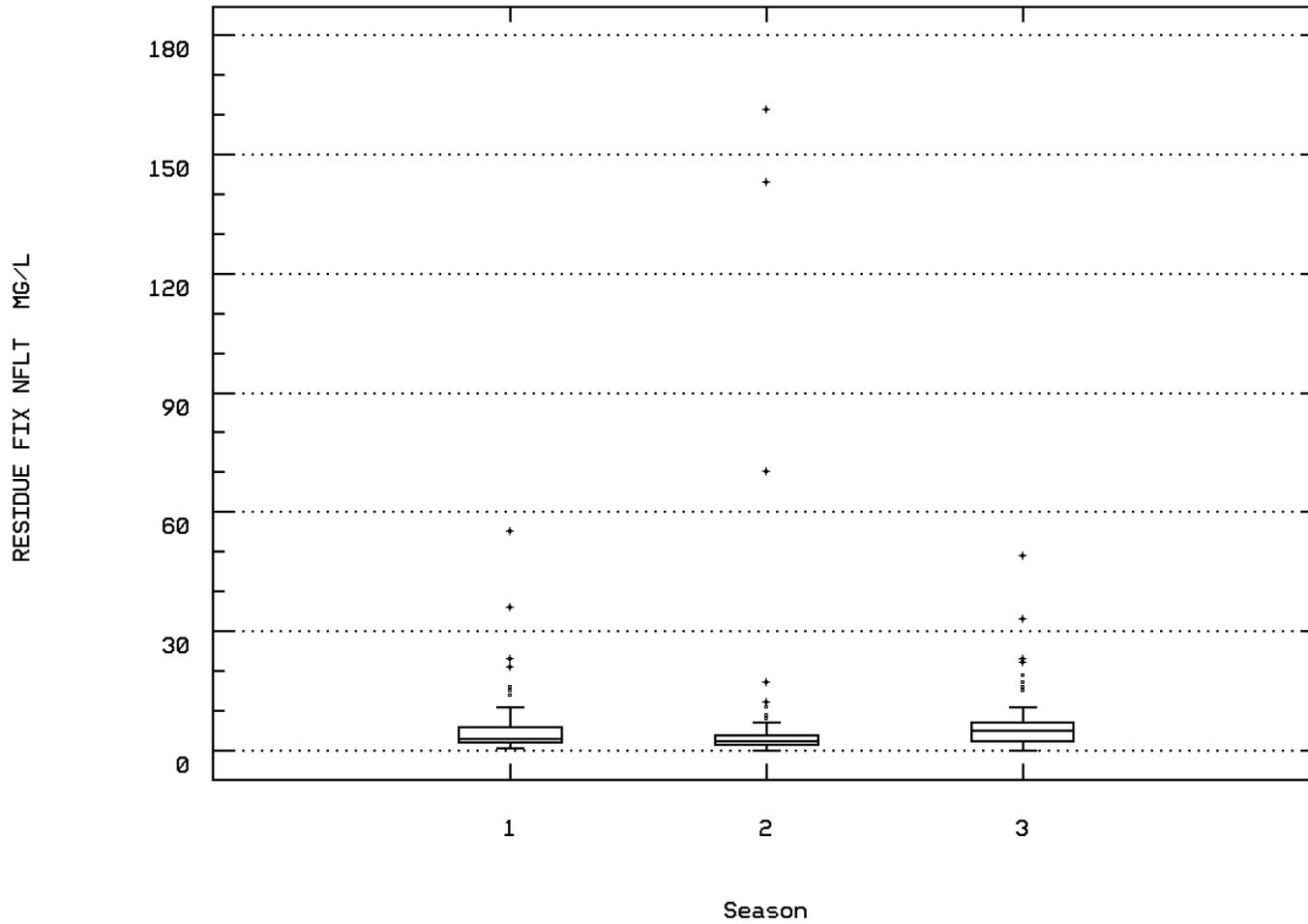
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00540

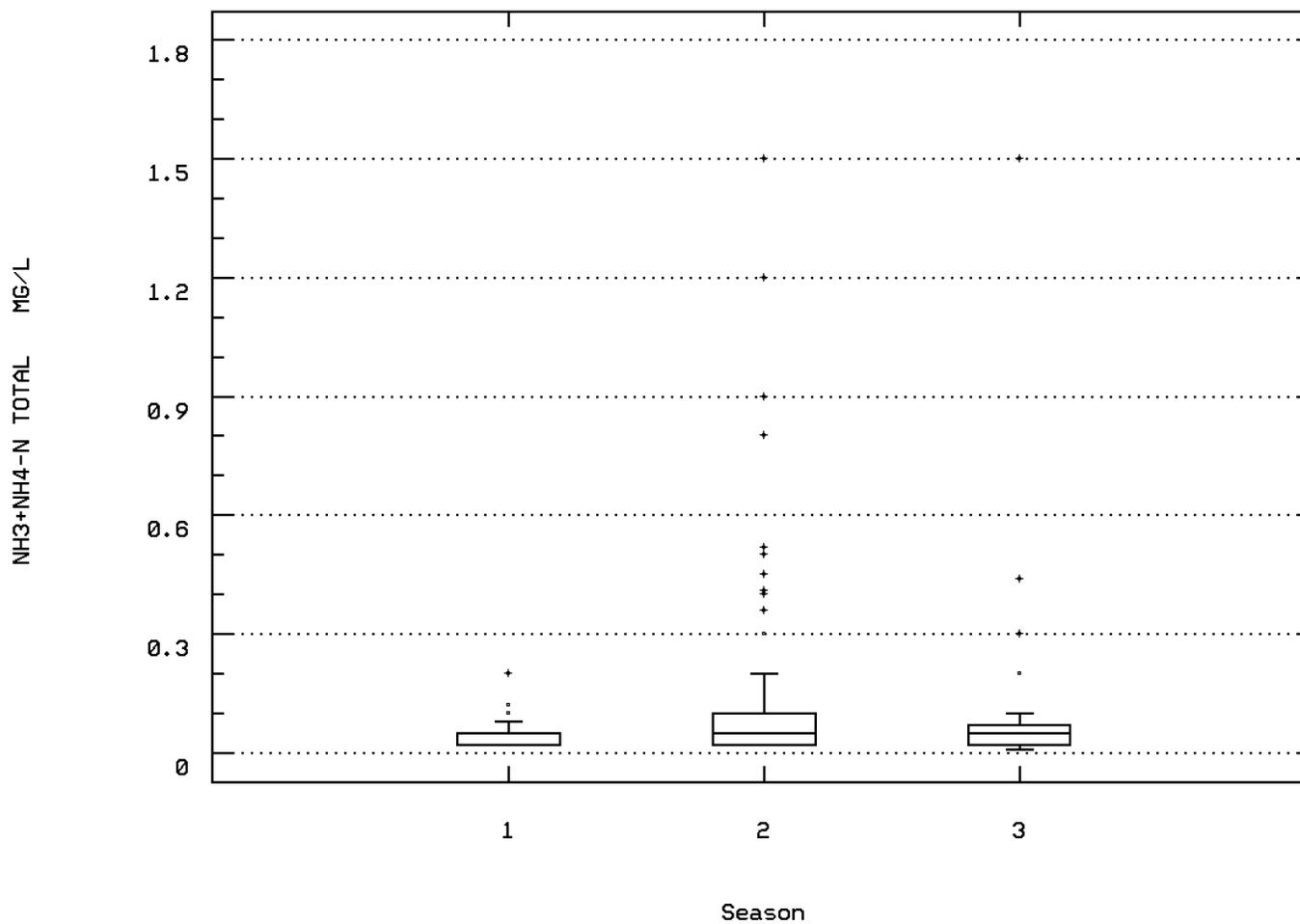
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00610

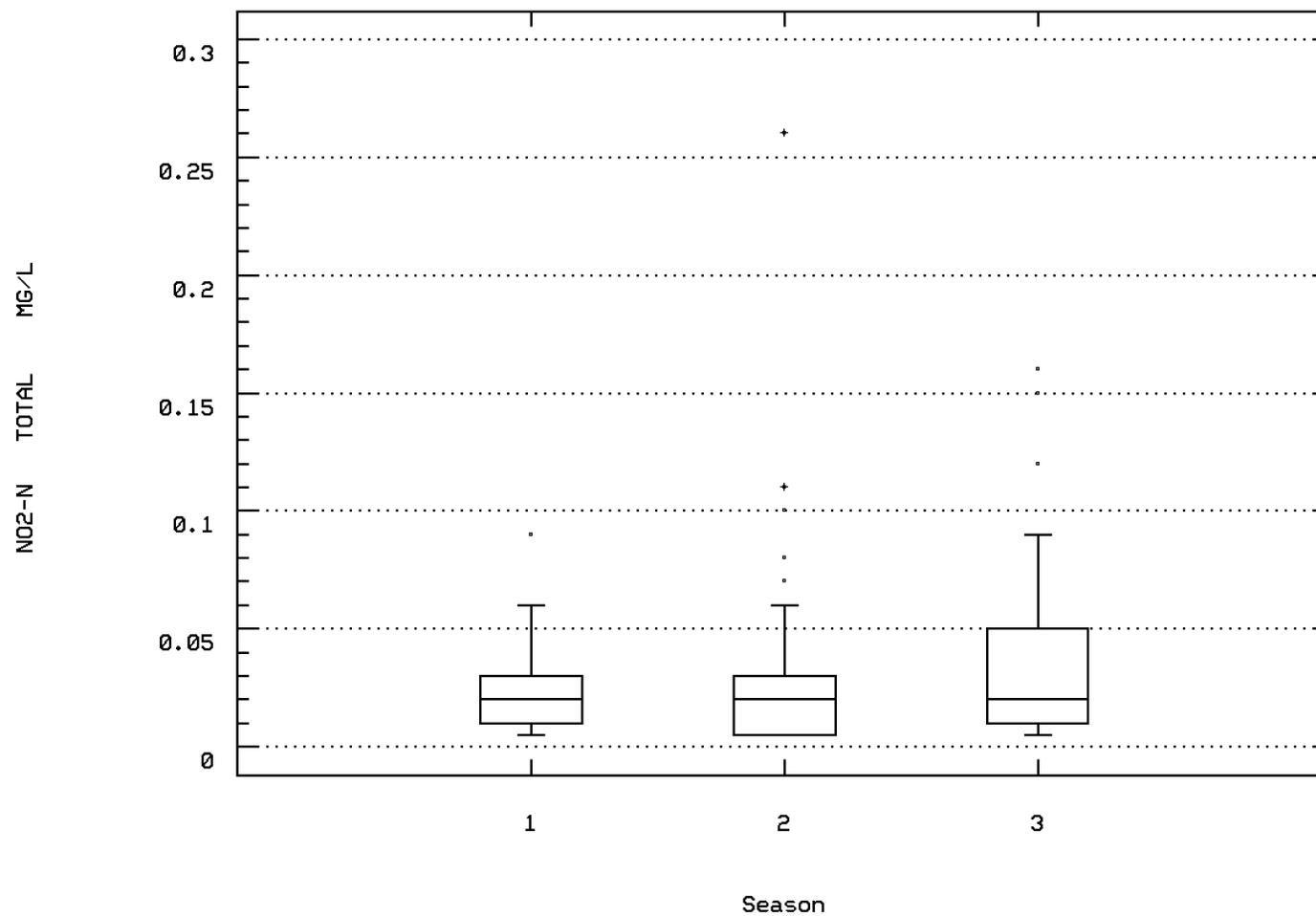
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00615

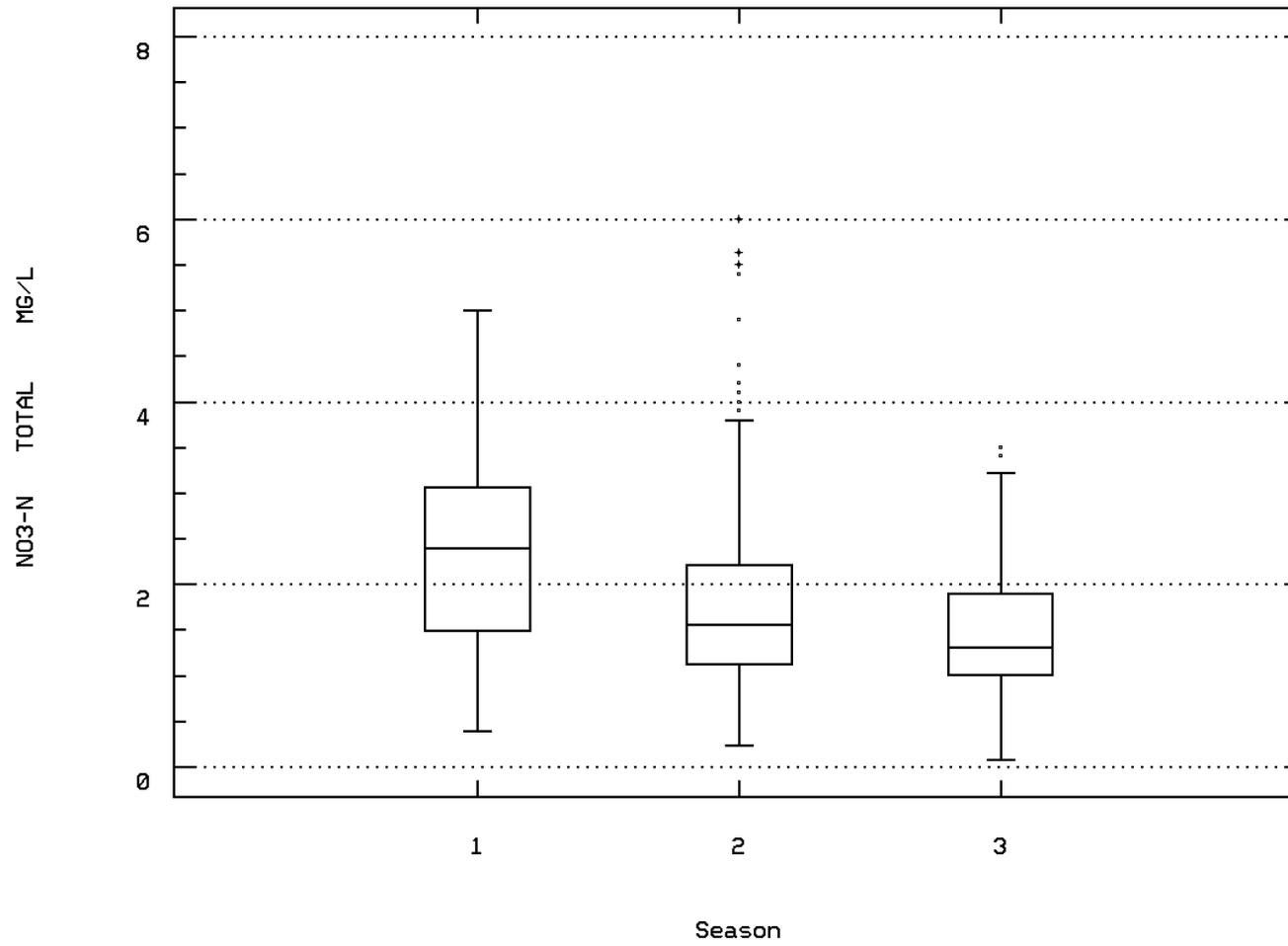
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00620

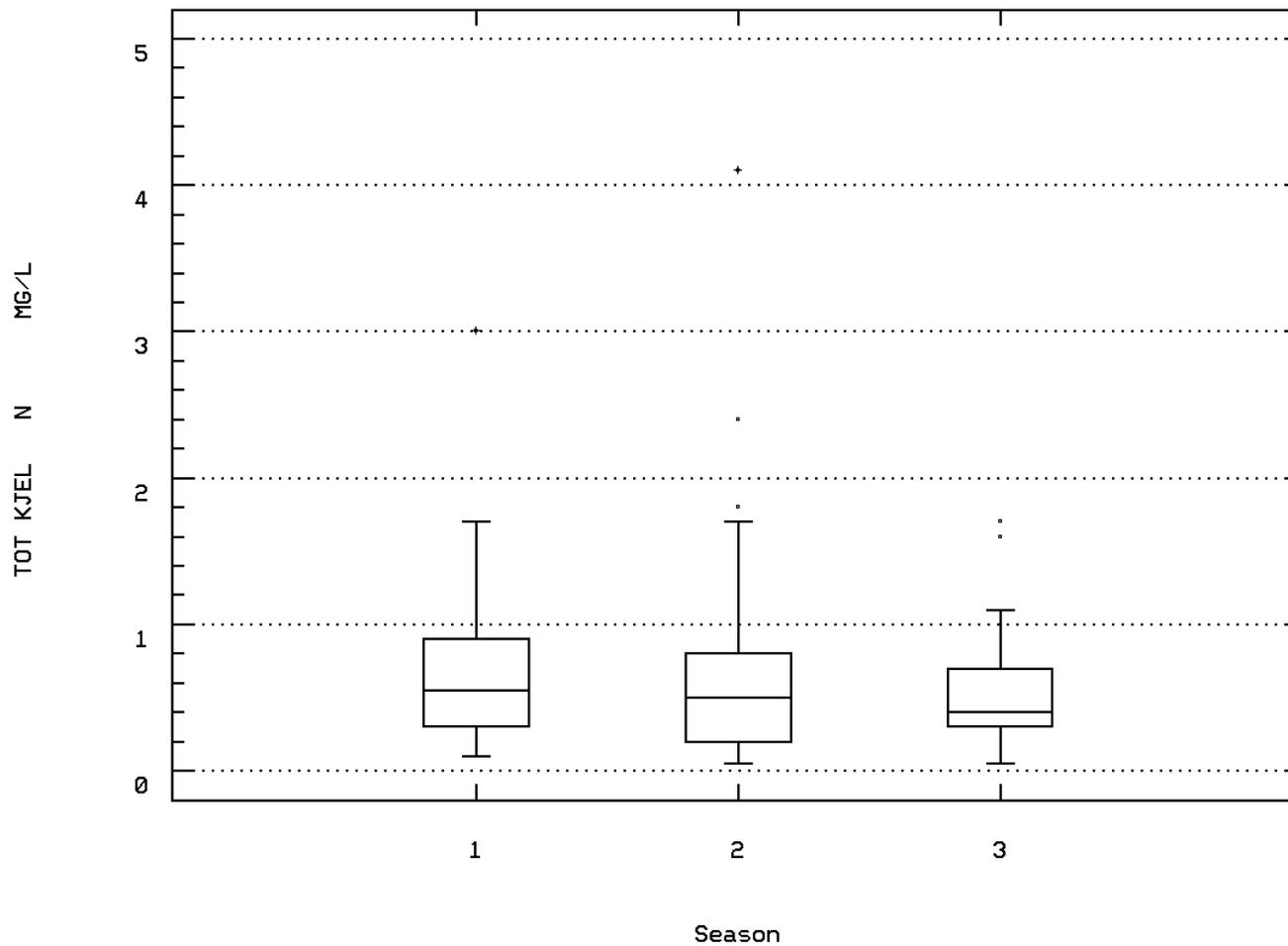
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00625

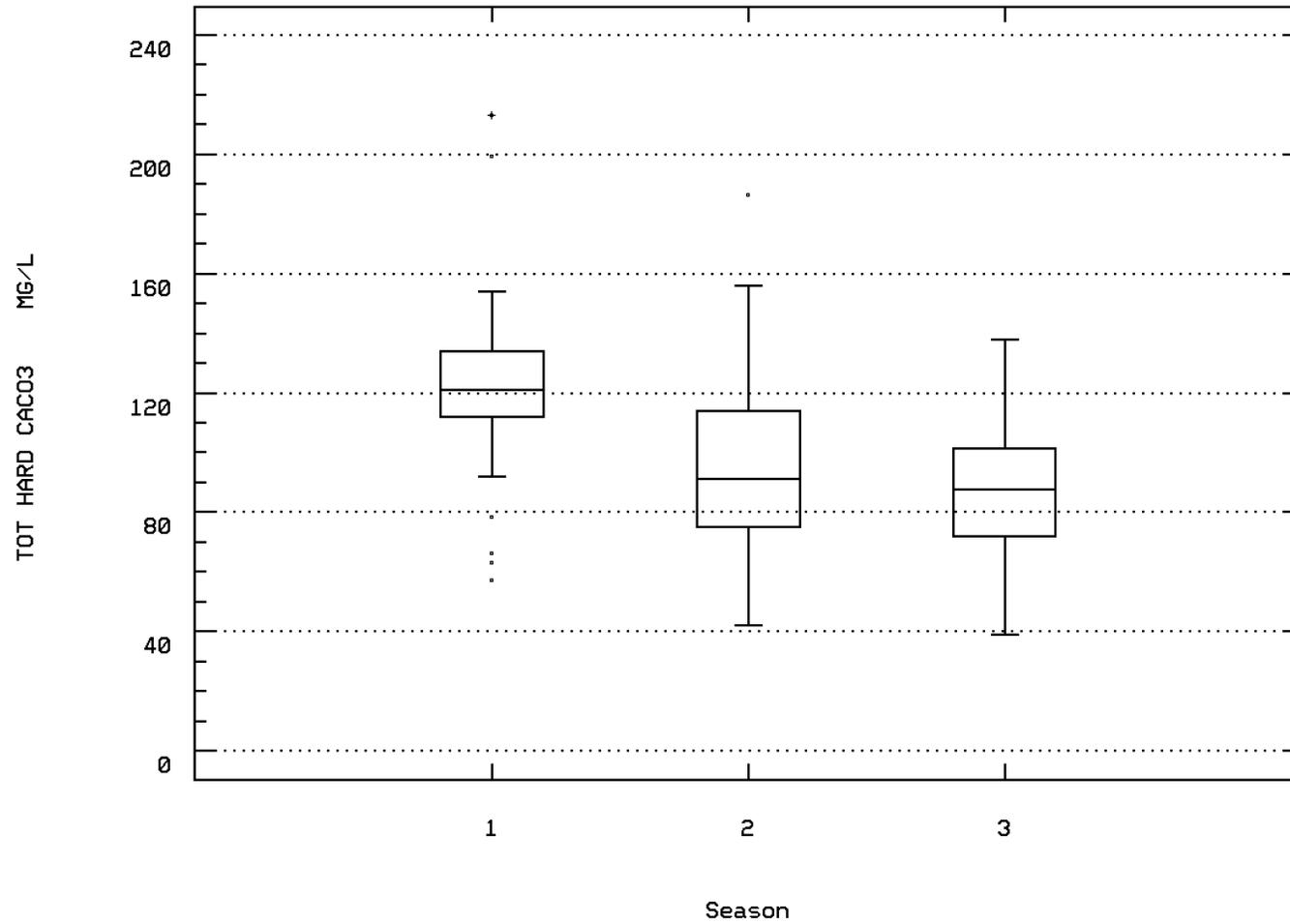
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 00900

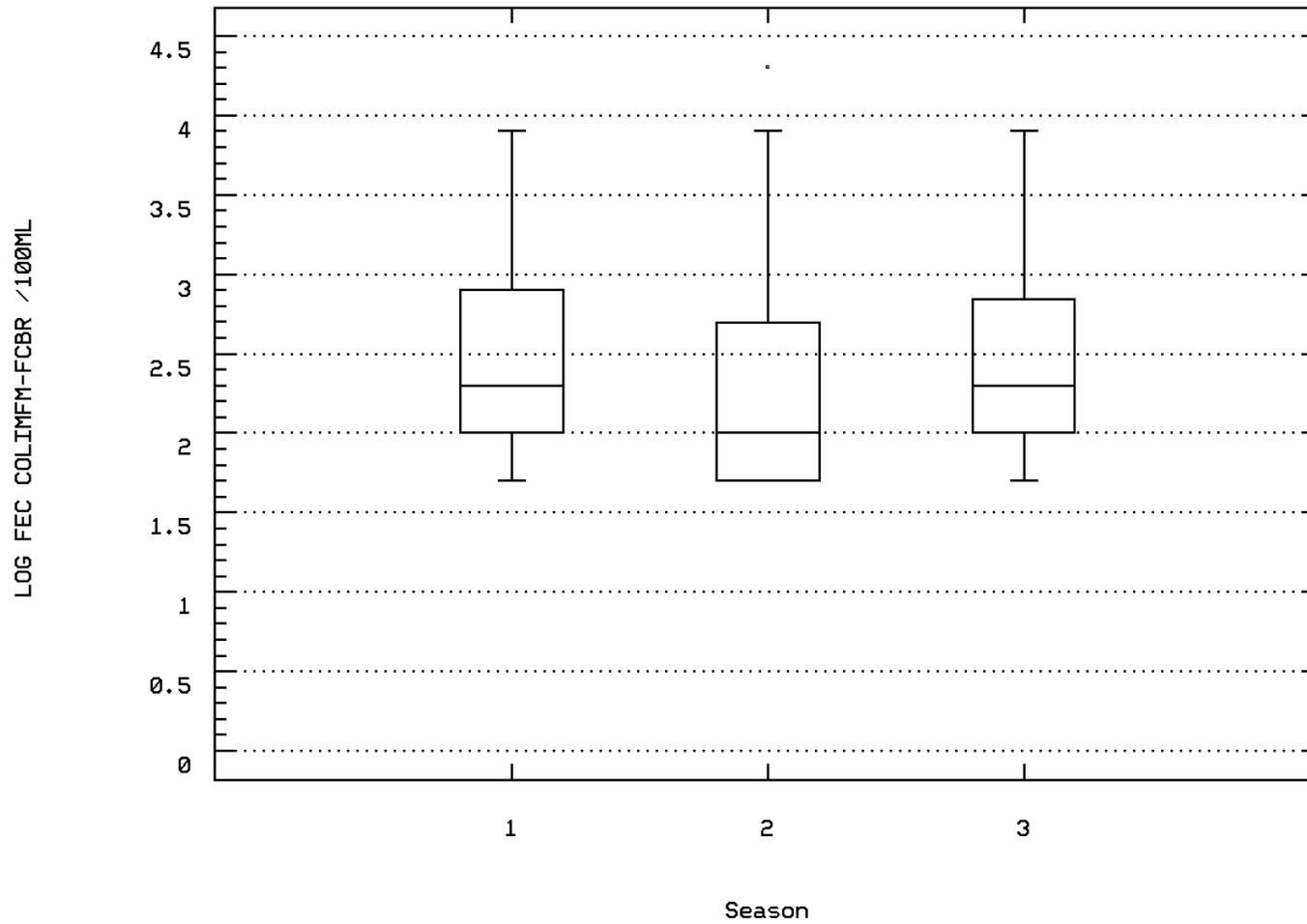
HARDNESS, TOTAL (MG/L AS CaCO3)



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 31616

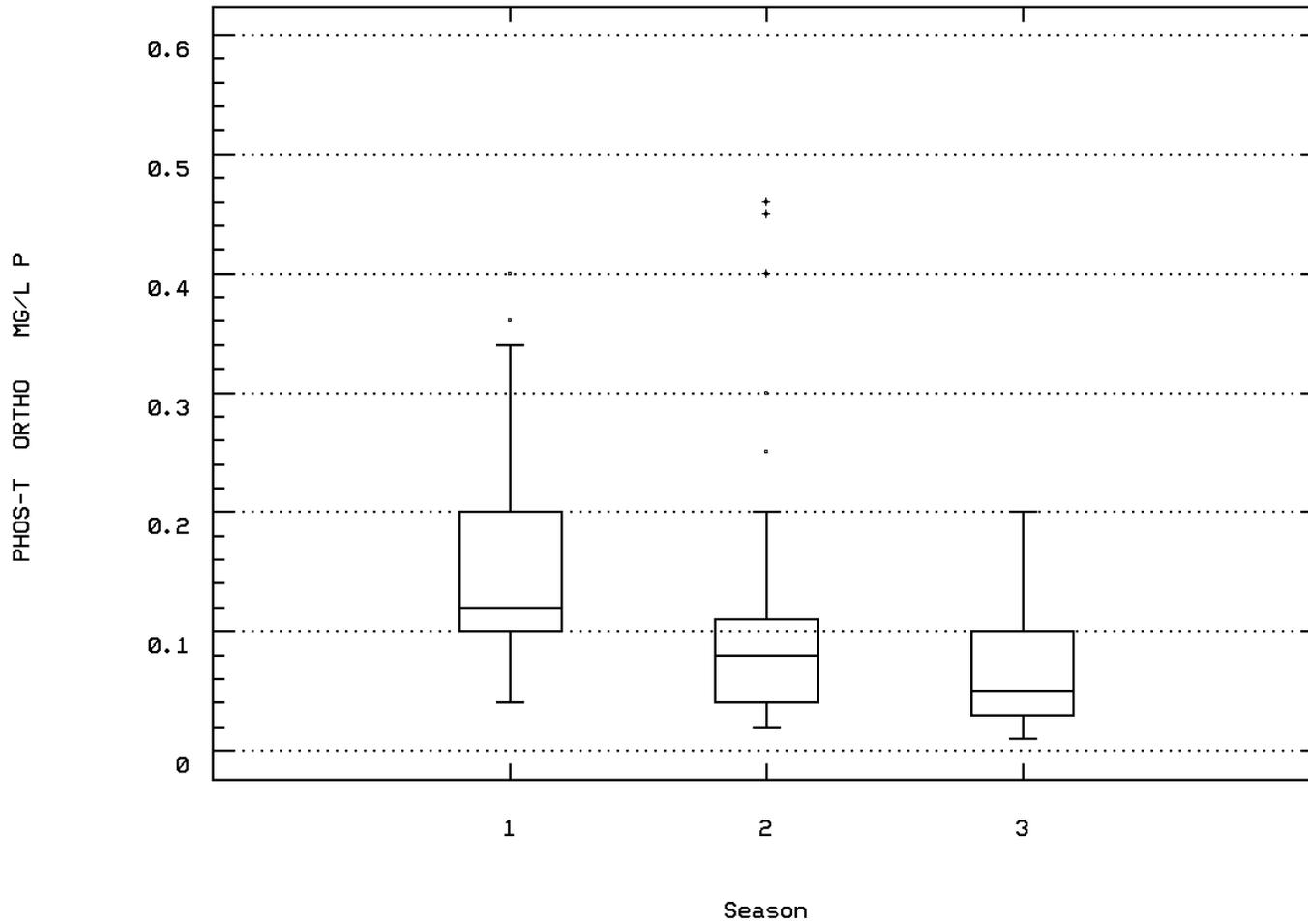
LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



RT. 778 AT HARRISONBURG

Station: SHEN0162 Parameter Code: 70507

PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



RT. 778 AT HARRISONBURG

Station Inventory for Station: SHEN0163

NPS Station ID: SHEN0163
 Location: POLECAT DRAFT NEAR PIEDMONT, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.218893/ -78.875281

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 01624950
 Within Park Boundary: No

Date Created: 11/20/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0163

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/13/93-09/13/93	1	21.5	21.5	21.5	21.5	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/13/93-09/13/93	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	09/13/93-09/13/93	1	741.	741.	741.	741.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/13/93-09/13/93	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/13/93-09/13/93	1	436.	436.	436.	436.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/13/93-09/13/93	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/13/93-09/13/93	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/13/93-09/13/93	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/13/93-09/13/93	1	0.013	0.013	0.013	0.013	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/13/93-09/13/93	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/13/93-09/13/93	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/13/93-09/13/93	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00453	BICARBONATE, WATER, DISS, INCR TIT, FIELD, AS HCO3, MG/L	09/13/93-09/13/93	1	262.	262.	262.	262.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/13/93-09/13/93	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/13/93-09/13/93	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/13/93-09/13/93	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/13/93-09/13/93	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/13/93-09/13/93	1	62.	62.	62.	62.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/13/93-09/13/93	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/13/93-09/13/93	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/13/93-09/13/93	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/13/93-09/13/93	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/13/93-09/13/93	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/13/93-09/13/93	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/13/93-09/13/93	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/13/93-09/13/93	1##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/13/93-09/13/93	1	22.	22.	22.	22.	0.	0.	**	**	**	**
04024	PROPACHLOR, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1##	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
04040	DEETHYL ATRAZINE, DISSOLVED, WATER, TOT REC UG/L	09/13/93-09/13/93	1	0.047	0.047	0.047	0.047	0.	0.	**	**	**	**
04041	CYANAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1##	0.007	0.007	0.007	0.007	0.	0.	**	**	**	**
04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/13/93-09/13/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0163

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
34253	A-BHC-ALPHA DISSUG/L	09/13/93-09/13/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**
34653	P,P'-DDE DISSUG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
38933	CHLORPYRIFOS,DISSOLVED UG/L	09/13/93-09/13/93	1##	0.003	0.003	0.003	0.003	0.	0.	**	**	**
39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	09/13/93-09/13/93	1	215.	215.	215.	215.	0.	0.	**	**	**
39341	GAMMA-BHC(LINDANE),DISSOLVED,UG/L	09/13/93-09/13/93	1##	0.006	0.006	0.006	0.006	0.	0.	**	**	**
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
39415	METOLACHLOR, WATER, DISSOLVED UG/L	09/13/93-09/13/93	1	0.002	0.002	0.002	0.002	0.	0.	**	**	**
39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	1##	0.011	0.011	0.011	0.011	0.	0.	**	**	**
39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/13/93-09/13/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**
39632	ATRAZINE DISSOLVED IN WATER PPB	09/13/93-09/13/93	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**
46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/13/93-09/13/93	1	204.	204.	204.	204.	0.	0.	**	**	**
82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82660	DIETHYLANILINE, 2, 6-0.7UM FILT,TOT RECV,WTR UG/L	09/13/93-09/13/93	1##	0.003	0.003	0.003	0.003	0.	0.	**	**	**
82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	09/13/93-09/13/93	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**
82662	DIMETHOATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1	0.	0.	0.	0.	0.	0.	**	**	**
82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**
82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**
82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	09/13/93-09/13/93	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**
82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.003	0.003	0.003	0.003	0.	0.	**	**	**
82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**
82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**
82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**
82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.025	0.025	0.025	0.025	0.	0.	**	**	**
82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**
82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**
82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/13/93-09/13/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0163

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00								
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00								
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00								
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00								
		Drinking Water	250.	1	0	0.00	1	0	0.00								
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00								
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0163

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
04035 SIMAZINE, DISSOLVED, WATER, TOTAL RECOVER	Drinking Water	4.	1	0	0.00	1	0	0.00										
34653 P,P'-DDE, DISSOLVED	Fresh Acute	1050.	1	0	0.00	1	0	0.00										
38933 CHLORPYRIFOS, DISSOLVED	Fresh Acute	0.083	1	0	0.00	1	0	0.00										
39341 GAMMA-BHC(LINDANE), DISSOLVED	Fresh Acute	2.	1	0	0.00	1	0	0.00										
	Drinking Water	0.2	1	0	0.00	1	0	0.00										
39381 DIELDRIN IN FILT. FRAC. OF WATER SAMPLE	Fresh Acute	2.5	1	0	0.00	1	0	0.00										
39542 PARATHION IN FILT. FRAC. OF WATER SAMPLE	Fresh Acute	0.065	1	0	0.00	1	0	0.00										
39632 ATRAZINE DISSOLVED IN WATER	Drinking Water	3.	1	0	0.00	1	0	0.00										
46342 ALACHLOR (LASSO), WATER, DISSOLVED	Drinking Water	2.	1	0	0.00	1	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0164

NPS Station ID: SHEN0164
 Location: RT. 776 BRIDGE (AUGUSTA CO)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.219170/ -78.875281

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BPCD001.03
 Within Park Boundary: No

Date Created: 06/05/93

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: POLECAT DRAFT SECTION: 04 TOPO MAP #: 0063 TOPO MAP NAME: FORT DEFIANCE, VA

Parameter Inventory for Station: SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/93-12/21/98	67	15.8	15.015	26.2	0.5	41.599	6.45	6	9.5	20.	23.22
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	54	7.15	16.831	217.	1.2	999.347	31.612	3.05	4.6	14.375	40.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/93-12/21/98	65	449.	442.154	505.	302.	1406.413	37.502	397.8	420.	469.5	481.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/10/93-12/21/98	65	10.4	10.237	13.9	6.8	2.401	1.549	7.86	8.9	11.3	12.14
00310	BOD, 5 DAY, 20 DEG C MG/L	06/10/93-12/21/98	63	1.	1.746	21.	0.5	8.796	2.966	0.5	0.5	1.6	3.24
00340	COD, .25N K2CR2O7 MG/L	06/10/93-12/21/98	65	5.	6.546	30.	2.5	26.162	5.115	2.5	2.5	8.	12.4
00400	PH (STANDARD UNITS)	06/10/93-12/21/98	68	7.8	7.773	8.7	7.	0.113	0.337	7.29	7.6	8.	8.2
00400	CONVERTED PH (STANDARD UNITS)	06/10/93-12/21/98	68	7.8	7.638	8.7	7.	0.132	0.363	7.29	7.6	8.	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	68	0.016	0.023	0.1	0.002	0.	0.021	0.006	0.01	0.025	0.051
00403	PH, LAB, STANDARD UNITS SU	06/10/93-12/21/98	65	8.1	8.055	8.7	7.1	0.073	0.27	7.8	7.9	8.2	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	06/10/93-12/21/98	65	8.1	7.95	8.7	7.1	0.084	0.29	7.8	7.9	8.2	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	65	0.008	0.011	0.079	0.002	0.	0.012	0.004	0.006	0.013	0.016
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	65	219.	213.292	243.	18.	952.648	30.865	193.2	204.5	228.	238.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/10/93-12/21/98	65	7.	27.746	358.	1.5	3752.376	61.257	1.5	4.	18.	73.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/10/93-12/21/98	65##	1.5	4.085	46.	1.	49.114	7.008	1.	1.5	3.5	9.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/10/93-12/21/98	65	6.	23.9	328.	1.5	2970.791	54.505	1.5	3.	15.5	64.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/10/93-12/21/98	64##	0.02	0.046	0.24	0.02	0.002	0.043	0.02	0.02	0.05	0.105
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	64	0.02	0.026	0.11	0.005	0.	0.021	0.005	0.01	0.03	0.055
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	64	2.79	2.706	4.4	1.19	0.285	0.533	2.005	2.363	2.978	3.395
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/10/93-12/21/98	63	0.3	0.451	3.2	0.05	0.319	0.565	0.07	0.2	0.5	1.
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/10/93-12/21/98	64##	0.05	0.084	0.5	0.05	0.007	0.081	0.05	0.05	0.1	0.15
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/14/93-12/14/93	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/93-08/20/96	37	1.8	2.468	8.3	0.5	3.676	1.917	0.5	1.1	3.7	5.54
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	65	236.	227.692	262.	149.	815.404	28.555	175.	221.	246.5	254.8
00940	CHLORIDE,TOTAL IN WATER MG/L	06/10/93-12/21/98	65	7.	7.062	11.	5.	0.965	0.982	6.	6.	8.	8.
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/93-12/21/98	64	6.	6.359	9.	4.	0.647	0.804	6.	6.	7.	7.
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/22/96-07/22/96	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/22/96-07/22/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG.DRY WGT)	07/22/96-07/22/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG.DRY WGT)	07/22/96-07/22/96	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/22/96-07/22/96	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/22/96-07/22/96	1	24.	24.	24.	24.	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	1	267.	267.	267.	267.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/22/96-07/22/96	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/22/96-07/22/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/22/96-07/22/96	1	41.	41.	41.	41.	0.	0.	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	1	20000.	20000.	20000.	20000.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/22/96-07/22/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	1	19700.	19700.	19700.	19700.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	62	1250.	2162.903	8000.	50.	5513601.269	2348.106	65.	400.	3000.	6380.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	62	3.097	3.009	3.903	1.699	0.4	0.633	1.789	2.602	3.476	3.805
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98		GEOMETRIC MEAN =	1020.03								
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/22/96-07/22/96	1##	40.	40.	40.	40.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39351	CHLORDANE (TECH MIX & METABS), SEDIMENTS, DRY WGT, UG/KG	07/22/96-07/22/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/22/96-07/22/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/22/96-07/22/96	1##	80.	80.	80.	80.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/22/96-07/22/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39526	PCBS TOTAL, IN SEDIMENT, DRY (ISOMER ANALYSES) UG/KG	07/22/96-07/22/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/10/93-12/21/98	63	0.02	0.032	0.23	0.005	0.001	0.034	0.01	0.01	0.04	0.06
71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/22/96-07/22/96	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/22/96-07/22/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/22/96-07/22/96	1##	40.	40.	40.	40.	0.	0.	**	**	**	**
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/10/93-06/20/94	10	4.6	44.8	400.	2.	15593.253	124.873	2.03	3.05	8.325	361.65

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0164

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	54	3	0.06	17	0	0.00	21	3	0.14	16	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	65	0	0.00	21	0	0.00	24	0	0.00	20	0	0.00			
00400	PH	Fresh Chronic	9.	68	0	0.00	22	0	0.00	25	0	0.00	21	0	0.00			
		Other-Lo Lim.	6.5	68	0	0.00	22	0	0.00	25	0	0.00	21	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	65	0	0.00	20	0	0.00	24	0	0.00	21	0	0.00			
		Other-Lo Lim.	6.5	65	0	0.00	20	0	0.00	24	0	0.00	21	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	64	0	0.00	19	0	0.00	24	0	0.00	21	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	64	0	0.00	19	0	0.00	24	0	0.00	21	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	65	0	0.00	20	0	0.00	24	0	0.00	21	0	0.00			
		Drinking Water	250.	65	0	0.00	20	0	0.00	24	0	0.00	21	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	64	0	0.00	20	0	0.00	23	0	0.00	21	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	62	55	0.89	19	18	0.95	22	20	0.91	21	17	0.81			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	10	1	0.10	2	0	0.00	3	0	0.00	5	1	0.20			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1993 - Station SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	6	18.5	17.75	22.1	13.4	11.719	3.423	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	7	428.	411.714	461.	309.	2491.905	49.919	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	6	9.7	9.85	12.8	7.8	3.651	1.911	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	7	1.	0.929	1.	0.5	0.036	0.189	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	7##	2.5	3.071	5.	2.5	1.036	1.018	**	**	**	**
00400	PH (STANDARD UNITS)	7	7.5	7.614	8.4	7.1	0.211	0.46	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	7.5	7.451	8.4	7.1	0.243	0.493	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.032	0.035	0.079	0.004	0.001	0.028	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	7	8.1	8.2	8.7	8.	0.06	0.245	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	7	8.1	8.153	8.7	8.	0.063	0.25	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.008	0.007	0.01	0.002	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	7	219.	219.	241.	195.	213.667	14.617	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	7	6.	5.286	9.	1.5	10.821	3.29	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	7	1.	1.143	1.5	1.	0.06	0.244	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	7	5.	4.571	8.	1.5	8.536	2.922	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7##	0.02	0.03	0.06	0.02	0.	0.017	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	7	0.01	0.012	0.03	0.005	0.	0.01	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	7	2.09	2.189	3.39	1.19	0.439	0.663	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	6	0.25	0.233	0.5	0.05	0.03	0.172	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	7##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	7	236.	232.	262.	156.	1254.667	35.421	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	7	6.	6.286	7.	5.	0.571	0.756	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	6	6.	5.833	7.	5.	0.567	0.753	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	7	900.	1135.714	3300.	50.	1580595.238	1257.217	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	7	2.954	2.693	3.519	1.699	0.49	0.7	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C											
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	6	0.01	0.016	0.04	0.005	0.	0.013	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	16.05	15.217	23.	5.9	32.834	5.73	6.38	9.925	20.5	22.91
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	5	5.6	10.9	20.	4.3	69.24	8.321	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	418.	424.4	462.	376.	908.489	30.141	378.3	399.75	457.	461.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12	10.6	10.567	13.1	7.8	1.835	1.355	8.25	9.825	11.475	12.62
00310	BOD, 5 DAY, 20 DEG C MG/L	10	1.45	1.63	4.7	0.5	1.338	1.157	0.55	1.	1.75	4.42
00340	COD, .25N K2CR2O7 MG/L	10	7.5	9.8	30.	5.	55.067	7.421	5.	5.75	10.5	28.2
00400	PH (STANDARD UNITS)	12	7.9	7.946	8.3	7.7	0.031	0.175	7.73	7.812	8.075	8.27
00400	CONVERTED PH (STANDARD UNITS)	12	7.9	7.917	8.3	7.7	0.032	0.178	7.73	7.812	8.075	8.27
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.013	0.012	0.02	0.005	0.	0.004	0.005	0.008	0.015	0.019
00403	PH, LAB, STANDARD UNITS SU	10	8.15	8.1	8.4	7.7	0.078	0.279	7.71	7.8	8.4	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	10	8.147	8.02	8.4	7.7	0.085	0.291	7.71	7.8	8.4	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.007	0.01	0.02	0.004	0.	0.006	0.004	0.004	0.016	0.02
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	10	205.5	209.4	228.	187.	240.044	15.493	187.7	197.	226.	227.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10	7.5	52.4	358.	3.	11983.156	109.468	3.3	6.75	47.	329.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10	1.75	5.3	30.	1.	81.067	9.004	1.	1.	4.5	27.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10	6.	47.15	328.	1.5	10098.781	100.493	1.85	5.75	42.5	301.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10	0.05	0.06	0.2	0.02	0.003	0.055	0.02	0.02	0.083	0.189
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10	0.03	0.035	0.11	0.005	0.001	0.031	0.005	0.009	0.05	0.104
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10	2.815	2.75	3.19	2.23	0.095	0.308	2.233	2.508	2.97	3.168
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10	0.25	0.69	3.2	0.1	1.07	1.034	0.1	0.1	0.85	3.07
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10##	0.05	0.095	0.4	0.05	0.012	0.109	0.05	0.05	0.1	0.37
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	10	232.5	232.7	254.	205.	282.011	16.793	206.1	219.	250.25	253.7
00940	CHLORIDE,TOTAL IN WATER MG/L	10	7.	7.	8.	5.	1.111	1.054	5.1	6.	8.	8.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/93-12/21/98	10	6.	6.	8.	4.	1.111	1.054	4.1	5.75	6.25	7.9
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	10	3350.	3605.	8000.	50.	9998027.778	3161.966	65.	350.	6875.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	10	3.519	3.204	3.903	1.699	0.585	0.765	1.759	2.527	3.835	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	10		1598.648								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/10/93-12/21/98	10	0.01	0.026	0.11	0.005	0.001	0.034	0.005	0.005	0.038	0.105

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/93-12/21/98	12	12.2	14.725	25.8	3.9	56.602	7.523	4.68	9.675	22.85	25.65
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	7.8	11.1	44.	1.2	121.145	11.007	2.43	5.9	12.4	35.45
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/93-12/21/98	12	477.	478.	505.	457.	229.091	15.136	457.6	464.25	491.75	502.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/10/93-12/21/98	11	10.7	10.318	13.9	7.9	2.912	1.706	8.06	8.7	11.2	13.44
00310	BOD, 5 DAY, 20 DEG C MG/L	06/10/93-12/21/98	11 ##	0.5	2.791	21.	0.5	37.263	6.104	0.5	0.5	1.6	17.48
00340	COD, .25N K2CR2O7 MG/L	06/10/93-12/21/98	12	5.5	7.	25.	2.5	38.455	6.201	2.5	2.5	8.75	20.2
00400	PH (STANDARD UNITS)	06/10/93-12/21/98	12	7.95	7.917	8.2	7.4	0.069	0.262	7.43	7.8	8.175	8.2
00400	CONVERTED PH (STANDARD UNITS)	06/10/93-12/21/98	12	7.947	7.836	8.2	7.4	0.076	0.276	7.43	7.8	8.175	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	12	0.011	0.015	0.04	0.006	0.	0.011	0.006	0.007	0.016	0.037
00403	PH, LAB, STANDARD UNITS SU	06/10/93-12/21/98	12	7.95	7.942	8.2	7.8	0.017	0.131	7.8	7.8	8.	8.17
00403	CONVERTED PH, LAB, STANDARD UNITS	06/10/93-12/21/98	12	7.947	7.924	8.2	7.8	0.018	0.132	7.8	7.8	8.	8.17
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	12	0.011	0.012	0.016	0.006	0.	0.003	0.007	0.01	0.016	0.016
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	12	224.5	224.75	233.	214.	34.023	5.833	214.9	220.5	230.25	232.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	7.	14.708	77.	1.5	432.475	20.796	1.95	5.25	15.25	62.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/10/93-12/21/98	12 ##	1.5	3.208	9.	1.5	6.566	2.562	1.5	1.5	4.75	8.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	5.	11.542	68.	1.5	345.294	18.582	1.5	1.875	11.75	53.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/10/93-12/21/98	12	0.05	0.068	0.24	0.02	0.004	0.063	0.02	0.02	0.093	0.204
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	12	0.025	0.032	0.06	0.01	0.	0.016	0.013	0.02	0.04	0.06
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	12	2.83	2.723	3.41	2.03	0.148	0.385	2.111	2.443	2.988	3.29
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/10/93-12/21/98	12	0.35	0.329	0.7	0.05	0.039	0.198	0.065	0.125	0.4	0.67
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/10/93-12/21/98	12 ##	0.05	0.062	0.1	0.05	0.001	0.023	0.05	0.05	0.088	0.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	12	242.	232.833	260.	154.	1056.697	32.507	160.9	239.	251.75	258.2
00940	CHLORIDE, TOTAL IN WATER MG/L	06/10/93-12/21/98	12	7.	7.583	11.	6.	1.538	1.24	6.3	7.	8.	10.1
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/93-12/21/98	12	6.	6.417	7.	6.	0.265	0.515	6.	6.	7.	7.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	11	1500.	2700.	8000.	400.	8234000.	2869.495	440.	600.	4500.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	11	3.176	3.212	3.903	2.602	0.21	0.458	2.637	2.778	3.653	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	11		1630.362								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/10/93-12/21/98	12	0.025	0.026	0.04	0.01	0.	0.011	0.01	0.02	0.038	0.04

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/93-12/21/98	13	13.4	14.262	26.2	0.5	74.938	8.657	2.1	6.55	21.95	25.96
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	4.65	8.192	46.	1.9	144.341	12.014	2.14	3.95	6.05	34.63
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/93-12/21/98	12	446.	440.583	470.	407.	315.538	17.763	409.4	425.25	449.75	464.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/10/93-12/21/98	12	10.5	10.417	12.4	6.8	2.551	1.597	7.31	9.7	11.6	12.34
00310	BOD, 5 DAY, 20 DEG C MG/L	06/10/93-12/21/98	11 ##	0.5	0.727	2.	0.5	0.218	0.467	0.5	0.5	1.	1.8
00340	COD, .25N K2CR2O7 MG/L	06/10/93-12/21/98	12	5.	5.375	13.	2.5	12.233	3.498	2.5	2.5	6.75	12.4
00400	PH (STANDARD UNITS)	06/10/93-12/21/98	13	7.7	7.785	8.1	7.5	0.04	0.199	7.54	7.6	7.95	8.1
00400	CONVERTED PH (STANDARD UNITS)	06/10/93-12/21/98	13	7.7	7.745	8.1	7.5	0.041	0.204	7.54	7.6	7.95	8.1
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	13	0.02	0.018	0.032	0.008	0.	0.008	0.008	0.011	0.025	0.029
00403	PH, LAB, STANDARD UNITS SU	06/10/93-12/21/98	12	8.15	8.117	8.4	7.8	0.032	0.18	7.83	8.	8.275	8.37

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403	CONVERTED PH, LAB, STANDARD UNITS	06/10/93-12/21/98	12	8.147	8.082	8.4	7.8	0.034	0.184	7.83	8.	8.275	8.37
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	12	0.007	0.008	0.016	0.004	0.	0.004	0.004	0.005	0.01	0.015
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	12	207.	208.25	225.	190.	133.659	11.561	192.4	198.25	218.5	224.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	3.5	9.292	55.	1.5	247.021	15.717	1.5	1.5	7.5	45.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/10/93-12/21/98	12 ##	1.5	2.083	7.	1.5	2.583	1.607	1.5	1.5	1.5	5.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	3.	8.042	48.	1.5	188.021	13.712	1.5	1.5	5.75	39.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/10/93-12/21/98	11 ##	0.02	0.032	0.11	0.02	0.001	0.027	0.02	0.02	0.04	0.096
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	11	0.02	0.021	0.06	0.005	0.	0.016	0.006	0.01	0.03	0.056
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	11	2.97	2.973	4.4	2.11	0.39	0.624	2.114	2.59	3.19	4.2
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/10/93-12/21/98	11	0.2	0.232	0.4	0.05	0.008	0.09	0.08	0.2	0.3	0.38
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/10/93-12/21/98	11 ##	0.05	0.055	0.1	0.05	0.	0.015	0.05	0.05	0.05	0.09
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	12	225.	219.667	240.	172.	389.697	19.741	178.9	211.	234.25	239.7
00940	CHLORIDE, TOTAL IN WATER MG/L	06/10/93-12/21/98	12	7.	7.333	8.	7.	0.242	0.492	7.	7.	8.	8.
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/93-12/21/98	12	6.5	6.583	8.	6.	0.447	0.669	6.	6.	7.	7.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	10	1350.	1410.	3900.	50.	1744888.889	1320.942	50.	162.5	2450.	3800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	10	3.13	2.808	3.591	1.699	0.507	0.712	1.699	2.151	3.387	3.578
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	11	0.02	0.024	0.08	0.01	0.	0.02	0.01	0.01	0.02	0.07

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/93-12/21/98	12	16.2	15.008	21.8	6.	32.452	5.697	6.12	9.4	20.2	21.56
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	25.45	42.9	217.	4.8	3487.618	59.056	4.83	8.25	58.75	172.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/93-12/21/98	12	448.	449.917	483.	413.	469.174	21.66	414.8	435.75	468.5	480.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/10/93-12/21/98	12	10.9	10.142	12.6	7.2	3.139	1.772	7.38	8.65	11.3	12.45
00310	BOD, 5 DAY, 20 DEG C MG/L	06/10/93-12/21/98	12	2.	2.875	12.	0.5	9.733	3.12	0.65	1.	3.75	9.6
00340	COD, .25N K2CR2O7 MG/L	06/10/93-12/21/98	12	7.5	8.125	17.	2.5	20.96	4.578	2.5	3.375	10.75	16.1
00400	PH (STANDARD UNITS)	06/10/93-12/21/98	12	7.8	7.792	8.7	7.1	0.174	0.417	7.16	7.525	7.975	8.55
00400	CONVERTED PH (STANDARD UNITS)	06/10/93-12/21/98	12	7.8	7.63	8.7	7.1	0.202	0.45	7.16	7.525	7.975	8.55
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	12	0.016	0.023	0.079	0.002	0.	0.022	0.003	0.011	0.03	0.071
00403	PH, LAB, STANDARD UNITS SU	06/10/93-12/21/98	12	8.15	8.108	8.4	7.1	0.128	0.358	7.34	8.025	8.375	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	06/10/93-12/21/98	12	8.147	7.891	8.4	7.1	0.179	0.424	7.34	8.025	8.375	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	12	0.007	0.013	0.079	0.004	0.	0.021	0.004	0.004	0.009	0.059
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	12	232.	211.25	243.	18.	3939.295	62.764	70.2	213.5	240.5	243.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	49.	69.625	315.	1.5	7616.778	87.274	1.95	10.25	97.5	257.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	7.5	10.042	46.	1.5	152.794	12.361	1.5	1.875	10.75	37.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	41.5	59.667	269.	1.5	5624.015	74.993	1.5	7.75	87.25	219.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/10/93-12/21/98	12	0.045	0.054	0.14	0.02	0.001	0.038	0.02	0.02	0.07	0.131
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	12	0.03	0.034	0.09	0.005	0.001	0.025	0.007	0.02	0.045	0.084
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	12	2.79	2.727	3.74	1.59	0.406	0.637	1.611	2.533	3.095	3.677
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/10/93-12/21/98	12	0.6	0.875	2.5	0.2	0.444	0.666	0.26	0.4	1.15	2.26
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/10/93-12/21/98	12	0.1	0.146	0.5	0.05	0.016	0.125	0.05	0.063	0.2	0.41
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	12	243.	240.417	260.	198.	266.447	16.323	205.8	237.	252.25	258.2
00940	CHLORIDE, TOTAL IN WATER MG/L	06/10/93-12/21/98	12	7.5	7.417	9.	6.	0.811	0.9	6.	7.	8.	8.7
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/93-12/21/98	12	7.	6.5	7.	5.	0.455	0.674	5.3	6.	7.	7.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	12	1700.	2679.167	8000.	50.	6387026.515	2527.257	95.	800.	4700.	7430.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	12	3.23	3.151	3.903	1.699	0.407	0.638	1.88	2.894	3.669	3.868
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/10/93-12/21/98	12	0.045	0.048	0.11	0.02	0.001	0.026	0.02	0.03	0.058	0.101

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0164

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/93-12/21/98	12	15.7	14.558	23.7	4.4	35.512	5.959	4.88	9.65	18.975	22.59
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	6.15	8.808	34.	2.2	72.99	8.543	2.56	4.375	10.425	27.76
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/10/93-12/21/98	12	450.	432.667	481.	302.	2621.879	51.204	329.6	401.75	471.25	478.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/10/93-12/21/98	12	10.05	9.942	12.1	7.7	1.79	1.338	7.85	8.875	10.8	11.98
00310	BOD, 5 DAY, 20 DEG C MG/L	06/10/93-12/21/98	12 ##	1.	1.167	3.	1.	0.333	0.577	1.	1.	1.	2.4
00340	COD, .25N K2CR2O7 MG/L	06/10/93-12/21/98	12 ##	3.75	5.	13.	2.5	10.591	3.254	2.5	2.5	6.75	11.5
00400	PH (STANDARD UNITS)	06/10/93-12/21/98	12	7.55	7.517	8.1	7.	0.116	0.341	7.	7.25	7.775	8.04
00400	CONVERTED PH (STANDARD UNITS)	06/10/93-12/21/98	12	7.547	7.397	8.1	7.	0.132	0.363	7.	7.25	7.775	8.04
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	12	0.028	0.04	0.1	0.008	0.001	0.032	0.009	0.017	0.057	0.1
00403	PH, LAB, STANDARD UNITS SU	06/10/93-12/21/98	12	7.95	7.933	8.3	7.2	0.097	0.311	7.29	7.9	8.175	8.27
00403	CONVERTED PH, LAB, STANDARD UNITS	06/10/93-12/21/98	12	7.947	7.804	8.3	7.2	0.115	0.34	7.29	7.9	8.175	8.27
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/93-12/21/98	12	0.011	0.016	0.063	0.005	0.	0.016	0.005	0.007	0.013	0.054
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	12	212.5	208.833	238.	125.	891.061	29.851	144.2	206.	228.75	236.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	8.	9.917	23.	4.	34.811	5.9	4.	5.25	13.5	21.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/10/93-12/21/98	12 ##	1.5	1.708	4.	1.5	0.521	0.722	1.5	1.5	1.5	3.25
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/10/93-12/21/98	12	6.5	8.25	19.	3.	27.114	5.207	3.	4.25	11.75	18.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	06/10/93-12/21/98	12 ##	0.02	0.024	0.07	0.02	0.	0.014	0.02	0.02	0.02	0.055
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	12	0.015	0.016	0.04	0.005	0.	0.011	0.005	0.006	0.02	0.037
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	06/10/93-12/21/98	12	2.715	2.691	3.48	1.96	0.16	0.4	2.053	2.378	2.88	3.363
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/10/93-12/21/98	12	0.2	0.258	0.7	0.05	0.042	0.205	0.05	0.1	0.4	0.64
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/10/93-12/21/98	12 ##	0.05	0.079	0.3	0.05	0.005	0.072	0.05	0.05	0.088	0.24
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/93-12/21/98	12	223.5	211.167	260.	149.	1507.97	38.833	150.8	170.	238.5	259.4
00940	CHLORIDE,TOTAL IN WATER MG/L	06/10/93-12/21/98	12	6.	6.417	8.	6.	0.447	0.669	6.	6.	7.	7.7
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/93-12/21/98	12	6.	6.5	9.	6.	1.	1.	6.	6.	6.75	8.7
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	06/10/93-12/21/98	12	850.	1179.167	4700.	50.	1520662.879	1233.152	125.	425.	1550.	3830.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	06/10/93-12/21/98	12	2.923	2.868	3.672	1.699	0.242	0.492	1.932	2.626	3.19	3.547
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			738.383								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/10/93-12/21/98	12	0.02	0.041	0.23	0.01	0.004	0.06	0.013	0.02	0.03	0.176

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0165

NPS Station ID: SHEN0165
 Location: DOYLES RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.222976/ -78.687198

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F086
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Browns Cove VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0165

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/95-06/21/95	1	17.8	17.8	17.8	17.8	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/21/95-06/21/95	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/21/95-06/21/95	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/21/95-06/21/95	1	7.05	7.05	7.05	7.05	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/21/95-06/21/95	1	7.05	7.05	7.05	7.05	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/21/95-06/21/95	1	0.089	0.089	0.089	0.089	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/21/95-06/21/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0165

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00									1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00									1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00									1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0166

NPS Station ID: SHEN0166
 Location: Doyles River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.229809/ -78.693698

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_FISH_3F087
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Browns Cove VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0166

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/95-06/21/95	2	16.6	16.6	16.6	16.6	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/21/95-06/21/95	2	33.	33.	36.	30.	18.	4.243	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/21/95-06/21/95	2	8.75	8.75	8.9	8.6	0.045	0.212	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/21/95-06/21/95	2	6.945	6.945	6.99	6.9	0.004	0.064	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/21/95-06/21/95	2	6.943	6.943	6.99	6.9	0.004	0.064	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/21/95-06/21/95	2	0.114	0.114	0.126	0.102	0.	0.017	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/21/95-06/21/95	2	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0166

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00							2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00							2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0167

NPS Station ID: SHEN0167
 Location: JONES RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.230309/ -78.695004

Depth of Water: 0
 Elevation: 1460

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_VTSSS_AB07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB07 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JONES RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.55 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0167

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.08	7.08	7.08	7.08	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.08	7.08	7.08	7.08	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.083	0.083	0.083	0.083	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0167

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00					1	0	0.00	
	Other-Lo Lim.	6.5	1	0	0.00					1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0167

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0168

NPS Station ID: SHEN0168
 Location: DOYLES RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.230809/ -78.694199

Depth of Water: 0
 Elevation: 1460

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): SHEN_VTSSS_AB06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION AB06 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE DOYLE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.45 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0168

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.18	7.18	7.18	7.18	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.18	7.18	7.18	7.18	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.066	0.066	0.066	0.066	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.66	1.66	1.66	1.66	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.31	0.31	0.31	0.31	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0168

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0168

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0169

NPS Station ID: SHEN0169
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.233782/ -78.736671

Depth of Water: 0
 Elevation: 1840
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR09 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.16 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0169

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.04	6.04	6.04	6.04	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.04	6.04	6.04	6.04	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	0.912	0.912	0.912	0.912	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.55	0.55	0.55	0.55	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.36	1.36	1.36	1.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	0.92	0.92	0.92	0.92	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0169

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0170

NPS Station ID: SHEN0170
 Location: MUDDY RUN TRIB NEAR BOONESVILLE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204002003.14
 Description:

LAT/LON: 38.233892/ -78.618892

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 4.80

Agency: 112WRD
 FIPS State/County: 51003 VIRGINIA/ALBEMARLE
 STORET Station ID(s): 02032310
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.90
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0170

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/25/82	6	16.5	14.	21.5	3.	47.3	6.877	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/25/82	6	1.5	2.483	9.	0.3	10.69	3.27	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/25/82	6	7.05	7.1	7.6	6.3	0.232	0.482	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/25/82	6	7.047	6.859	7.6	6.3	0.302	0.549	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/25/82	6	0.09	0.138	0.501	0.025	0.033	0.181	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/25/82	6	7.25	7.167	7.4	6.9	0.047	0.216	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/25/82	6	7.247	7.12	7.4	6.9	0.049	0.222	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/25/82	6	0.057	0.076	0.126	0.04	0.002	0.039	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/25/82	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/25/82	6	0.145	0.262	0.6	0.04	0.072	0.269	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/25/82	6	13.	12.833	14.	11.	1.367	1.169	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/25/82	6	2.8	2.767	3.1	2.4	0.063	0.25	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/25/82	6	1.45	1.467	1.7	1.3	0.027	0.163	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/25/82	6	2.05	2.133	2.6	1.8	0.079	0.28	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/25/82	6	0.25	0.25	0.3	0.2	0.003	0.055	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/25/82	6	26.	25.833	28.	24.	2.967	1.722	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/25/82	6	0.2	0.233	0.3	0.2	0.003	0.052	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/25/82	6	1.	1.167	2.	1.	0.167	0.408	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/25/82	6	4.	4.333	5.	4.	0.267	0.516	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/25/82	6	12.	12.133	14.8	9.7	4.135	2.033	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0170

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	0	0.00	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0170

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0171

NPS Station ID: SHEN0171
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.235031/ -78.737170

Depth of Water: 0
 Elevation: 1840
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR10 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.66 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0171

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.09	6.09	6.09	6.09	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.09	6.09	6.09	6.09	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	0.813	0.813	0.813	0.813	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.58	0.58	0.58	0.58	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.37	1.37	1.37	1.37	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	0.82	0.82	0.82	0.82	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0171

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0172

NPS Station ID: SHEN0172
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.237809/ -78.740587

Depth of Water: 0
 Elevation: 1690
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR08 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.99 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0172

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	5.97	5.97	5.97	5.97	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	5.97	5.97	5.97	5.97	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	1.072	1.072	1.072	1.072	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.59	0.59	0.59	0.59	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.29	1.29	1.29	1.29	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	1.08	1.08	1.08	1.08	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0172

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0173

NPS Station ID: SHEN0173
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.241254/ -78.741143

Depth of Water: 0
 Elevation: 1620
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR07 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.30 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0173

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.36	6.36	6.36	6.36	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.36	6.36	6.36	6.36	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	0.437	0.437	0.437	0.437	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.26	1.26	1.26	1.26	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	0.007	0.007	0.007	0.007	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	0.44	0.44	0.44	0.44	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0173

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0174

NPS Station ID: SHEN0174
 Location: LUCK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.242559/ -78.744171

Depth of Water: 0
 Elevation: 1560
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_LUCK
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION LUCK IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT LUCK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.96 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	394	10.	10.457	19.	2.5	13.645	3.694	6.	7.	14.	15.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	415	21.	20.877	30.	13.	8.77	2.961	17.	19.	23.	25.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	416	5.64	5.641	6.45	4.9	0.037	0.191	5.44	5.58	5.71	5.813
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	416	5.64	5.597	6.45	4.9	0.039	0.196	5.44	5.58	5.71	5.813
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	416	2.291	2.532	12.589	0.355	2.029	1.424	1.538	1.95	2.63	3.631
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/29/86-06/20/95	415	20.	20.304	29.	13.	8.729	2.954	17.	18.	22.	24.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	416	16.25	20.537	107.5	-10.9	248.55	15.765	6.1	9.425	30.625	42.8
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-05/02/95	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	416	0.6	0.642	1.	0.4	0.016	0.127	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	416	0.7	0.671	1.	0.4	0.012	0.108	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	416	0.5	0.51	0.74	0.37	0.002	0.046	0.467	0.48	0.53	0.57
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	416	1.82	1.835	2.55	1.18	0.062	0.25	1.5	1.66	2.018	2.173
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	416	0.8	0.803	1.	0.5	0.008	0.091	0.7	0.7	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	416	4.1	4.128	6.	3.2	0.176	0.42	3.6	3.8	4.4	4.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	416	5.	5.063	6.8	3.2	0.291	0.539	4.5	4.7	5.5	5.8
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/29/86-06/10/86	10 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	416	0.7	1.363	6.3	0.	2.48	1.575	0.	6.3	0.007	2.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	416	2.31	2.552	12.69	0.36	2.06	1.435	1.551	1.97	2.65	3.66

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0174

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH		416	0	0.00	104	0	0.00	177	0	0.00	135	0	0.00			
	Fresh Chronic	9.	416	0	0.00	104	0	0.00	177	0	0.00	135	0	0.00			
	Other-Lo Lim.	6.5	416	416	1.00	104	104	1.00	177	177	1.00	135	135	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	416	416	1.00	104	104	1.00	177	177	1.00	135	135	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	860.	416	0	0.00	104	0	0.00	177	0	0.00	135	0	0.00			
	Fresh Acute	860.	416	0	0.00	104	0	0.00	177	0	0.00	135	0	0.00			
	Drinking Water	250.	416	0	0.00	104	0	0.00	177	0	0.00	135	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	250.	416	0	0.00	104	0	0.00	177	0	0.00	135	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	416	0	0.00	104	0	0.00	177	0	0.00	135	0	0.00			
	Drinking Water	44.	416	0	0.00	104	0	0.00	177	0	0.00	135	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1986 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	25	12.	11.236	15.	5.	7.692	2.773	6.6	8.85	13.5	14.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	28	19.	19.071	23.	14.	5.328	2.308	15.9	17.25	21.	23.
00400	PH (STANDARD UNITS)	28	5.52	5.564	6.14	5.36	0.028	0.168	5.379	5.438	5.66	5.771
00400	CONVERTED PH (STANDARD UNITS)	28	5.52	5.538	6.14	5.36	0.029	0.17	5.379	5.438	5.66	5.771
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	28	3.021	2.901	4.365	0.724	0.828	0.91	1.694	2.19	3.653	4.178
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	28	18.5	18.393	22.	14.	4.988	2.233	14.9	17.	20.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	28	12.2	22.432	55.	2.1	354.946	18.84	6.49	7.625	46.25	49.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	28	0.6	0.55	0.7	0.4	0.009	0.096	0.4	0.5	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	28	0.65	0.629	0.7	0.5	0.007	0.081	0.5	0.6	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	28	0.57	0.575	0.72	0.45	0.004	0.06	0.479	0.55	0.617	0.651
00935	POTASSIUM, DISSOLVED (MG/L AS K)	28	1.815	1.755	2.02	1.42	0.036	0.19	1.477	1.565	1.93	1.991
00941	CHLORIDE, DISSOLVED IN WATER MG/L	28	0.8	0.796	1.	0.7	0.003	0.058	0.7	0.8	0.8	0.81
00946	SULFATE, DISSOLVED (MG/L AS SO4)	28	4.15	4.239	4.9	3.3	0.137	0.371	3.88	4.	4.5	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	28	5.35	5.343	6.3	4.5	0.255	0.505	4.79	4.9	5.8	5.91
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	28	0.05	0.085	0.6	0.	0.018	0.133	0.	0.	0.095	0.3
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	28	3.04	2.92	4.4	0.73	0.844	0.918	1.696	2.203	3.678	4.21

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	36	10.	10.133	18.	4.5	15.206	3.899	5.7	6.5	14.	15.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	36	19.	19.	24.	16.	4.057	2.014	16.7	18.	19.75	22.
00400	PH (STANDARD UNITS)	37	5.6	5.593	6.12	5.32	0.019	0.137	5.432	5.525	5.64	5.696
00400	CONVERTED PH (STANDARD UNITS)	37	5.6	5.574	6.12	5.32	0.019	0.139	5.432	5.525	5.64	5.696
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	37	2.512	2.669	4.786	0.759	0.584	0.764	2.027	2.291	2.986	3.701
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	36	18.	18.361	24.	16.	3.894	1.973	16.	17.	19.	21.3
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	37	16.9	22.649	52.	1.1	175.473	13.247	9.58	12.05	36.2	41.54
00915	CALCIUM, DISSOLVED (MG/L AS CA)	37	0.5	0.535	0.6	0.4	0.003	0.054	0.5	0.5	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	37	0.6	0.595	0.7	0.5	0.004	0.062	0.5	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	37	0.48	0.494	0.58	0.45	0.001	0.036	0.46	0.47	0.515	0.556
00935	POTASSIUM, DISSOLVED (MG/L AS K)	37	1.67	1.676	2.12	1.41	0.04	0.2	1.45	1.475	1.88	1.95
00941	CHLORIDE, DISSOLVED IN WATER MG/L	37	0.7	0.751	0.9	0.7	0.003	0.056	0.7	0.7	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	37	4.6	4.595	5.1	3.9	0.062	0.248	4.28	4.45	4.75	4.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	37	4.9	5.008	5.8	4.4	0.21	0.458	4.48	4.6	5.5	5.62
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	37 ##	0.	0.001	0.02	0.	0.	0.003	0.	0.	0.	0.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	37	2.53	2.69	4.82	0.77	0.591	0.769	2.048	2.31	3.005	3.73

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	28	9.	9.589	19.	4.	9.871	3.142	5.9	7.625	11.	14.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	34	19.	19.294	24.	15.	3.668	1.915	17.	18.	21.	22.
00400	PH (STANDARD UNITS)	34	5.665	5.686	6.19	5.49	0.012	0.111	5.63	5.64	5.7	5.725
00400	CONVERTED PH (STANDARD UNITS)	34	5.665	5.675	6.19	5.49	0.013	0.112	5.63	5.64	5.7	5.725
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	34	2.163	2.115	3.236	0.646	0.159	0.399	1.884	1.995	2.291	2.344
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	34	18.5	18.588	23.	14.	3.704	1.925	16.	17.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	34	16.25	18.735	53.8	2.8	138.216	11.757	6.4	9.975	26.4	36.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	34	0.5	0.544	0.7	0.5	0.004	0.061	0.5	0.5	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	34	0.6	0.6	0.7	0.5	0.001	0.035	0.6	0.6	0.6	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	34	0.5	0.511	0.61	0.48	0.001	0.032	0.48	0.49	0.52	0.565
00935	POTASSIUM, DISSOLVED (MG/L AS K)	34	1.575	1.624	2.29	1.36	0.053	0.229	1.39	1.42	1.75	1.95

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	34	0.7	0.721	0.8	0.7	0.002	0.041	0.7	0.7	0.7	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	34	4.6	4.582	4.9	4.	0.033	0.182	4.35	4.5	4.7	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	34	4.8	4.971	6.2	4.5	0.191	0.437	4.5	4.6	5.3	5.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	34 ##	0.	0.006	0.2	0.	0.001	0.034	0.	0.	0.	0.002
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	34	2.185	2.134	3.26	0.65	0.162	0.402	1.9	2.01	2.31	2.36

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	43	11.	10.547	15.	2.5	12.533	3.54	6.	7.	14.	15.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	44	18.	17.955	22.	14.	2.789	1.67	16.	17.	19.	20.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	44	5.695	5.747	6.45	5.39	0.051	0.225	5.57	5.62	5.818	6.12
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	44	5.695	5.701	6.45	5.39	0.053	0.23	5.57	5.62	5.818	6.12
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	44	2.019	1.992	4.074	0.355	0.649	0.806	0.759	1.522	2.399	2.692
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/29/86-06/20/95	44	17.	17.341	22.	13.	3.16	1.778	15.5	16.	19.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	44	14.85	21.807	84.	4.1	253.263	15.914	8.	11.2	30.125	43.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	44	0.5	0.564	0.9	0.5	0.011	0.106	0.5	0.5	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	44	0.6	0.611	0.9	0.5	0.008	0.092	0.5	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	44	0.49	0.514	0.74	0.45	0.004	0.062	0.47	0.473	0.538	0.61
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	44	1.71	1.691	2.01	1.25	0.03	0.174	1.495	1.563	1.78	1.975
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	44	0.7	0.739	1.	0.7	0.006	0.078	0.7	0.7	0.775	0.85
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	44	4.5	4.486	6.	3.6	0.16	0.4	4.	4.225	4.7	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	44	5.1	5.173	6.8	4.5	0.302	0.55	4.6	4.7	5.5	5.95
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	44	0.007	0.017	0.4	0.	0.004	0.06	0.	0.	0.01	0.02
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	44	2.035	2.009	4.11	0.36	0.66	0.812	0.765	1.538	2.42	2.71

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	47	10.	10.564	16.	4.	13.126	3.623	5.9	8.	14.	15.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	52	19.	18.846	22.	13.	3.858	1.964	16.3	17.	20.	21.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	52	5.715	5.758	6.35	5.53	0.03	0.175	5.583	5.66	5.795	5.981
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	52	5.715	5.73	6.35	5.53	0.031	0.177	5.583	5.66	5.795	5.981
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	52	1.928	1.864	2.951	0.447	0.337	0.58	1.045	1.604	2.188	2.612
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/29/86-06/20/95	52	18.	18.327	21.	13.	3.244	1.801	16.	17.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	52	19.9	24.033	53.7	5.3	211.529	14.544	7.69	13.1	35.175	48.67
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	52	0.5	0.533	0.7	0.4	0.003	0.058	0.5	0.5	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	52	0.6	0.577	0.7	0.4	0.006	0.076	0.5	0.5	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	52	0.485	0.498	0.59	0.37	0.002	0.044	0.46	0.47	0.54	0.56
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	52	1.75	1.735	2.07	1.18	0.048	0.22	1.483	1.563	1.95	2.007
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	52	0.7	0.725	0.9	0.5	0.004	0.062	0.7	0.7	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	52	4.3	4.194	4.7	3.3	0.091	0.302	3.8	3.925	4.4	4.5
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	52	5.05	5.087	6.1	3.4	0.391	0.626	4.43	4.7	5.6	6.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	52	0.02	0.114	1.3	0.007	0.084	0.29	0.01	0.01	0.02	0.48
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	52	1.945	1.88	2.97	0.45	0.342	0.585	1.054	1.618	2.21	2.632

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	51	10.	10.529	18.	5.	17.664	4.203	6.	6.5	15.	16.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	52	22.	21.981	29.	18.	8.098	2.846	19.	19.25	24.	26.4
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	52	5.74	5.7	6.27	4.9	0.066	0.257	5.573	5.66	5.807	5.914
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	52	5.74	5.595	6.27	4.9	0.077	0.278	5.573	5.66	5.807	5.914
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	52	1.82	2.543	12.589	0.537	6.971	2.64	1.219	1.558	2.188	2.673
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	52	22.	21.462	29.	17.	8.567	2.927	18.	19.	23.	25.7
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	52	21.2	18.652	42.7	-9.6	186.941	13.673	6.13	8.875	29.225	36.69
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	52	0.6	0.644	0.9	0.5	0.011	0.106	0.5	0.6	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	52	0.7	0.687	1.	0.6	0.009	0.095	0.6	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	52	0.52	0.521	0.6	0.47	0.001	0.035	0.48	0.49	0.54	0.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	52	1.945	1.996	2.55	1.54	0.072	0.268	1.616	1.78	2.233	2.331
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	52	0.8	0.813	1.	0.7	0.005	0.069	0.7	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	52	3.9	3.89	4.5	3.2	0.105	0.324	3.4	3.6	4.175	4.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	52	4.95	4.998	5.8	4.1	0.261	0.511	4.33	4.5	5.5	5.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	52	1.85	1.874	5.1	0.	1.701	1.304	0.33	0.625	2.7	3.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	52	1.835	2.563	12.69	0.54	7.081	2.661	1.228	1.57	2.21	2.692

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	49	9.5	10.235	19.	5.	16.459	4.057	5.5	6.5	12.25	16.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	52	24.	24.288	30.	21.	3.778	1.944	22.	23.	25.	26.7
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	52	5.6	5.566	5.84	5.03	0.028	0.167	5.324	5.543	5.658	5.724
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	52	5.6	5.526	5.84	5.03	0.029	0.172	5.324	5.543	5.658	5.724
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	52	2.512	2.976	9.333	1.445	2.757	1.661	1.888	2.201	2.868	4.759
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	52	24.	23.75	29.	20.	3.721	1.929	21.3	22.25	25.	26.7
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	52	4.05	9.648	30.	-6.4	84.817	9.21	2.8	5.3	16.2	24.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	52	0.8	0.794	1.	0.7	0.005	0.073	0.7	0.7	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	52	0.8	0.817	1.	0.7	0.004	0.062	0.73	0.8	0.875	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	52	0.51	0.514	0.56	0.49	0.	0.02	0.49	0.5	0.53	0.547
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	52	2.	2.003	2.34	1.7	0.037	0.191	1.76	1.808	2.178	2.267
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	52	0.9	0.931	1.	0.8	0.004	0.064	0.83	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	52	3.7	3.671	4.1	3.4	0.033	0.183	3.4	3.5	3.8	3.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	52	4.95	4.896	5.7	3.2	0.327	0.572	4.	4.6	5.3	5.57
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	52	3.8	3.919	6.3	2.7	0.573	0.757	2.9	3.4	4.4	4.91
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	52	2.53	3.	9.41	1.46	2.801	1.674	1.907	2.223	2.893	4.795

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	49	12.	11.153	18.	4.	15.106	3.887	5.5	7.75	14.75	16.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	49	24.	24.	29.	21.	3.083	1.756	22.	23.	25.	27.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	49	5.6	5.566	5.77	5.14	0.016	0.125	5.39	5.48	5.64	5.7
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	49	5.6	5.546	5.77	5.14	0.016	0.127	5.39	5.48	5.64	5.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	49	2.512	2.842	7.244	1.698	0.977	0.988	1.995	2.291	3.311	4.074
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	49	23.	23.224	28.	21.	2.594	1.611	22.	22.	24.	26.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	49	18.7	21.273	45.3	-3.1	242.523	15.573	3.7	7.4	35.7	42.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	49	0.8	0.79	1.	0.7	0.004	0.062	0.7	0.8	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	49	0.8	0.778	1.	0.7	0.005	0.069	0.7	0.7	0.8	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	49	0.5	0.523	0.64	0.45	0.002	0.045	0.48	0.49	0.555	0.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	49	2.06	2.021	2.42	1.62	0.039	0.197	1.74	1.85	2.16	2.29

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	49	0.9	0.886	1.	0.8	0.002	0.05	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	49	3.7	3.708	4.2	3.4	0.037	0.193	3.4	3.55	3.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	49	5.1	5.18	6.1	4.4	0.297	0.545	4.5	4.7	5.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	49	3.2	3.243	5.5	1.6	0.517	0.719	2.5	2.85	3.5
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	49	2.53	2.864	7.3	1.71	0.992	0.996	2.01	2.31	3.34

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	42	11.	11.333	16.5	-4.5	12.325	3.511	6.5	9.	15.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	43	22.	21.744	25.	20.	1.195	1.093	20.	21.	22.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	43	5.62	5.551	5.71	5.08	0.022	0.147	5.306	5.49	5.65
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	43	5.62	5.523	5.71	5.08	0.022	0.15	5.306	5.49	5.65
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	43	2.399	3.001	8.318	1.95	1.74	1.319	2.138	2.239	3.236
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/29/86-06/20/95	43	21.	21.419	25.	20.	1.106	1.052	20.	21.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	43	14.4	19.565	44.4	-10.9	198.328	14.083	4.96	8.7	34.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	43	0.7	0.714	0.8	0.6	0.003	0.056	0.64	0.7	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	43	0.7	0.688	0.8	0.6	0.003	0.054	0.6	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	43	0.48	0.483	0.54	0.44	0.	0.022	0.46	0.47	0.49
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	43	1.91	1.902	2.21	1.61	0.027	0.165	1.658	1.72	2.05
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	43	0.8	0.809	0.9	0.8	0.001	0.029	0.8	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	43	4.1	4.098	4.6	3.8	0.035	0.188	3.84	4.	4.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	43	5.1	5.053	5.8	4.1	0.373	0.611	4.1	4.4	5.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	43	1.4	1.593	2.9	0.5	0.316	0.562	0.9	1.2	1.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	43	2.42	3.025	8.38	1.97	1.765	1.328	2.16	2.26	3.26

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	24	8.5	8.125	14.	5.	5.005	2.237	5.	6.125	9.375
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	25	20.	20.12	23.	19.	0.693	0.833	19.	20.	20.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	25	5.67	5.646	5.78	5.	0.021	0.145	5.576	5.62	5.71
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	25	5.67	5.61	5.78	5.	0.022	0.15	5.576	5.62	5.71
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	25	2.138	2.455	10.	1.66	2.547	1.596	1.845	1.95	2.399
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/29/86-06/20/95	25	19.	19.68	23.	19.	1.06	1.03	19.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	25	25.3	35.036	107.5	9.4	600.929	24.514	15.3	20.6	37.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	25	0.7	0.668	0.7	0.6	0.002	0.048	0.6	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	25	0.6	0.648	0.7	0.6	0.003	0.051	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	25	0.48	0.473	0.5	0.44	0.	0.02	0.446	0.45	0.49
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	25	1.74	1.736	2.01	1.54	0.019	0.137	1.546	1.6	1.84
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	25	0.8	0.816	1.	0.8	0.002	0.047	0.8	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	25	4.3	4.252	4.4	4.1	0.008	0.087	4.1	4.2	4.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	25	4.9	4.992	5.7	4.7	0.057	0.238	4.8	4.8	5.05
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	25	1.1	1.168	2.1	0.7	0.119	0.345	0.76	0.9	1.35
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	25	2.16	2.476	10.08	1.67	2.587	1.608	1.86	1.97	2.42

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	100	15.	14.97	19.	9.5	2.676	1.636	13.	14.	16.	16.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	104	22.	22.548	29.	17.	5.881	2.425	20.	21.	24.	25.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	104	5.605	5.64	6.45	5.3	0.039	0.197	5.405	5.56	5.7	5.875
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	104	5.605	5.604	6.45	5.3	0.04	0.201	5.405	5.56	5.7	5.875
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	104	2.483	2.488	5.012	0.355	0.835	0.914	1.334	1.995	2.754	3.936
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	104	22.	21.913	28.	16.	5.808	2.41	19.	20.	24.	25.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	104	11.25	12.992	44.5	-10.9	125.311	11.194	4.4	8.35	18.1	33.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	104	0.7	0.707	1.	0.5	0.013	0.114	0.6	0.6	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	104	0.7	0.732	1.	0.5	0.009	0.096	0.6	0.7	0.8	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	104	0.54	0.546	0.74	0.46	0.002	0.043	0.5	0.52	0.56	0.59
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	104	2.065	2.066	2.42	1.41	0.034	0.185	1.86	1.97	2.208	2.3
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	104	0.8	0.827	1.	0.7	0.008	0.091	0.7	0.8	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	104	3.8	3.849	4.9	3.3	0.132	0.363	3.4	3.5	4.1	4.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	104	5.7	5.675	6.8	4.9	0.095	0.308	5.3	5.5	5.9	6.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	104	1.4	1.662	6.3	0.	2.819	1.679	0.	0.01	3.075	3.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	104	2.5	2.508	5.05	0.36	0.847	0.921	1.345	2.01	2.78	3.965

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	168	7.	7.815	14.5	2.5	6.683	2.585	5.	6.	9.875	12.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	176	20.	20.528	30.	13.	9.496	3.082	17.	18.	23.	24.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	177	5.64	5.609	6.13	4.9	0.036	0.19	5.39	5.57	5.695	5.77
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	177	5.64	5.558	6.13	4.9	0.039	0.197	5.39	5.57	5.695	5.77
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	177	2.291	2.768	12.589	0.741	3.326	1.824	1.698	2.019	2.692	4.074
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	176	20.	20.04	29.	13.	9.878	3.143	16.	18.	22.	24.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	177	12.9	15.928	97.5	-5.6	151.806	12.321	4.94	7.8	21.8	32.08
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	177	0.6	0.627	1.	0.4	0.017	0.129	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	177	0.6	0.671	1.	0.4	0.011	0.107	0.6	0.6	0.8	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	177	0.49	0.493	0.6	0.37	0.001	0.035	0.46	0.47	0.51	0.55
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	177	1.72	1.732	2.55	1.18	0.054	0.233	1.46	1.57	1.87	2.05
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	177	0.8	0.799	1.	0.5	0.008	0.092	0.7	0.7	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	177	4.3	4.232	6.	3.2	0.171	0.414	3.7	3.9	4.5	4.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	177	4.8	4.898	5.9	3.4	0.204	0.452	4.4	4.6	5.1	5.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	177	0.9	1.38	5.5	0.	2.422	1.556	0.	0.	2.7	3.72
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	177	2.31	2.79	12.69	0.75	3.378	1.838	1.71	2.035	2.71	4.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/29/86-06/13/95	126	10.5	10.399	17.	5.	6.173	2.485	7.	8.5	12.	14.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	135	20.	20.044	30.	14.	7.147	2.673	17.	18.	22.	24.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	135	5.67	5.683	6.3	5.04	0.033	0.181	5.486	5.61	5.74	5.84
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	135	5.67	5.647	6.3	5.04	0.034	0.184	5.486	5.61	5.74	5.84
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	135	2.138	2.255	9.12	0.501	1.12	1.058	1.445	1.82	2.455	3.266
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	135	19.	19.407	29.	14.	6.691	2.587	16.	18.	21.	23.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	135	32.9	32.393	107.5	3.7	260.19	16.13	11.04	21.6	43.5	50.56
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	135	0.6	0.612	0.9	0.4	0.014	0.118	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	135	0.6	0.623	0.9	0.5	0.009	0.095	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	135	0.49	0.506	0.72	0.44	0.002	0.046	0.47	0.48	0.52	0.578
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	135	1.78	1.79	2.22	1.25	0.039	0.196	1.496	1.67	1.91	2.074

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0174

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	135	0.8	0.79	1.	0.7	0.007	0.086	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	135	4.2	4.208	5.2	3.6	0.139	0.373	3.7	3.9	4.5	4.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	135	4.8	4.81	5.7	3.2	0.168	0.41	4.36	4.6	5.1	5.3
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	135	0.3	1.112	5.5	0.	2.2	1.483	0.	0.004	1.8	3.44
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	135	2.16	2.274	9.19	0.51	1.137	1.066	1.46	1.83	2.47	3.292

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0175

NPS Station ID: SHEN0175
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.242781/ -78.743282

Depth of Water: 0
 Elevation: 1560
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WOR3
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WOR3 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.43 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	426	11.	11.445	23.	0.5	30.69	5.54	4.	7.	16.5	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	449	18.	18.033	28.	6.	7.05	2.655	14.	16.	20.	21.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	450	6.24	6.176	6.6	5.08	0.054	0.232	5.88	6.047	6.34	6.409
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	450	6.24	6.09	6.6	5.08	0.061	0.247	5.88	6.047	6.34	6.409
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	450	0.575	0.812	8.318	0.251	0.663	0.814	0.39	0.457	0.896	1.318
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/29/86-06/20/95	449	18.	17.579	28.	6.	6.811	2.61	14.	16.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	450	27.75	30.843	99.1	2.9	210.137	14.496	16.11	20.75	38.325	51.05
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-05/02/95	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	450	0.7	0.676	1.1	0.4	0.015	0.124	0.5	0.6	0.8	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	450	0.7	0.665	1.1	0.4	0.01	0.099	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	450	0.56	0.575	0.78	0.38	0.005	0.07	0.5	0.52	0.62	0.68
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	450	1.28	1.28	2.21	0.23	0.043	0.208	1.03	1.13	1.42	1.53
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	450	0.8	0.783	1.	0.5	0.008	0.09	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	450	3.	3.062	5.6	1.9	0.162	0.402	2.6	2.8	3.3	3.6
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	449	5.	5.203	7.4	3.4	0.659	0.812	4.3	4.6	5.7	6.5
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/29/86-05/23/94	14 ##	0.	0.001	0.01	0.	0.	0.003	0.	0.	0.	0.005
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	450	0.7	1.145	5.1	0.	1.638	1.28	0.	0.	2.1	3.1
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	450	0.58	0.819	8.38	0.25	0.674	0.821	0.391	0.46	0.905	1.33

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0175

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH		450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			
	Fresh Chronic	9.	450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			
	Other-Lo Lim.	6.5	450	449	1.00	125	124	0.99	188	188	1.00	137	137	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS		450	450	1.00	125	125	1.00	188	188	1.00	137	137	1.00			
	Other-Lo Lim.	200.	450	450	1.00	125	125	1.00	188	188	1.00	137	137	1.00			
00941	CHLORIDE, DISSOLVED IN WATER		450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			
	Fresh Acute	860.	450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			
	Drinking Water	250.	450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)		450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			
	Drinking Water	250.	450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)		450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			
	Drinking Water	44.	450	0	0.00	125	0	0.00	188	0	0.00	137	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1986 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	34	14.4	13.512	20.5	4.	25.266	5.027	5.55	9.875	18.	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	37	17.	16.027	21.	6.	8.305	2.882	13.6	15.	17.5	19.2
00400	PH (STANDARD UNITS)	37	5.92	5.967	6.39	5.51	0.049	0.221	5.694	5.86	6.07	6.326
00400	CONVERTED PH (STANDARD UNITS)	37	5.92	5.915	6.39	5.51	0.052	0.227	5.694	5.86	6.07	6.326
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	37	1.202	1.217	3.09	0.407	0.378	0.615	0.472	0.853	1.38	2.029
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	37	16.	15.568	20.	6.	7.974	2.824	12.8	14.5	17.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	37	24.5	32.208	86.4	9.2	345.911	18.599	15.04	19.4	39.5	60.34
00915	CALCIUM, DISSOLVED (MG/L AS CA)	37	0.6	0.632	1.	0.4	0.022	0.149	0.48	0.5	0.7	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	37	0.6	0.635	0.8	0.5	0.008	0.092	0.5	0.6	0.7	0.72
00930	SODIUM, DISSOLVED (MG/L AS NA)	37	0.66	0.653	0.77	0.46	0.006	0.079	0.508	0.61	0.71	0.75
00935	POTASSIUM, DISSOLVED (MG/L AS K)	37	1.16	1.175	1.55	0.29	0.046	0.214	0.998	1.065	1.315	1.424
00941	CHLORIDE, DISSOLVED IN WATER MG/L	37	0.7	0.73	1.	0.6	0.008	0.088	0.6	0.7	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	37	3.1	3.205	3.9	2.8	0.091	0.302	2.9	2.9	3.4	3.62
00955	SILICA, DISSOLVED (MG/L AS SI02)	37	6.	6.157	7.4	4.4	0.532	0.729	4.96	5.85	6.75	7.04
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	37	0.005	0.154	0.8	0.	0.052	0.228	0.	0.	0.25	0.62
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	37	1.21	1.226	3.11	0.41	0.383	0.619	0.474	0.86	1.39	2.048

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	42	10.	10.931	23.	3.	36.73	6.06	3.65	5.375	15.5	20.55
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	43	16.	16.209	22.	13.	5.646	2.376	14.	14.	18.	20.
00400	PH (STANDARD UNITS)	44	6.2	6.179	6.39	5.83	0.017	0.13	5.98	6.15	6.255	6.32
00400	CONVERTED PH (STANDARD UNITS)	44	6.2	6.158	6.39	5.83	0.017	0.131	5.98	6.15	6.255	6.32
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	44	0.631	0.696	1.479	0.407	0.063	0.251	0.479	0.556	0.708	1.05
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	43	15.	15.767	22.	13.	4.849	2.202	14.	14.	17.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	44	29.1	35.295	74.4	15.6	271.675	16.483	18.6	23.8	48.325	65.55
00915	CALCIUM, DISSOLVED (MG/L AS CA)	44	0.6	0.584	0.9	0.5	0.01	0.099	0.5	0.5	0.675	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	44	0.6	0.602	0.9	0.5	0.009	0.095	0.5	0.5	0.675	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	44	0.53	0.559	0.73	0.44	0.005	0.072	0.475	0.51	0.625	0.66
00935	POTASSIUM, DISSOLVED (MG/L AS K)	44	1.075	1.101	1.5	0.23	0.042	0.205	0.95	0.992	1.21	1.385
00941	CHLORIDE, DISSOLVED IN WATER MG/L	44	0.7	0.716	0.8	0.6	0.002	0.048	0.7	0.7	0.7	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	44	3.4	3.386	4.1	2.6	0.063	0.251	3.05	3.3	3.5	3.65
00955	SILICA, DISSOLVED (MG/L AS SI02)	43	5.1	5.228	7.3	4.1	0.686	0.828	4.4	4.5	5.7	6.62
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	44 ##	0.	0.001	0.05	0.	0.	0.008	0.	0.	0.	0.001
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	44	0.635	0.701	1.49	0.41	0.064	0.253	0.48	0.558	0.71	1.06

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	39	11.5	10.808	20.	0.5	33.798	5.814	1.5	6.	16.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	48	17.	16.854	21.	13.	3.787	1.946	14.	16.	18.	20.
00400	PH (STANDARD UNITS)	48	6.32	6.312	6.6	6.04	0.01	0.101	6.177	6.25	6.378	6.422
00400	CONVERTED PH (STANDARD UNITS)	48	6.32	6.3	6.6	6.04	0.01	0.102	6.177	6.25	6.378	6.422
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	48	0.479	0.501	0.912	0.251	0.015	0.121	0.378	0.419	0.562	0.665
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	48	16.	16.313	20.	13.	3.496	1.87	14.	15.	17.75	19.1
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	48	25.5	33.167	74.1	9.1	329.715	18.158	14.26	20.225	48.575	63.23
00915	CALCIUM, DISSOLVED (MG/L AS CA)	48	0.6	0.592	0.8	0.5	0.008	0.087	0.5	0.5	0.7	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	48	0.6	0.619	0.8	0.5	0.008	0.091	0.5	0.525	0.7	0.71
00930	SODIUM, DISSOLVED (MG/L AS NA)	48	0.58	0.61	0.78	0.49	0.007	0.081	0.529	0.55	0.68	0.741
00935	POTASSIUM, DISSOLVED (MG/L AS K)	48	1.14	1.188	1.64	0.88	0.048	0.219	0.939	0.982	1.388	1.521

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	48	0.7	0.712	0.8	0.6	0.002	0.039	0.7	0.7	0.7	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	48	3.3	3.346	4.	3.	0.054	0.232	3.1	3.2	3.4	3.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	48	5.1	5.41	7.1	4.2	0.946	0.973	4.39	4.525	6.5	6.9
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	48 ##	0.	0.003	0.08	0.	0.	0.013	0.	0.	0.	0.004
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	48	0.48	0.505	0.92	0.25	0.015	0.123	0.379	0.423	0.57	0.674

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	46	10.	11.174	20.	1.	29.758	5.455	4.	7.	16.25	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	46	16.	15.391	21.	8.	4.955	2.226	12.7	14.	17.	17.3
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	46	6.235	6.147	6.49	5.08	0.089	0.299	5.819	6.023	6.342	6.423
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	46	6.235	5.993	6.49	5.08	0.113	0.337	5.819	6.022	6.342	6.423
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	46	0.582	1.015	8.318	0.324	1.999	1.414	0.378	0.454	0.952	1.521
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	46	15.	15.043	20.	8.	4.62	2.149	12.7	14.	16.	17.3
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	46	30.15	30.559	49.5	10.5	84.027	9.167	16.87	26.	35.6	45.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	46	0.5	0.561	0.7	0.5	0.005	0.071	0.5	0.5	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	46	0.6	0.587	0.8	0.5	0.005	0.069	0.5	0.5	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	46	0.53	0.539	0.65	0.47	0.002	0.046	0.48	0.508	0.563	0.61
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	46	1.235	1.262	2.02	0.96	0.048	0.219	1.037	1.078	1.363	1.57
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	46	0.7	0.713	0.8	0.7	0.001	0.034	0.7	0.7	0.7	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	46	3.45	3.522	4.3	3.	0.144	0.379	3.1	3.2	3.825	4.13
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	46	4.8	5.043	6.7	4.2	0.375	0.612	4.47	4.6	5.325	6.03
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	46	0.006	0.011	0.2	0.	0.001	0.029	0.	0.	0.01	0.02
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	46	0.585	1.024	8.38	0.33	2.03	1.425	0.38	0.458	0.96	1.535

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	47	10.5	11.436	20.	3.5	27.844	5.277	5.4	6.5	17.	19.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	51	17.	17.118	21.	13.	3.746	1.935	15.	16.	19.	20.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	51	6.3	6.235	6.49	5.62	0.031	0.177	5.986	6.15	6.34	6.384
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	51	6.3	6.19	6.49	5.62	0.033	0.183	5.986	6.15	6.34	6.384
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	51	0.501	0.645	2.399	0.324	0.148	0.384	0.413	0.457	0.708	1.035
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	51	17.	16.588	20.	12.	3.127	1.768	15.	15.	18.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	51	31.1	33.682	83.7	8.7	209.476	14.473	16.98	22.8	42.7	52.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	51	0.6	0.596	0.7	0.4	0.006	0.08	0.5	0.5	0.7	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	51	0.6	0.586	0.7	0.4	0.007	0.083	0.5	0.5	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	51	0.52	0.535	0.63	0.38	0.002	0.043	0.492	0.51	0.57	0.59
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	51	1.26	1.252	2.02	1.01	0.033	0.181	1.032	1.11	1.38	1.438
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	51	0.7	0.716	0.8	0.5	0.003	0.05	0.7	0.7	0.7	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	51	3.	3.118	4.1	2.6	0.096	0.31	2.82	3.	3.1	3.78
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	51	4.8	4.939	6.	3.6	0.342	0.584	4.2	4.6	5.5	5.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	51	0.04	0.369	2.3	0.008	0.26	0.51	0.01	0.01	0.6	1.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	51	0.51	0.651	2.42	0.33	0.15	0.388	0.416	0.46	0.71	1.044

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	50	11.75	11.91	22.5	3.5	35.334	5.944	4.55	6.	18.	20.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	51	19.	19.569	28.	16.	3.85	1.962	17.	19.	20.	21.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	51	6.24	6.199	6.48	5.41	0.045	0.213	5.924	6.09	6.36	6.42
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	51	6.24	6.134	6.48	5.41	0.05	0.223	5.924	6.09	6.36	6.42
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	51	0.575	0.734	3.89	0.331	0.315	0.562	0.38	0.437	0.813	1.191
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	51	19.	19.176	28.	16.	4.188	2.047	17.	18.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	51	25.4	26.859	47.8	11.1	82.584	9.088	16.2	20.3	33.6	42.38
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	51	0.7	0.72	1.1	0.6	0.008	0.087	0.6	0.7	0.8	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	51	0.7	0.706	1.1	0.6	0.007	0.081	0.6	0.7	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	51	0.6	0.594	0.77	0.49	0.005	0.068	0.52	0.53	0.64	0.668
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	51	1.39	1.379	1.98	1.08	0.039	0.196	1.134	1.22	1.51	1.59
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	51	0.8	0.818	1.	0.7	0.006	0.077	0.7	0.8	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	51	2.8	2.847	4.	2.6	0.051	0.226	2.7	2.7	2.9	3.
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	51	5.2	5.108	6.3	3.8	0.399	0.632	4.3	4.6	5.7	5.9
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	51	1.4	1.718	3.8	0.	0.571	0.755	0.92	1.2	2.2	2.76
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	51	0.58	0.739	3.92	0.33	0.32	0.566	0.38	0.44	0.82	1.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	49	10.5	10.878	22.	3.	27.131	5.209	4.	6.75	14.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	52	20.	20.654	27.	17.	3.25	1.803	19.	20.	22.	22.7
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	52	6.29	6.186	6.44	5.12	0.092	0.303	5.829	6.133	6.36	6.4
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	52	6.29	6.018	6.44	5.12	0.121	0.348	5.829	6.132	6.36	6.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	52	0.513	0.96	7.586	0.363	1.979	1.407	0.398	0.437	0.738	1.483
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	52	20.	20.135	26.	17.	3.256	1.804	18.	19.	21.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	52	22.8	25.879	55.3	2.9	163.424	12.784	10.79	17.2	35.775	45.93
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	52	0.8	0.815	1.	0.7	0.005	0.072	0.7	0.8	0.9	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	52	0.8	0.775	0.9	0.7	0.003	0.056	0.7	0.7	0.8	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	52	0.56	0.561	0.69	0.51	0.001	0.035	0.523	0.54	0.57	0.61
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	52	1.36	1.385	2.21	1.08	0.035	0.186	1.153	1.263	1.503	1.58
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	52	0.9	0.906	1.	0.8	0.002	0.046	0.9	0.9	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	52	2.6	2.675	5.6	2.5	0.188	0.433	2.5	2.5	2.7	2.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	52	4.85	4.812	5.8	3.6	0.27	0.52	4.03	4.5	5.2	5.5
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	52	3.15	3.158	5.	0.9	0.541	0.735	2.2	2.8	3.5	3.87
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	52	0.52	0.968	7.65	0.37	2.012	1.418	0.4	0.44	0.748	1.497

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	51	12.	11.922	21.5	2.	32.134	5.669	4.	7.	17.	19.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	51	20.	20.078	26.	17.	2.434	1.56	18.	19.	21.	22.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	51	6.07	6.064	6.44	5.23	0.04	0.2	5.88	5.97	6.2	6.336
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	51	6.07	6.005	6.44	5.23	0.044	0.209	5.88	5.97	6.2	6.336
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	51	0.851	0.989	5.888	0.363	0.615	0.784	0.461	0.631	1.072	1.318
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	51	19.	19.49	25.	17.	2.495	1.58	17.2	19.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	51	33.7	31.659	57.9	4.5	185.813	13.631	15.4	18.6	42.8	50.96
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	51	0.8	0.773	1.	0.7	0.004	0.067	0.7	0.7	0.8	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	51	0.7	0.743	1.	0.7	0.004	0.064	0.7	0.7	0.8	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	51	0.57	0.596	0.73	0.48	0.005	0.074	0.502	0.52	0.67	0.69
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	51	1.36	1.368	1.61	1.1	0.02	0.142	1.15	1.26	1.49	1.554

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	51	0.9	0.878	1.	0.8	0.003	0.05	0.8	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	51	2.7	2.761	3.4	2.4	0.046	0.215	2.5	2.6	2.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	51	5.1	5.363	6.9	4.1	0.801	0.895	4.3	4.6	6.3
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	51	2.7	2.408	5.1	0.3	1.17	1.081	0.84	1.6	3.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	51	0.86	0.998	5.94	0.37	0.626	0.791	0.464	0.64	1.08

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	44	12.	12.466	22.5	2.5	30.412	5.515	4.5	8.625	16.375
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	45	19.	19.333	23.	18.	1.136	1.066	18.	19.	20.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	45	6.22	6.184	6.47	5.45	0.049	0.221	5.86	6.07	6.345
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	45	6.22	6.117	6.47	5.45	0.053	0.231	5.86	6.07	6.345
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	45	0.603	0.764	3.548	0.339	0.316	0.562	0.382	0.452	0.853
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/29/86-06/20/95	45	19.	18.978	23.	17.	1.295	1.138	18.	18.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	45	27.8	34.169	99.1	11.9	258.719	16.085	21.2	24.05	39.85
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	45	0.8	0.753	0.9	0.6	0.003	0.059	0.7	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	45	0.7	0.707	0.9	0.7	0.001	0.033	0.7	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	45	0.57	0.567	0.67	0.46	0.004	0.059	0.49	0.515	0.61
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	45	1.38	1.372	1.7	1.16	0.019	0.138	1.196	1.26	1.47
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	45	0.8	0.811	1.	0.7	0.002	0.044	0.8	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	45	2.9	2.911	3.6	1.9	0.055	0.234	2.76	2.8	3.
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	45	5.2	5.204	6.9	3.4	0.908	0.953	3.96	4.3	5.8
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	45	1.8	1.741	3.4	0.01	0.6	0.775	0.8	1.25	2.35
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	45	0.61	0.77	3.58	0.34	0.321	0.566	0.386	0.455	0.86

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	24	8.5	8.292	16.	0.5	15.346	3.917	0.75	5.75	11.375
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	25	18.	18.04	20.	17.	0.623	0.79	17.	17.5	18.5
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	25	6.33	6.294	6.49	5.74	0.034	0.184	5.964	6.215	6.415
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	25	6.33	6.248	6.49	5.74	0.036	0.19	5.964	6.215	6.415
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	25	0.468	0.565	1.82	0.324	0.111	0.333	0.331	0.385	0.611
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/29/86-06/20/95	25	18.	17.8	20.	17.	0.667	0.816	17.	17.	18.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	25	20.4	22.056	45.3	11.1	48.272	6.948	15.18	18.1	23.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	25	0.7	0.728	0.8	0.6	0.003	0.054	0.7	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	25	0.7	0.672	0.7	0.6	0.002	0.046	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	25	0.55	0.538	0.59	0.46	0.001	0.032	0.492	0.51	0.56
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	25	1.26	1.262	1.54	1.08	0.013	0.112	1.112	1.185	1.305
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	25	0.8	0.808	0.9	0.8	0.001	0.028	0.8	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	25	2.9	2.908	3.4	2.7	0.019	0.138	2.8	2.8	3.
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	25	4.8	4.856	5.5	4.4	0.068	0.262	4.6	4.7	4.9
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	25	1.5	1.48	2.2	0.004	0.229	0.478	0.78	1.25	1.75
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	25	0.47	0.57	1.83	0.33	0.113	0.336	0.33	0.385	0.615

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	119	18.	17.815	23.	9.5	7.919	2.814	14.	16.	20.	21.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	125	19.	19.296	27.	14.	4.129	2.032	17.	18.	21.	22.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	125	6.18	6.124	6.6	5.18	0.067	0.258	5.826	5.97	6.335	6.384
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	125	6.18	6.029	6.6	5.18	0.076	0.275	5.826	5.97	6.335	6.384
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	125	0.661	0.935	6.607	0.251	0.765	0.875	0.413	0.462	1.072	1.493
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	125	19.	18.824	26.	14.	4.017	2.004	16.	17.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	125	28.7	29.535	83.7	6.9	163.102	12.771	15.48	20.3	36.2	49.08
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	125	0.7	0.726	1.	0.5	0.01	0.098	0.6	0.7	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	125	0.7	0.706	0.9	0.6	0.005	0.068	0.6	0.7	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	125	0.63	0.633	0.78	0.49	0.004	0.063	0.56	0.58	0.68	0.724
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	125	1.45	1.44	2.02	1.07	0.021	0.146	1.26	1.36	1.525	1.584
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	125	0.8	0.782	1.	0.6	0.008	0.09	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	125	3.	2.991	4.2	2.5	0.109	0.331	2.6	2.8	3.1	3.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	125	5.9	6.061	7.4	4.7	0.427	0.654	5.2	5.6	6.6	6.9
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	125	0.7	1.149	5.	0.	1.572	1.254	0.	0.007	2.	3.14
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	125	0.67	0.943	6.66	0.25	0.778	0.882	0.416	0.465	1.08	1.506

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	179	6.	6.604	16.5	0.5	9.165	3.027	3.	4.	8.5	11.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	187	18.	17.519	28.	8.	7.767	2.787	14.	16.	19.	20.
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	188	6.24	6.187	6.47	5.12	0.045	0.213	5.92	6.12	6.33	6.38
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	188	6.24	6.11	6.47	5.12	0.051	0.227	5.92	6.12	6.33	6.38
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	188	0.575	0.775	7.586	0.339	0.603	0.777	0.417	0.468	0.759	1.202
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	187	17.	17.118	28.	8.	7.459	2.731	14.	15.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	188	36.9	38.496	99.1	2.9	251.93	15.872	19.06	27.85	46.2	57.91
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	188	0.7	0.659	1.1	0.4	0.017	0.129	0.5	0.5	0.8	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	188	0.7	0.657	1.1	0.4	0.012	0.108	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	188	0.53	0.552	0.76	0.38	0.004	0.06	0.5	0.52	0.57	0.65
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	188	1.175	1.17	1.98	0.23	0.029	0.17	0.96	1.06	1.27	1.341
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	188	0.8	0.795	1.	0.5	0.008	0.092	0.7	0.7	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	188	3.1	3.13	4.2	2.4	0.141	0.376	2.6	2.9	3.4	3.61
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	187	4.7	4.823	6.7	3.6	0.333	0.577	4.2	4.5	5.	5.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	188	0.7	1.177	5.1	0.	1.792	1.339	0.	0.	2.175	3.2
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	188	0.58	0.782	7.65	0.34	0.613	0.783	0.42	0.47	0.77	1.21

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/05/86-06/13/95	128	12.	12.292	21.5	5.	10.721	3.274	8.	10.	14.375	17.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/29/86-06/20/95	137	18.	17.584	24.	6.	6.804	2.608	14.	16.	20.	20.2
00400	PH (STANDARD UNITS)	03/29/86-06/20/95	137	6.27	6.208	6.49	5.08	0.051	0.226	5.932	6.085	6.37	6.42
00400	CONVERTED PH (STANDARD UNITS)	03/29/86-06/20/95	137	6.27	6.124	6.49	5.08	0.058	0.241	5.932	6.085	6.37	6.42
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/29/86-06/20/95	137	0.537	0.751	8.318	0.324	0.642	0.801	0.38	0.427	0.822	1.17
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/29/86-06/20/95	137	17.	17.073	24.	6.	6.598	2.569	14.	15.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/29/86-06/20/95	137	21.9	21.534	31.9	3.7	28.803	5.367	15.12	18.1	25.35	27.96
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/29/86-06/20/95	137	0.7	0.655	0.9	0.4	0.016	0.125	0.5	0.5	0.8	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/29/86-06/20/95	137	0.7	0.64	0.8	0.5	0.01	0.101	0.5	0.55	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/29/86-06/20/95	137	0.55	0.555	0.77	0.44	0.004	0.06	0.49	0.51	0.58	0.63
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/29/86-06/20/95	137	1.29	1.287	2.21	0.29	0.044	0.209	1.04	1.15	1.4	1.51

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0175

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/29/86-06/20/95	137	0.8	0.768	1.	0.6	0.007	0.085	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/29/86-06/20/95	137	2.9	3.034	5.6	1.9	0.228	0.477	2.6	2.7	3.3	3.6
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/29/86-06/20/95	137	4.8	4.938	6.4	3.4	0.379	0.616	4.2	4.6	5.4	5.9
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/29/86-06/20/95	137	0.7	1.097	4.8	0.	1.504	1.227	0.	0.001	2.05	2.92
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/29/86-06/20/95	137	0.54	0.757	8.38	0.33	0.652	0.807	0.38	0.43	0.83	1.182

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0176

NPS Station ID: SHEN0176
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.242948/ -78.743587

Depth of Water: 0
 Elevation: 1580
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR06 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.43 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0176

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.42	6.42	6.42	6.42	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.42	6.42	6.42	6.42	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.26	1.26	1.26	1.26	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0176

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0177

NPS Station ID: SHEN0177
 Location: LUCK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.242976/ -78.743726

Depth of Water: 0
 Elevation: 1560

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WR05 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT LUCK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.96 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0177

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	12.5	12.5	12.5	12.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	5.62	5.62	5.62	5.62	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	5.62	5.62	5.62	5.62	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	2.399	2.399	2.399	2.399	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.49	0.49	0.49	0.49	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	2.05	2.05	2.05	2.05	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	2.42	2.42	2.42	2.42	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0177

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0178

NPS Station ID: SHEN0178
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.243421/ -78.743698

Depth of Water: 0
 Elevation: 1580
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WR04 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.48 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0178

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.07	6.07	6.07	6.07	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.07	6.07	6.07	6.07	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	0.851	0.851	0.851	0.851	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.61	0.61	0.61	0.61	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.58	1.58	1.58	1.58	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	0.86	0.86	0.86	0.86	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0178

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0179

NPS Station ID: SHEN0179
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.244838/ -78.744420

Depth of Water: 0
 Elevation: 1540
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WOR2
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WOR2 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	309	11.	11.427	24.	30.03	5.48	4.5	7.	16.25	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	337	18.	18.499	30.	7.215	2.686	16.	17.	20.	22.
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	339	6.18	6.146	6.79	0.06	0.244	5.87	6.04	6.3	6.41
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	339	6.18	6.054	6.79	0.068	0.261	5.87	6.04	6.3	6.41
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	339	0.661	0.883	9.12	0.162	0.864	0.929	0.389	0.501	0.912
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	10/16/86-07/22/93	337	18.	17.967	29.	11.	6.942	2.635	15.	16.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	339	25.4	29.009	80.3	1.2	220.627	14.854	13.6	17.8	37.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	339	0.6	0.632	1.5	0.4	0.016	0.125	0.5	0.5	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	339	0.6	0.65	1.4	0.5	0.012	0.107	0.5	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	339	0.54	0.547	1.3	0.45	0.004	0.066	0.49	0.5	0.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	339	1.46	1.458	2.1	1.05	0.037	0.192	1.2	1.32	1.59
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	339	0.7	0.777	1.	0.6	0.009	0.096	0.7	0.7	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	339	3.5	3.461	4.7	0.17	0.413	3.	3.1	3.8	4.
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	337	4.9	5.034	9.9	3.5	0.454	0.674	4.3	4.6	5.5
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	06/04/90-06/04/90	1 ##	0.	0.	0.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	339	0.02	1.049	5.2	0.	2.013	1.419	0.	0.	2.3
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	339	0.67	0.891	9.19	0.16	0.877	0.937	0.39	0.51	0.92

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0179

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	339	0	0.00	90	0	0.00	149	0	0.00	100	0	0.00				
	Other-Lo Lim.	6.5	339	328	0.97	90	79	0.88	149	149	1.00	100	100	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	339	339	1.00	90	90	1.00	149	149	1.00	100	100	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	339	0	0.00	90	0	0.00	149	0	0.00	100	0	0.00				
	Drinking Water	250.	339	0	0.00	90	0	0.00	149	0	0.00	100	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	339	0	0.00	90	0	0.00	149	0	0.00	100	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	339	0	0.00	90	0	0.00	149	0	0.00	100	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1986 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	2	6.75	6.75	7.5	6.	1.125	1.061	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	17.	16.364	19.	14.	2.455	1.567	14.	15.	17.	18.8
00400	PH (STANDARD UNITS)	11	6.03	5.975	6.3	5.66	0.034	0.184	5.672	5.81	6.08	6.256
00400	CONVERTED PH (STANDARD UNITS)	11	6.03	5.939	6.3	5.66	0.035	0.188	5.672	5.81	6.08	6.256
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.933	1.15	2.188	0.501	0.265	0.515	0.567	0.832	1.549	2.131
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11	16.	16.	18.	14.	2.2	1.483	14.	14.	17.	18.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11	48.3	53.955	80.3	17.8	353.833	18.81	22.1	42.2	71.	79.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11	0.6	0.582	0.7	0.5	0.004	0.06	0.5	0.5	0.6	0.68
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11	0.7	0.655	0.7	0.6	0.003	0.052	0.6	0.6	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	11	0.58	0.568	0.65	0.46	0.005	0.069	0.466	0.49	0.64	0.648
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11	1.3	1.295	1.47	1.11	0.01	0.098	1.134	1.24	1.36	1.46
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11	0.8	0.773	0.9	0.7	0.004	0.065	0.7	0.7	0.8	0.88
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11	3.7	3.782	4.2	3.5	0.052	0.227	3.5	3.6	3.9	4.18
00955	SILICA, DISSOLVED (MG/L AS SI02)	11	5.8	5.464	6.1	4.4	0.389	0.623	4.46	4.8	6.	6.1
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11 ##	0.	0.027	0.1	0.	0.002	0.045	0.	0.	0.09	0.1
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11	0.94	1.161	2.21	0.51	0.269	0.519	0.576	0.84	1.56	2.152

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	47	11.	11.777	24.	3.5	38.02	6.166	4.4	6.	18.	21.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	48	17.	17.417	26.	14.	5.61	2.369	15.	16.	18.	20.
00400	PH (STANDARD UNITS)	49	6.19	6.162	6.45	5.54	0.028	0.169	5.98	6.055	6.295	6.36
00400	CONVERTED PH (STANDARD UNITS)	49	6.19	6.125	6.45	5.54	0.03	0.173	5.98	6.055	6.295	6.36
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	49	0.646	0.751	2.884	0.355	0.155	0.394	0.437	0.507	0.881	1.047
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	48	17.	16.958	25.	14.	4.934	2.221	15.	15.	18.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	49	25.3	30.529	58.2	14.	161.405	12.705	16.	20.8	39.85	52.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	49	0.6	0.563	0.9	0.4	0.008	0.091	0.5	0.5	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	49	0.6	0.602	0.8	0.5	0.006	0.08	0.5	0.5	0.65	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	49	0.54	0.543	0.69	0.45	0.004	0.064	0.47	0.49	0.595	0.62
00935	POTASSIUM, DISSOLVED (MG/L AS K)	49	1.36	1.365	1.78	1.05	0.036	0.19	1.11	1.175	1.52	1.64
00941	CHLORIDE, DISSOLVED IN WATER MG/L	49	0.7	0.722	1.	0.6	0.008	0.087	0.6	0.7	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	49	3.8	3.714	4.4	3.1	0.085	0.292	3.3	3.5	3.9	4.
00955	SILICA, DISSOLVED (MG/L AS SI02)	48	5.2	5.177	8.	3.9	0.542	0.736	4.4	4.6	5.6	6.11
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	49 ##	0.	0.005	0.2	0.	0.001	0.029	0.	0.	0.	0.002
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	49	0.65	0.757	2.91	0.36	0.158	0.398	0.44	0.515	0.89	1.06

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	41	11.	11.451	22.	1.	32.848	5.731	4.	8.	16.5	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	50	17.	17.54	30.	14.	5.356	2.314	16.	16.	19.	19.
00400	PH (STANDARD UNITS)	50	6.29	6.322	6.79	5.94	0.031	0.177	6.124	6.2	6.465	6.577
00400	CONVERTED PH (STANDARD UNITS)	50	6.29	6.289	6.79	5.94	0.033	0.181	6.124	6.2	6.465	6.577
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	50	0.513	0.514	1.148	0.162	0.039	0.197	0.265	0.343	0.631	0.752
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	50	17.	17.04	29.	14.	4.978	2.231	15.	16.	18.	18.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	50	23.05	31.042	63.7	7.9	291.38	17.07	13.16	16.75	47.35	57.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	50	0.6	0.574	1.5	0.5	0.021	0.144	0.5	0.5	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	50	0.6	0.616	1.4	0.5	0.016	0.127	0.5	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	50	0.55	0.59	1.3	0.49	0.014	0.118	0.51	0.52	0.64	0.669
00935	POTASSIUM, DISSOLVED (MG/L AS K)	50	1.415	1.383	1.74	1.08	0.049	0.222	1.091	1.143	1.593	1.67

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	50	0.7	0.728	1.	0.7	0.004	0.064	0.7	0.7	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	50	3.7	3.742	4.5	3.4	0.057	0.239	3.5	3.575	4.1
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	49	5.2	5.359	9.9	4.4	0.918	0.958	4.4	6.	6.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	50 ##	0.	0.004	0.2	0.	0.001	0.028	0.	0.	0.001
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	50	0.52	0.519	1.16	0.16	0.04	0.2	0.271	0.345	0.763

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	45	10.5	11.278	20.	2.	27.04	5.2	4.6	7.5	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	46	16.	16.326	21.	12.	3.291	1.814	14.	15.75	19.
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	46	6.135	6.108	6.48	5.38	0.057	0.239	5.827	5.97	6.42
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	46	6.135	6.032	6.48	5.38	0.063	0.251	5.827	5.97	6.42
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	46	0.733	0.929	4.169	0.331	0.504	0.71	0.38	0.534	1.489
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	10/16/86-07/22/93	46	16.	15.783	20.	12.	2.974	1.725	13.	15.	18.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	46	24.65	25.598	43.8	6.9	64.685	8.043	16.	19.275	36.45
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	46	0.5	0.539	0.7	0.5	0.003	0.058	0.5	0.5	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	46	0.6	0.58	0.8	0.5	0.004	0.062	0.5	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	46	0.515	0.526	0.63	0.46	0.001	0.039	0.487	0.5	0.583
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	46	1.39	1.398	1.98	1.16	0.027	0.163	1.22	1.26	1.49
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	46	0.7	0.702	0.8	0.7	0.	0.015	0.7	0.7	0.7
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	46	3.9	3.846	4.7	3.3	0.083	0.287	3.4	3.675	4.13
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	46	4.85	5.013	6.3	4.4	0.272	0.521	4.5	4.6	5.225
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	46	0.007	0.013	0.3	0.	0.002	0.044	0.	0.	0.02
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	46	0.74	0.936	4.2	0.33	0.512	0.715	0.38	0.538	1.502

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	47	10.5	11.606	21.5	3.5	27.478	5.242	6.	7.	19.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	51	17.	17.275	21.	12.	2.963	1.721	15.2	16.	19.8
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	52	6.21	6.209	6.53	5.81	0.034	0.184	5.936	6.08	6.437
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	52	6.21	6.169	6.53	5.81	0.036	0.189	5.936	6.08	6.437
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	52	0.617	0.678	1.549	0.295	0.098	0.313	0.366	0.447	1.159
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	10/16/86-07/22/93	51	17.	16.627	20.	11.	2.798	1.673	15.	16.	18.8
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	52	28.65	29.385	68.6	7.8	149.335	12.22	14.42	19.1	46.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	52	0.6	0.571	0.7	0.5	0.003	0.057	0.5	0.5	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	52	0.6	0.575	0.7	0.5	0.004	0.065	0.5	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	52	0.51	0.522	0.6	0.46	0.001	0.036	0.49	0.49	0.555
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	52	1.43	1.409	1.6	1.19	0.01	0.099	1.28	1.323	1.52
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	52	0.7	0.721	0.8	0.7	0.002	0.041	0.7	0.7	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	52	3.5	3.5	4.5	3.	0.109	0.33	3.1	3.2	3.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	52	4.9	4.881	5.8	3.5	0.346	0.588	4.16	4.425	5.67
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	52	0.02	0.258	1.8	0.008	0.156	0.394	0.01	0.01	0.87
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	52	0.62	0.683	1.56	0.3	0.099	0.315	0.373	0.45	1.165

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	51	12.	11.912	23.	3.5	31.757	5.635	4.7	7.	18.	18.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	52	20.	19.904	28.	17.	4.324	2.079	17.3	18.25	21.	22.
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	52	6.17	6.141	6.47	5.28	0.048	0.22	5.821	6.043	6.278	6.38
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	52	6.17	6.069	6.47	5.28	0.054	0.231	5.821	6.042	6.277	6.38
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	52	0.676	0.853	5.248	0.339	0.538	0.733	0.417	0.528	0.907	1.514
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10/16/86-07/22/93	52	19.5	19.481	28.	16.	4.647	2.156	17.	18.	20.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	52	20.3	22.552	40.4	1.2	93.689	9.679	11.41	15.3	29.875	36.69
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	52	0.7	0.683	1.	0.6	0.006	0.076	0.6	0.6	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	52	0.7	0.69	1.	0.6	0.006	0.077	0.6	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	52	0.56	0.563	0.72	0.48	0.003	0.053	0.493	0.52	0.607	0.627
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	52	1.585	1.588	2.1	1.26	0.035	0.187	1.309	1.443	1.73	1.797
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	52	0.8	0.819	1.	0.7	0.006	0.077	0.7	0.8	0.8	0.97
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	52	3.2	3.221	4.2	2.9	0.059	0.244	3.	3.1	3.3	3.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	52	5.05	4.996	6.1	3.9	0.291	0.539	4.3	4.6	5.4	5.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	52	1.6	1.627	3.6	0.	0.697	0.835	0.73	1.	2.1	3.07
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	52	0.68	0.86	5.29	0.34	0.547	0.74	0.42	0.533	0.915	1.528

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	48	11.	11.083	21.5	3.	27.184	5.214	4.	7.125	13.875	19.05
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	51	21.	21.49	28.	18.	3.695	1.922	19.2	20.	22.	23.8
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	51	6.15	6.057	6.44	5.04	0.129	0.359	5.282	6.04	6.29	6.384
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	51	6.15	5.849	6.44	5.04	0.173	0.416	5.282	6.04	6.29	6.384
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	51	0.708	1.415	9.12	0.363	3.922	1.98	0.413	0.513	0.912	5.411
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10/16/86-07/22/93	51	21.	20.922	27.	18.	3.394	1.922	19.	20.	21.	23.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	51	17.8	18.702	35.3	1.2	77.552	8.806	6.02	13.3	25.4	31.44
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	51	0.8	0.794	1.	0.7	0.005	0.068	0.7	0.8	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	51	0.8	0.782	0.9	0.7	0.003	0.059	0.7	0.7	0.8	0.88
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	51	0.54	0.539	0.6	0.47	0.001	0.028	0.502	0.52	0.55	0.586
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	51	1.57	1.577	1.87	1.29	0.022	0.147	1.346	1.47	1.69	1.748
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	51	0.9	0.904	1.	0.8	0.003	0.053	0.8	0.9	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	51	3.	2.965	3.4	2.7	0.027	0.163	2.8	2.8	3.1	3.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	51	4.8	4.796	5.6	3.6	0.268	0.518	4.1	4.5	5.2	5.4
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	51	3.3	3.376	5.2	1.9	0.513	0.717	2.42	3.	3.8	4.42
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	51	0.71	1.426	9.19	0.37	3.982	1.996	0.416	0.52	0.92	5.45

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	28	11.	10.786	20.	3.	29.063	5.391	3.45	4.625	15.875	18.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	28	21.	20.643	24.	18.	1.423	1.193	19.	20.	21.	22.1
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	28	5.97	5.992	6.26	5.72	0.017	0.129	5.85	5.9	6.068	6.202
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	28	5.97	5.974	6.26	5.72	0.017	0.13	5.85	5.9	6.067	6.202
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	28	1.072	1.062	1.905	0.55	0.099	0.315	0.628	0.856	1.26	1.416
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10/16/86-07/22/93	28	20.	19.964	23.	18.	1.221	1.105	19.	19.	21.	21.1
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	28	49.75	48.589	69.5	14.5	140.649	11.86	36.4	41.	57.875	61.75
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	28	0.75	0.754	0.9	0.7	0.003	0.058	0.7	0.7	0.8	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	28	0.7	0.729	0.8	0.7	0.002	0.046	0.7	0.7	0.8	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	28	0.525	0.534	0.63	0.47	0.002	0.044	0.489	0.5	0.548	0.611
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	28	1.57	1.553	1.76	1.29	0.018	0.134	1.347	1.453	1.653	1.721

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	28	0.9	0.882	0.9	0.8	0.002	0.039	0.8	0.9	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	28	3.	3.032	3.4	2.8	0.024	0.156	2.89	2.9	3.1	3.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	28	4.7	4.875	6.1	4.3	0.292	0.541	4.3	4.5	5.15	6.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	28	2.95	2.996	5.	1.8	0.362	0.602	2.29	2.8	3.25	3.62
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	28	1.085	1.071	1.92	0.55	0.1	0.317	0.637	0.865	1.27	1.426

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	84	18.5	18.119	24.	11.	7.395	2.719	13.75	17.	20.	21.25
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	89	19.	19.798	30.	15.	5.822	2.413	17.	18.	21.	23.
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	90	6.295	6.241	6.79	5.22	0.072	0.269	5.882	6.098	6.42	6.53
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	90	6.295	6.136	6.79	5.22	0.084	0.289	5.882	6.097	6.42	6.53
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	90	0.507	0.731	6.026	0.162	0.564	0.751	0.295	0.38	0.799	1.312
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10/16/86-07/22/93	89	19.	19.225	29.	15.	5.517	2.349	17.	18.	21.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	90	21.05	21.642	68.6	1.2	115.121	10.729	10.03	14.475	25.425	34.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	90	0.6	0.679	1.5	0.5	0.018	0.134	0.6	0.6	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	90	0.7	0.688	1.4	0.5	0.013	0.112	0.6	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	90	0.59	0.597	1.3	0.51	0.007	0.086	0.54	0.56	0.62	0.66
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	90	1.62	1.614	1.98	1.16	0.017	0.132	1.44	1.52	1.723	1.76
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	90	0.8	0.784	1.	0.6	0.01	0.098	0.7	0.7	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	90	3.2	3.26	4.4	2.7	0.13	0.361	2.8	3.	3.5	3.79
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	90	5.6	5.692	9.9	3.9	0.38	0.617	5.1	5.4	6.	6.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	90	0.2	1.107	5.2	0.	2.076	1.441	0.	0.001	2.3	3.39
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	90	0.515	0.737	6.07	0.16	0.573	0.757	0.3	0.38	0.805	1.324

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	132	6.	6.723	14.	1.	7.482	2.735	3.5	4.5	8.	10.85
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	148	17.	17.932	28.	12.	7.41	2.722	15.	16.	20.	21.
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	149	6.13	6.09	6.48	5.04	0.054	0.232	5.83	6.04	6.22	6.3
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	149	6.13	5.997	6.48	5.04	0.062	0.25	5.83	6.04	6.22	6.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	149	0.741	1.007	9.12	0.331	1.256	1.121	0.501	0.603	0.912	1.479
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10/16/86-07/22/93	148	17.	17.412	28.	11.	7.523	2.743	14.	16.	19.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	149	36.2	36.914	80.3	4.4	179.71	13.406	19.2	28.2	45.4	54.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	149	0.6	0.615	1.	0.5	0.014	0.116	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	149	0.6	0.646	1.	0.5	0.01	0.1	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	149	0.52	0.532	0.66	0.45	0.002	0.047	0.49	0.5	0.55	0.61
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	149	1.35	1.362	2.1	1.05	0.029	0.171	1.12	1.245	1.47	1.56
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	149	0.8	0.785	1.	0.7	0.008	0.091	0.7	0.7	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	149	3.7	3.575	4.5	2.8	0.148	0.384	3.	3.3	3.9	4.
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	149	4.7	4.822	8.	3.6	0.306	0.553	4.3	4.5	5.	5.6
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	149	0.02	1.007	5.	0.	1.903	1.38	0.	0.	2.	3.3
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	149	0.75	1.015	9.19	0.33	1.275	1.129	0.51	0.61	0.92	1.49

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/12/86-07/22/93	93	12.	12.059	20.	6.	10.173	3.19	8.	10.	13.75	17.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/16/86-07/22/93	100	18.	18.18	28.	12.	6.21	2.492	16.	16.	20.	21.
00400	PH (STANDARD UNITS)	10/16/86-07/22/93	100	6.2	6.146	6.48	5.19	0.045	0.212	5.89	6.02	6.297	6.36
00400	CONVERTED PH (STANDARD UNITS)	10/16/86-07/22/93	100	6.2	6.078	6.48	5.19	0.05	0.223	5.89	6.02	6.297	6.36
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/16/86-07/22/93	100	0.631	0.835	6.457	0.331	0.518	0.72	0.437	0.504	0.955	1.288
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10/16/86-07/22/93	100	17.	17.67	27.	12.	5.516	2.349	15.	16.	19.75	20.9
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/16/86-07/22/93	100	19.4	23.86	69.5	1.2	210.935	14.524	11.96	16.	26.825	54.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/16/86-07/22/93	100	0.6	0.616	0.9	0.4	0.014	0.119	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/16/86-07/22/93	100	0.6	0.621	0.9	0.5	0.011	0.104	0.5	0.5	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/16/86-07/22/93	100	0.52	0.524	0.72	0.45	0.002	0.041	0.48	0.493	0.54	0.579
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/16/86-07/22/93	100	1.445	1.461	1.91	1.11	0.03	0.173	1.23	1.333	1.598	1.699

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0179

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/16/86-07/22/93	100	0.7	0.76	1.	0.6	0.01	0.098	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/16/86-07/22/93	100	3.5	3.471	4.7	2.8	0.187	0.433	3.	3.	3.8	4.1
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/16/86-07/22/93	98	4.7	4.752	5.9	3.5	0.206	0.454	4.3	4.5	5.	5.4
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/16/86-07/22/93	100	0.01	1.057	5.	0.	2.155	1.468	0.	0.	2.575	3.3
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/16/86-07/22/93	100	0.64	0.842	6.51	0.33	0.526	0.726	0.44	0.513	0.96	1.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0180

NPS Station ID: SHEN0180
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.244893/ -78.744420

Depth of Water: 0
 Elevation: 1540
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR03 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.56 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0180

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.41	6.41	6.41	6.41	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.41	6.41	6.41	6.41	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	0.389	0.389	0.389	0.389	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.57	0.57	0.57	0.57	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.55	1.55	1.55	1.55	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0180

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0181

NPS Station ID: SHEN0181
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.245837/ -78.745337

 Depth of Water: 0
 Elevation: 1540

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WORZ
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

 On/Off RF1:
 On/Off RF3:

STATION WORZ IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	272	11.	11.415	23.	27.842	5.277	4.5	7.	16.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	298	18.5	18.775	28.	7.124	2.669	16.	17.	21.	22.
00400	PH (STANDARD UNITS)	08/28/87-07/22/93	298	6.19	6.181	6.96	0.059	0.242	5.899	6.08	6.33	6.421
00400	CONVERTED PH (STANDARD UNITS)	08/28/87-07/22/93	298	6.19	6.094	6.96	0.066	0.258	5.899	6.08	6.33	6.421
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/87-07/22/93	298	0.646	0.805	6.457	0.11	0.607	0.379	0.468	0.832	1.262
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/28/87-07/22/93	298	18.	18.272	28.	7.034	2.652	15.	16.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	277	24.1	27.271	69.1	2.	180.964	13.452	12.88	17.35	35.15
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	298	0.6	0.652	1.5	0.017	0.131	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	298	0.6	0.659	1.1	0.01	0.101	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	298	0.53	0.543	0.73	0.046	0.046	0.49	0.51	0.57	0.61
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	298	1.51	1.511	2.15	0.036	0.19	1.27	1.37	1.64	1.751
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	298	0.8	0.782	1.	0.009	0.093	0.7	0.7	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	298	3.5	3.529	5.5	0.167	0.409	3.	3.2	3.8	4.1
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	298	4.9	4.981	6.5	0.334	0.578	4.3	4.6	5.4	5.8
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	298	0.2	1.12	5.1	0.	1.965	1.402	0.	0.	2.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	298	0.65	0.812	6.51	0.11	0.617	0.38	0.47	0.84	1.273

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0181

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH					84	0	0.00	129	0	0.00	85	0	0.00			
	Fresh Chronic	9.	298	0	0.00	84	0	0.00	129	0	0.00	85	0	0.00			
	Other-Lo Lim.	6.5	298	284	0.95	84	72	0.86	129	127	0.98	85	85	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS					80	80	1.00	126	126	1.00	71	71	1.00			
	Other-Lo Lim.	200.	277	277	1.00	80	80	1.00	126	126	1.00	71	71	1.00			
00941	CHLORIDE, DISSOLVED IN WATER					84	0	0.00	129	0	0.00	85	0	0.00			
	Fresh Acute	860.	298	0	0.00	84	0	0.00	129	0	0.00	85	0	0.00			
	Drinking Water	250.	298	0	0.00	84	0	0.00	129	0	0.00	85	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)					84	0	0.00	129	0	0.00	85	0	0.00			
	Drinking Water	250.	298	0	0.00	84	0	0.00	129	0	0.00	85	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)					84	0	0.00	129	0	0.00	85	0	0.00			
	Drinking Water	44.	298	0	0.00	84	0	0.00	129	0	0.00	85	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1987 - Station SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	15	10.5	10.833	19.	5.	21.81	4.67	5.	6.5	15.	18.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	18	17.5	18.056	28.	14.	12.056	3.472	14.9	16.	18.	26.2
00400	PH (STANDARD UNITS)	08/28/87-07/22/93	18	6.15	6.207	6.96	6.01	0.045	0.212	6.055	6.088	6.273	6.393
00400	CONVERTED PH (STANDARD UNITS)	08/28/87-07/22/93	18	6.15	6.173	6.96	6.01	0.046	0.214	6.055	6.088	6.272	6.393
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/87-07/22/93	18	0.708	0.671	0.977	0.11	0.042	0.206	0.432	0.534	0.818	0.882
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/28/87-07/22/93	18	17.	17.722	27.	14.	10.212	3.196	14.9	16.	18.	25.2
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	18	41.5	39.872	69.1	12.	243.926	15.618	18.03	26.5	49.475	61.45
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	18	0.55	0.639	1.5	0.5	0.073	0.27	0.5	0.5	0.6	1.23
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	18	0.6	0.667	1.1	0.6	0.021	0.146	0.6	0.6	0.7	1.01
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	18	0.56	0.573	0.73	0.5	0.004	0.066	0.5	0.51	0.61	0.703
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	18	1.41	1.433	1.8	1.2	0.031	0.176	1.209	1.3	1.55	1.764
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	18	0.7	0.728	0.8	0.7	0.002	0.046	0.7	0.7	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	18	3.9	4.078	5.5	3.7	0.183	0.428	3.79	3.8	4.2	4.78
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	18	5.5	5.367	6.5	4.7	0.253	0.503	4.79	4.9	5.5	6.41
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	18 ##	0.	0.	0.002	0.	0.	0.001	0.	0.	0.	0.002
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	18	0.71	0.677	0.99	0.11	0.043	0.209	0.434	0.538	0.825	0.891

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	39	10.5	11.167	23.	1.	30.82	5.552	4.	8.	16.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	50	18.	17.88	28.	12.	6.271	2.504	15.1	16.	19.	21.
00400	PH (STANDARD UNITS)	08/28/87-07/22/93	50	6.3	6.366	6.79	5.99	0.034	0.185	6.171	6.25	6.503	6.638
00400	CONVERTED PH (STANDARD UNITS)	08/28/87-07/22/93	50	6.3	6.33	6.79	5.99	0.035	0.188	6.171	6.25	6.503	6.638
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/87-07/22/93	50	0.501	0.468	1.023	0.162	0.034	0.185	0.23	0.314	0.562	0.675
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/28/87-07/22/93	50	17.	17.32	27.	12.	5.61	2.369	15.	16.	18.25	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	50	24.65	31.894	68.4	10.	313.553	17.707	12.97	18.3	49.9	59.74
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	50	0.6	0.606	0.9	0.5	0.013	0.115	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	50	0.6	0.624	0.8	0.5	0.005	0.069	0.51	0.6	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	50	0.55	0.573	0.66	0.49	0.003	0.052	0.511	0.53	0.623	0.65
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	50	1.425	1.429	1.79	1.1	0.05	0.224	1.14	1.218	1.645	1.72
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	50	0.7	0.718	0.9	0.7	0.002	0.044	0.7	0.7	0.7	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	50	3.8	3.84	4.5	3.4	0.042	0.205	3.6	3.7	3.9	4.19
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	50	5.25	5.254	6.4	4.3	0.447	0.669	4.5	4.6	5.925	6.19
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	50 ##	0.	0.003	0.1	0.	0.	0.015	0.	0.	0.	0.003
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	50	0.51	0.472	1.03	0.16	0.035	0.187	0.231	0.318	0.57	0.679

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	45	10.5	11.4	20.	2.	25.859	5.085	5.	7.5	16.5	18.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	47	16.	16.34	20.	7.	4.316	2.078	14.	16.	17.	18.2
00400	PH (STANDARD UNITS)	08/28/87-07/22/93	47	6.18	6.156	6.5	5.37	0.061	0.246	5.874	6.02	6.34	6.428
00400	CONVERTED PH (STANDARD UNITS)	08/28/87-07/22/93	47	6.18	6.069	6.5	5.37	0.068	0.262	5.874	6.02	6.34	6.428
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/87-07/22/93	47	0.661	0.854	4.266	0.316	0.581	0.763	0.373	0.457	0.955	1.337
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	08/28/87-07/22/93	47	16.	15.83	20.	7.	4.536	2.13	14.	15.	17.	18.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	47	24.8	26.719	49.5	13.5	76.447	8.743	17.28	20.6	33.1	41.18
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	47	0.5	0.553	0.7	0.5	0.005	0.069	0.5	0.5	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	47	0.6	0.591	0.8	0.5	0.003	0.058	0.5	0.6	0.6	0.62
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	47	0.51	0.524	0.61	0.46	0.001	0.038	0.48	0.49	0.55	0.582
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	47	1.41	1.45	1.98	1.19	0.032	0.178	1.266	1.3	1.57	1.658

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	47	0.7	0.704	0.8	0.7	0.	0.02	0.7	0.7	0.7
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	47	4.	3.926	4.7	3.4	0.058	0.242	3.68	3.8	4.1
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	47	4.9	5.015	6.2	4.4	0.242	0.492	4.5	4.6	5.3
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	47	0.006	0.013	0.3	0.	0.002	0.043	0.	0.	0.01
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	47	0.67	0.86	4.3	0.32	0.591	0.769	0.374	0.46	0.96

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	46	10.75	11.772	21.	3.5	25.397	5.04	6.	7.375	17.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	52	17.	17.462	21.	15.	2.057	1.434	16.	18.	19.7
00400	PH (STANDARD UNITS)	08/28/87-07/22/93	52	6.255	6.25	6.49	5.64	0.027	0.164	6.039	6.163	6.39
00400	CONVERTED PH (STANDARD UNITS)	08/28/87-07/22/93	52	6.255	6.214	6.49	5.64	0.028	0.168	6.039	6.163	6.39
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/87-07/22/93	52	0.556	0.61	2.291	0.324	0.097	0.312	0.374	0.407	0.688
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/28/87-07/22/93	52	17.	16.865	20.	14.	1.962	1.401	15.	16.	18.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	52	27.05	29.135	63.7	7.5	140.526	11.854	15.57	20.3	36.65
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	52	0.6	0.575	0.7	0.5	0.004	0.062	0.5	0.5	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	52	0.6	0.575	0.7	0.5	0.004	0.065	0.5	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	52	0.505	0.522	0.59	0.47	0.001	0.035	0.483	0.5	0.555
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	52	1.43	1.415	1.63	1.21	0.011	0.105	1.259	1.32	1.51
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	52	0.7	0.725	0.8	0.7	0.002	0.044	0.7	0.7	0.775
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	52	3.6	3.513	4.2	3.	0.07	0.264	3.1	3.3	3.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	52	4.9	4.862	5.8	3.6	0.374	0.611	4.03	4.325	5.5
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	52	0.02	0.231	1.7	0.007	0.144	0.379	0.01	0.01	0.375
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	52	0.56	0.615	2.31	0.33	0.099	0.315	0.38	0.41	0.695

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	51	12.	12.	22.5	4.	32.78	5.725	4.2	7.	18.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	52	20.	19.75	27.	16.	3.877	1.969	17.3	18.	21.
00400	PH (STANDARD UNITS)	08/28/87-07/22/93	52	6.2	6.146	6.41	5.44	0.037	0.193	5.855	6.033	6.297
00400	CONVERTED PH (STANDARD UNITS)	08/28/87-07/22/93	52	6.2	6.095	6.41	5.44	0.04	0.2	5.855	6.033	6.297
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/87-07/22/93	52	0.631	0.804	3.631	0.389	0.273	0.522	0.468	0.504	0.928
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/28/87-07/22/93	52	19.	19.404	28.	16.	4.049	2.012	17.	18.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	52	19.75	21.594	37.	5.3	83.239	9.124	11.34	14.475	30.775
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	52	0.7	0.679	1.	0.6	0.006	0.078	0.6	0.6	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	52	0.7	0.685	1.	0.6	0.006	0.08	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	52	0.55	0.553	0.65	0.48	0.002	0.041	0.5	0.52	0.59
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	52	1.61	1.612	2.15	1.28	0.04	0.2	1.333	1.438	1.758
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	52	0.8	0.81	1.	0.7	0.005	0.072	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	52	3.3	3.337	4.2	3.1	0.047	0.217	3.1	3.2	3.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	52	4.95	4.919	5.9	3.9	0.242	0.492	4.3	4.5	5.3
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	52	1.3	1.429	3.3	0.	0.659	0.812	0.53	0.8	1.975
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	52	0.635	0.811	3.66	0.39	0.277	0.527	0.47	0.513	0.935

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	48	10.75	11.177	21.5	3.	27.473	5.241	4.5	7.	14.375	19.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	51	21.	21.471	26.	18.	2.654	1.629	20.	21.	22.	23.8
00400	PH (STANDARD UNITS)	08/28/87-07/22/93	51	6.15	6.075	6.55	5.19	0.103	0.32	5.41	6.04	6.24	6.362
00400	CONVERTED PH (STANDARD UNITS)	08/28/87-07/22/93	51	6.15	5.913	6.55	5.19	0.129	0.36	5.41	6.04	6.24	6.362
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/87-07/22/93	51	0.708	1.222	6.457	0.282	2.245	1.498	0.435	0.575	0.912	3.894
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/28/87-07/22/93	51	21.	21.	26.	18.	2.56	1.6	19.	20.	22.	23.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	51	19.4	22.682	52.8	2.	164.175	12.813	8.52	14.4	29.4	47.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	51	0.8	0.786	1.	0.6	0.005	0.069	0.7	0.7	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	51	0.8	0.778	0.9	0.7	0.004	0.061	0.7	0.7	0.8	0.88
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	51	0.54	0.539	0.61	0.48	0.001	0.029	0.51	0.52	0.55	0.588
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	51	1.64	1.63	1.87	1.41	0.017	0.129	1.442	1.55	1.74	1.814
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	51	0.9	0.912	1.	0.8	0.003	0.059	0.8	0.9	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	51	3.1	3.084	3.4	2.8	0.028	0.167	2.9	3.	3.2	3.38
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	51	4.8	4.8	5.6	3.6	0.265	0.515	4.12	4.5	5.2	5.48
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	51	3.2	3.271	5.1	1.8	0.503	0.709	2.32	2.9	3.6	4.34
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	51	0.71	1.232	6.51	0.28	2.282	1.51	0.438	0.58	0.92	3.924

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0181

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/03/87-07/22/93	28	11.	10.857	20.	3.	30.201	5.496	3.95	4.25	16.25	18.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/28/87-07/22/93	28	21.	20.643	23.	18.	1.275	1.129	19.	20.	21.	22.1
00400	PH (STANDARD UNITS)	08/28/87-07/22/93	28	6.005	6.005	6.27	5.84	0.012	0.11	5.859	5.9	6.08	6.153
00400	CONVERTED PH (STANDARD UNITS)	08/28/87-07/22/93	28	6.005	5.992	6.27	5.84	0.012	0.111	5.859	5.9	6.08	6.153
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/28/87-07/22/93	28	0.989	1.019	1.445	0.537	0.061	0.247	0.703	0.832	1.26	1.384
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/28/87-07/22/93	28	20.	19.964	23.	18.	1.369	1.17	19.	19.	20.75	21.2
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/28/87-02/18/93	7	24.4	27.314	42.8	17.1	71.085	8.431	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/28/87-07/22/93	28	0.8	0.761	0.9	0.7	0.004	0.063	0.7	0.7	0.8	0.81
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/28/87-07/22/93	28	0.7	0.721	0.8	0.7	0.002	0.042	0.7	0.7	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/28/87-07/22/93	28	0.52	0.53	0.62	0.47	0.002	0.046	0.488	0.5	0.563	0.62
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/28/87-07/22/93	28	1.6	1.581	1.75	1.34	0.013	0.116	1.396	1.5	1.68	1.731
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/28/87-07/22/93	28	0.9	0.875	0.9	0.8	0.002	0.044	0.8	0.825	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/28/87-07/22/93	28	3.1	3.15	3.5	2.9	0.025	0.158	3.	3.	3.3	3.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/28/87-07/22/93	28	4.65	4.857	6.1	4.3	0.289	0.538	4.3	4.425	5.15	5.91
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/28/87-07/22/93	28	2.9	2.85	4.8	1.7	0.336	0.58	2.18	2.6	3.075	3.51
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/28/87-07/22/93	28	1.	1.029	1.46	0.54	0.062	0.249	0.706	0.84	1.27	1.393

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0182

NPS Station ID: SHEN0182
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.245837/ -78.745477

Depth of Water: 0
 Elevation: 1520
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR02 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.71 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0182

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.46	6.46	6.46	6.46	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.46	6.46	6.46	6.46	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	0.347	0.347	0.347	0.347	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.56	0.56	0.56	0.56	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.58	1.58	1.58	1.58	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0182

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00						
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0183

NPS Station ID: SHEN0183
 Location: WHITE OAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005007001.22

LAT/LON: 38.249170/ -78.747782

Depth of Water: 0
 Elevation: 451

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.63

Agency: 12NSS
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 2B047916L /SI02B047916L
 Within Park Boundary: Yes

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 25.20
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND
 AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS,
 AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS
 IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS.
 EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988)
 WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO
 SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN;
 (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0183

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/28/86-04/17/86	2	8.25	8.25	8.5	8.	0.125	0.354	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/28/86-04/17/86	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/28/86-04/17/86	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/28/86-04/17/86	2	15.	15.	16.	14.	2.	1.414	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/28/86-04/17/86	2	10.7	10.7	10.8	10.6	0.02	0.141	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/28/86-04/17/86	2	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/28/86-04/17/86	2	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/28/86-04/17/86	2	0.794	0.794	0.794	0.794	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/28/86-04/17/86	2	18.9	18.9	19.2	18.6	0.18	0.424	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/28/86-04/17/86	2	0.9	0.9	1.	0.8	0.02	0.141	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/28/86-04/17/86	2	0.003	0.003	0.005	0.001	0.	0.003	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/28/86-04/17/86	2	0.55	0.55	0.7	0.4	0.045	0.212	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/28/86-04/17/86	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/28/86-04/17/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/28/86-04/17/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/28/86-04/17/86	2	0.51	0.51	0.52	0.5	0.	0.014	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/28/86-04/17/86	2	1.295	1.295	1.31	1.28	0.	0.021	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/28/86-04/17/86	2	0.8	0.8	0.9	0.7	0.02	0.141	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/28/86-04/17/86	2	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0183

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/28/86-04/17/86	2	0.025	0.025	0.03	0.02	0.	0.007	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/28/86-04/17/86	2	4.6	4.6	4.8	4.4	0.08	0.283	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/28/86-04/17/86	2	5.	5.	10.	0.	50.	7.071	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/28/86-04/17/86	2	18.5	18.5	19.	18.	0.5	0.707	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/28/86-04/17/86	2	0.07	0.07	0.08	0.06	0.	0.014	**	**	**	**
71885	IRON (UG/L AS FE)	03/28/86-04/17/86	2	11.495	11.495	18.99	4.	112.35	10.6	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/28/86-04/17/86	2	1480.	1480.	1480.	1480.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/28/86-04/17/86	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
83509	STREAM, WIDTH METER	03/28/86-04/17/86	2	2.	2.	2.	2.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0183

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	2	1.00						2	2	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0184

NPS Station ID: SHEN0184
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.249698/ -78.748615

Depth of Water: 0
 Elevation: 1460

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH54
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION RH54 IS LOCATED ON THE BROWNS COVE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0184

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	1.29	1.29	1.29	1.29	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0184

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0184

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0185

NPS Station ID: SHEN0185
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.250253/ -78.749171

Depth of Water: 0
 Elevation: 1480
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WOR1
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WOR1 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.13 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	767	11.	11.248	23.	1.	26.568	5.154	4.5	7.	16.	18.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	786	18.	18.814	38.	10.	7.925	2.815	16.	17.	21.	22.3
00400	PH (STANDARD UNITS)	11/02/79-07/29/97	790	6.09	6.089	6.74	5.18	0.037	0.192	5.91	6.	6.172	6.31
00400	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	790	6.09	6.038	6.74	5.18	0.04	0.199	5.91	6.	6.172	6.31
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	790	0.813	0.916	6.607	0.182	0.389	0.624	0.49	0.672	1.	1.23
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	786	18.	18.276	36.	10.	7.581	2.753	15.	16.	20.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	805	22.5	28.612	146.1	1.9	290.121	17.033	13.3	16.9	37.45	54.7
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	08/19/92-07/29/97	15	0.6	0.507	1.6	0.	0.221	0.47	0.	0.	0.8	1.18
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	790	0.6	0.614	1.4	0.2	0.017	0.129	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	790	0.6	0.639	1.3	0.3	0.013	0.113	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	790	0.52	0.531	1.27	0.25	0.004	0.065	0.47	0.49	0.56	0.59
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	790	1.515	1.568	2.58	0.69	0.076	0.276	1.25	1.358	1.75	1.97
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	790	0.8	0.78	1.	0.4	0.007	0.085	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	790	3.7	3.757	5.	1.7	0.121	0.347	3.4	3.6	4.	4.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	789	4.8	4.903	9.9	0.2	0.562	0.749	4.2	4.5	5.4	5.8
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	08/19/92-09/17/92	5 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	08/19/92-07/29/97	11	3.806	3.614	10.691	0.	14.713	3.836	0.	0.	6.772	10.022
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	590	0.002	0.007	0.3	0.	0.	0.018	0.	0.	0.007	0.02
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	790	0.2	0.764	5.	0.	1.086	1.042	0.	0.01	1.2	2.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	790	0.82	0.924	6.66	0.18	0.395	0.629	0.49	0.678	1.01	1.24

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0185

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	790	0	0.00	183	0	0.00	347	0	0.00	260	0	0.00			
	Other-Lo Lim.	6.5	790	773	0.98	183	169	0.92	347	346	1.00	260	258	0.99			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	805	805	1.00	194	194	1.00	350	350	1.00	261	261	1.00			
	Fresh Acute	860.	790	0	0.00	183	0	0.00	347	0	0.00	260	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	790	0	0.00	183	0	0.00	347	0	0.00	260	0	0.00			
	Drinking Water	250.	790	0	0.00	183	0	0.00	347	0	0.00	260	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	790	0	0.00	183	0	0.00	347	0	0.00	260	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	790	0	0.00	183	0	0.00	347	0	0.00	260	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1979 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	7	8.5	7.729	11.8	4.5	7.719	2.778	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	7	17.	17.429	19.	17.	0.619	0.787	**	**	**	**
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	7	6.13	6.083	6.2	5.8	0.018	0.133	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	7	6.13	6.063	6.2	5.8	0.018	0.135	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	7	0.741	0.866	1.585	0.631	0.107	0.327	**	**	**	**
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	7	17.	16.857	18.	16.	0.81	0.9	**	**	**	**
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	7	15.8	15.686	17.5	13.5	2.225	1.492	**	**	**	**
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	7	0.4	0.429	0.5	0.4	0.002	0.049	**	**	**	**
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	7	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	7	0.5	0.504	0.54	0.47	0.001	0.024	**	**	**	**
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	7	1.36	1.364	1.53	1.27	0.007	0.084	**	**	**	**
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	7	0.8	0.814	0.9	0.8	0.001	0.038	**	**	**	**
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	7	3.9	3.914	4.	3.8	0.005	0.069	**	**	**	**
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	7	4.7	4.729	4.9	4.6	0.012	0.111	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	7##	0.	0.003	0.02	0.	0.	0.007	**	**	**	**
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	7	0.02	0.026	0.06	0.02	0.	0.015	**	**	**	**
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	7	0.75	0.873	1.6	0.64	0.11	0.331	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	36	8.5	9.653	21.	2.	28.012	5.293	3.	6.	13.75	17.3
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	35	17.	18.371	24.	16.	6.299	2.51	16.	17.	21.	22.4
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	36	6.135	6.158	6.62	5.94	0.021	0.146	6.005	6.035	6.22	6.359
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	36	6.135	6.137	6.62	5.94	0.022	0.148	6.005	6.035	6.22	6.359
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	36	0.733	0.73	1.148	0.24	0.044	0.21	0.438	0.603	0.923	0.99
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	35	17.	17.8	23.	15.	5.753	2.399	16.	16.	20.	22.4
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	36	25.35	31.178	70.5	12.	235.002	15.33	16.7	20.	41.375	55.25
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	36	0.5	0.561	1.	0.4	0.016	0.125	0.47	0.5	0.675	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	36	0.5	0.572	1.	0.5	0.015	0.123	0.5	0.5	0.7	0.73
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	36	0.5	0.504	0.58	0.44	0.002	0.039	0.457	0.48	0.53	0.573
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	36	1.35	1.462	2.4	1.11	0.088	0.297	1.187	1.25	1.618	1.936
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	36	0.7	0.697	0.9	0.5	0.006	0.077	0.6	0.7	0.7	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	36	3.8	3.8	4.2	2.9	0.071	0.266	3.6	3.7	4.	4.1
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	36	4.75	4.503	6.1	0.2	2.093	1.447	1.94	4.5	5.275	5.73
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	36	0.01	0.013	0.05	0.	0.	0.016	0.	0.	0.018	0.04
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	36	0.09	0.153	0.9	0.01	0.039	0.198	0.02	0.04	0.2	0.5
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	36	0.74	0.736	1.16	0.24	0.045	0.212	0.441	0.61	0.93	0.996

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	36	11.75	11.333	18.5	1.5	28.7	5.357	3.	6.	17.375	18.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	41	17.	17.415	22.	15.	2.649	1.628	16.	16.	18.5	20.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	41	6.07	6.083	6.33	5.85	0.012	0.11	5.956	6.01	6.135	6.272
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	41	6.07	6.07	6.33	5.85	0.012	0.111	5.956	6.01	6.135	6.272
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	41	0.851	0.851	1.413	0.468	0.043	0.206	0.535	0.733	0.977	1.107
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	41	16.	16.805	22.	15.	2.361	1.537	15.	16.	18.	19.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	41	21.9	28.683	60.	13.5	178.211	13.35	15.	18.25	39.5	49.6
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	41	0.6	0.571	0.8	0.4	0.012	0.11	0.4	0.5	0.7	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	41	0.6	0.585	0.7	0.5	0.007	0.085	0.5	0.5	0.7	0.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	41	0.57	0.561	0.67	0.44	0.002	0.046	0.5	0.525	0.585	0.618
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	41	1.47	1.488	1.93	1.09	0.03	0.174	1.282	1.375	1.59	1.742
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	41	0.8	0.785	1.	0.7	0.008	0.091	0.7	0.7	0.8	0.98
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	41	3.9	3.968	4.7	3.5	0.06	0.245	3.7	3.8	4.1	4.28
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	41	4.6	4.705	5.3	4.	0.132	0.363	4.22	4.5	5.05	5.28
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	41 ##	0.	0.005	0.03	0.	0.	0.01	0.	0.	0.005	0.03
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	41	0.02	0.037	0.4	0.	0.006	0.078	0.	0.	0.03	0.1
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	41	0.86	0.858	1.42	0.47	0.043	0.208	0.54	0.74	0.985	1.116

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	50	13.5	13.004	20.	3.	20.577	4.536	6.1	9.875	17.	18.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	54	17.	17.37	22.	14.	3.483	1.866	15.	16.	19.	20.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	55	6.06	6.146	6.62	5.81	0.041	0.203	5.942	6.	6.29	6.514
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	55	6.06	6.106	6.62	5.81	0.043	0.207	5.942	6.	6.29	6.514
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	55	0.871	0.784	1.549	0.24	0.093	0.304	0.306	0.513	1.	1.143
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	54	16.	16.759	21.	14.	3.356	1.832	15.	15.	18.	19.5
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	55	26.	30.164	79.	12.	240.195	15.498	16.5	18.5	35.	53.6
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	55	0.5	0.538	0.9	0.4	0.01	0.101	0.4	0.5	0.6	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	55	0.5	0.567	0.8	0.5	0.007	0.084	0.5	0.5	0.6	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	55	0.51	0.528	0.66	0.45	0.002	0.05	0.47	0.49	0.57	0.6
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	55	1.4	1.443	2.01	1.15	0.04	0.201	1.22	1.28	1.56	1.754
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	55	0.8	0.755	0.9	0.7	0.003	0.054	0.7	0.7	0.8	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	55	3.7	3.665	4.1	3.2	0.042	0.205	3.4	3.5	3.8	3.94
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	54	4.8	4.761	5.9	2.6	0.421	0.648	4.1	4.2	5.225	5.7
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	55 ##	0.	0.003	0.02	0.	0.	0.005	0.	0.	0.005	0.009
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	55	0.07	0.105	0.6	0.	0.017	0.132	0.	0.	0.1	0.3
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	55	0.88	0.791	1.56	0.24	0.094	0.307	0.306	0.52	1.01	1.15

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	37	10.9	10.954	20.	3.5	17.891	4.23	5.	7.75	14.	17.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	40	17.	17.925	38.	13.	13.61	3.689	16.	17.	18.	20.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	40	6.08	6.084	6.34	5.31	0.025	0.159	5.981	6.043	6.153	6.289
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	40	6.08	6.042	6.34	5.31	0.027	0.165	5.981	6.042	6.152	6.289
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	40	0.832	0.908	4.898	0.457	0.446	0.668	0.514	0.704	0.907	1.045
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	40	16.5	17.275	36.	13.	12.307	3.508	15.	16.	18.	19.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	40	20.	25.818	82.5	7.5	271.989	16.492	10.2	15.625	35.625	56.
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	40	0.5	0.543	0.8	0.3	0.006	0.075	0.5	0.5	0.6	0.6
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	40	0.6	0.59	0.8	0.3	0.006	0.078	0.5	0.6	0.6	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	40	0.49	0.512	0.85	0.4	0.007	0.086	0.421	0.46	0.548	0.608
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	40	1.445	1.494	2.1	0.81	0.062	0.25	1.216	1.36	1.663	1.896
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	40	0.8	0.763	1.	0.6	0.005	0.074	0.7	0.7	0.8	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	40	3.8	3.833	4.3	2.5	0.1	0.316	3.6	3.625	4.075	4.2
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	40	4.5	4.608	6.2	0.4	0.747	0.864	4.1	4.3	4.9	5.5
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	40 ##	0.	0.004	0.06	0.	0.	0.011	0.	0.	0.002	0.01
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	40	0.2	0.239	0.7	0.	0.038	0.195	0.041	0.078	0.4	0.58
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	40	0.84	0.917	4.94	0.46	0.454	0.674	0.521	0.712	0.915	1.057

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	38	9.	10.447	20.	3.	21.146	4.598	5.4	7.	13.75	17.55
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	40	18.5	19.3	33.	14.	14.472	3.804	15.1	17.	21.	24.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	40	6.02	6.032	6.35	5.84	0.011	0.104	5.912	5.97	6.08	6.15
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	40	6.02	6.021	6.35	5.84	0.011	0.104	5.912	5.97	6.08	6.15
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	40	0.955	0.953	1.445	0.447	0.042	0.206	0.708	0.832	1.072	1.225
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	40	17.5	18.65	32.	14.	13.003	3.606	15.	16.	20.75	23.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	40	31.75	42.3	87.5	17.5	540.497	23.249	20.	23.125	59.375	83.15
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	40	0.5	0.56	0.9	0.2	0.02	0.141	0.4	0.5	0.675	0.79
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	40	0.6	0.632	0.9	0.3	0.014	0.119	0.5	0.6	0.7	0.8
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	40	0.51	0.501	0.67	0.25	0.008	0.087	0.392	0.438	0.558	0.599
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	40	1.365	1.496	2.15	0.69	0.115	0.34	1.173	1.25	1.815	1.969
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	40	0.7	0.725	1.	0.4	0.01	0.098	0.61	0.7	0.8	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	40	3.7	3.67	4.2	1.7	0.199	0.446	3.41	3.6	3.9	4.
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	40	4.3	4.56	6.3	1.2	1.039	1.02	4.01	4.125	5.4	5.89
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	40###	0.	0.005	0.06	0.	0.	0.012	0.	0.	0.	0.029
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	40	0.03	0.147	1.	0.	0.057	0.239	0.	0.	0.2	0.49
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	40	0.96	0.961	1.46	0.45	0.043	0.208	0.71	0.84	1.08	1.234

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	44	12.	10.989	19.5	2.5	27.064	5.202	3.25	6.	16.	17.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	45	18.	17.956	25.	10.	7.134	2.671	15.6	16.	19.	21.4
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	45	6.02	6.015	6.22	5.75	0.01	0.101	5.856	5.965	6.08	6.14
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	45	6.02	6.003	6.22	5.75	0.01	0.101	5.856	5.965	6.08	6.14
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	45	0.955	0.993	1.778	0.603	0.06	0.244	0.726	0.832	1.084	1.393
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	45	17.	17.378	24.	10.	7.013	2.648	14.6	16.	18.5	21.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	45	30.	33.567	78.	13.5	268.677	16.391	16.3	19.75	43.5	60.5
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	45	0.5	0.527	0.7	0.4	0.008	0.091	0.4	0.5	0.6	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	45	0.5	0.562	0.8	0.5	0.007	0.086	0.5	0.5	0.6	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	45	0.54	0.549	0.82	0.48	0.004	0.062	0.48	0.505	0.57	0.624
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	45	1.35	1.408	2.02	1.09	0.047	0.217	1.186	1.235	1.505	1.774
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	45	0.7	0.744	1.	0.7	0.006	0.078	0.7	0.7	0.8	0.9
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	45	3.8	3.867	4.3	3.5	0.045	0.211	3.66	3.7	4.	4.2
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	45	5.	4.958	6.1	2.4	0.642	0.801	4.	4.3	5.65	5.9
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	45	0.01	0.009	0.03	0.	0.	0.009	0.	0.	0.015	0.02
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	45	0.02	0.061	0.3	0.	0.006	0.077	0.	0.	0.1	0.2
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	45	0.96	1.002	1.79	0.61	0.06	0.246	0.734	0.84	1.095	1.402

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	29	9.	9.586	18.	1.5	24.854	4.985	3.	5.75	13.75	17.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	31	17.	17.226	28.	13.	9.114	3.019	13.2	15.	19.	20.8
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	31	5.99	5.966	6.24	5.43	0.041	0.202	5.664	5.89	6.11	6.22
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	31	5.99	5.914	6.24	5.43	0.044	0.209	5.664	5.89	6.11	6.22
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	31	1.023	1.219	3.715	0.575	0.517	0.719	0.603	0.776	1.288	2.168
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	31	16.	16.71	28.	12.	9.013	3.002	13.2	15.	18.	19.8
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	31	17.5	27.706	67.5	4.9	401.574	20.039	10.1	13.8	47.5	61.5
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	31	0.5	0.51	0.8	0.4	0.016	0.125	0.4	0.4	0.6	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	31	0.6	0.597	0.8	0.5	0.012	0.108	0.5	0.5	0.7	0.8

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	31	0.6	0.618	0.96	0.46	0.009	0.094	0.502	0.57	0.64	0.73
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	31	1.31	1.444	2.04	1.09	0.081	0.284	1.152	1.23	1.74	1.892
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	31	0.8	0.803	1.	0.7	0.006	0.08	0.7	0.7	0.9	0.9
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	31	4.1	4.11	4.3	3.6	0.024	0.154	4.	4.	4.3	4.3
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	31	5.7	5.623	6.2	4.6	0.182	0.426	4.74	5.4	5.9	6.
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	21 ##	0.	0.001	0.01	0.	0.	0.002	0.	0.	0.	0.005
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	31	0.06	0.111	0.6	0.	0.023	0.152	0.	0.03	0.1	0.3
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	31	1.03	1.229	3.74	0.58	0.524	0.724	0.61	0.78	1.3	2.19

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	37	9.5	9.77	19.	3.5	20.439	4.521	4.4	5.25	13.25	17.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	37	17.	17.676	22.	15.	4.003	2.001	15.	16.	19.	21.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	39	6.	6.024	6.41	5.86	0.015	0.12	5.88	5.94	6.08	6.18
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	39	6.	6.01	6.41	5.86	0.015	0.121	5.88	5.94	6.08	6.18
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	39	1.	0.978	1.38	0.389	0.056	0.236	0.661	0.832	1.148	1.318
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	37	17.	17.27	21.	15.	3.869	1.967	15.	15.5	18.	21.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	39	21.1	28.559	66.7	7.8	227.645	15.088	13.	17.5	40.4	55.4
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	39	0.5	0.562	0.7	0.5	0.007	0.081	0.5	0.5	0.6	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	39	0.6	0.618	0.8	0.5	0.01	0.1	0.5	0.5	0.7	0.8
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	39	0.51	0.517	0.6	0.44	0.002	0.041	0.47	0.48	0.55	0.58
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	39	1.35	1.458	1.88	1.17	0.059	0.242	1.2	1.24	1.68	1.84
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	39	0.7	0.738	0.8	0.7	0.002	0.049	0.7	0.7	0.8	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	39	4.5	4.449	5.	3.9	0.056	0.236	4.1	4.3	4.6	4.7
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	39	4.8	4.931	5.7	4.1	0.238	0.488	4.4	4.5	5.4	5.6
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	39 ##	0.	0.	0.002	0.	0.	0.	0.	0.	0.	0.
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	39	1.01	0.986	1.39	0.39	0.056	0.238	0.67	0.84	1.16	1.33

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	26	8.5	9.038	20.	1.	23.498	4.848	3.35	4.375	12.	17.3
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	32	17.	17.781	29.	14.	7.467	2.733	15.3	16.	18.75	20.7
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	32	6.115	6.145	6.53	5.99	0.014	0.119	6.046	6.07	6.165	6.302
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	32	6.115	6.131	6.53	5.99	0.014	0.12	6.046	6.07	6.165	6.302
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	32	0.767	0.739	1.023	0.295	0.026	0.16	0.5	0.684	0.851	0.9
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	32	17.	17.25	28.	14.	7.032	2.652	14.3	16.	18.	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	32	19.75	25.722	146.1	9.7	625.199	25.004	11.76	13.7	24.975	45.79
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	32	0.5	0.569	1.4	0.5	0.027	0.165	0.5	0.5	0.6	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	32	0.6	0.628	1.3	0.5	0.019	0.137	0.5	0.6	0.6	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	32	0.53	0.557	1.27	0.5	0.018	0.133	0.5	0.51	0.558	0.587
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	32	1.355	1.403	2.07	1.15	0.051	0.227	1.176	1.208	1.47	1.79
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	32	0.7	0.728	1.	0.7	0.004	0.063	0.7	0.7	0.7	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	32	4.	4.122	4.6	3.8	0.049	0.221	3.9	4.	4.3	4.5
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	32	4.8	5.041	9.9	4.4	1.022	1.011	4.4	4.5	5.2	5.84
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	32 ##	0.	0.003	0.07	0.	0.	0.013	0.	0.	0.	0.003
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	32	0.775	0.745	1.03	0.3	0.026	0.162	0.501	0.688	0.86	0.908

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	47	11.	11.415	20.	2.	27.427	5.237	4.8	8.	17.	19.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	47	17.	16.426	22.	11.	5.119	2.263	13.	15.	17.	20.
00400p	PH (STANDARD UNITS)	47	6.1	6.125	6.58	5.59	0.048	0.218	5.892	5.97	6.28	6.448
00400p	CONVERTED PH (STANDARD UNITS)	47	6.1	6.072	6.58	5.59	0.051	0.225	5.892	5.97	6.28	6.448
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	47	0.794	0.848	2.57	0.263	0.205	0.453	0.357	0.525	1.072	1.283
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	47	16.	15.957	21.	11.	4.737	2.177	13.	15.	17.	19.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	47	22.7	27.589	72.3	11.4	215.526	14.681	15.04	20.	28.9	54.64
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	47	0.5	0.545	0.7	0.5	0.005	0.072	0.5	0.5	0.6	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	47	0.6	0.6	0.8	0.5	0.006	0.075	0.5	0.6	0.6	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	47	0.51	0.52	0.6	0.43	0.001	0.038	0.48	0.5	0.55	0.58
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	47	1.44	1.516	2.09	1.14	0.053	0.23	1.296	1.35	1.63	1.94
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	47	0.7	0.704	0.8	0.6	0.001	0.029	0.7	0.7	0.7	0.7
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	47	4.	4.053	4.8	3.7	0.037	0.193	3.8	3.9	4.1	4.3
00955p	SILICA, DISSOLVED (MG/L AS SI02)	47	4.9	5.002	6.	4.1	0.228	0.477	4.5	4.6	5.3	5.74
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	47	0.007	0.011	0.2	0.	0.001	0.029	0.	0.	0.01	0.02
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	47	0.8	0.856	2.59	0.27	0.209	0.457	0.362	0.53	1.08	1.294

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	45	10.5	11.711	21.	3.5	26.483	5.146	6.	7.25	17.25	19.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	51	18.	17.824	22.	13.	4.108	2.027	15.2	16.	19.	21.
00400p	PH (STANDARD UNITS)	51	6.16	6.171	6.39	5.96	0.013	0.113	6.022	6.08	6.25	6.35
00400p	CONVERTED PH (STANDARD UNITS)	51	6.16	6.157	6.39	5.96	0.013	0.114	6.022	6.08	6.25	6.35
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	51	0.692	0.697	1.096	0.407	0.03	0.174	0.447	0.562	0.832	0.951
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	51	17.	17.294	21.	12.	3.772	1.942	15.	16.	19.	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	51	24.4	29.7	66.1	9.5	195.138	13.969	15.86	20.2	36.9	53.28
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	51	0.6	0.569	0.7	0.5	0.005	0.073	0.5	0.5	0.6	0.7
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	51	0.6	0.592	0.7	0.5	0.006	0.074	0.5	0.5	0.6	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	51	0.51	0.528	0.7	0.47	0.002	0.045	0.49	0.5	0.57	0.588
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	51	1.47	1.526	1.91	1.28	0.045	0.211	1.282	1.33	1.75	1.848
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	51	0.7	0.729	0.9	0.7	0.003	0.05	0.7	0.7	0.8	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	51	3.7	3.673	4.2	3.2	0.032	0.179	3.4	3.5	3.8	3.9
00955p	SILICA, DISSOLVED (MG/L AS SI02)	51	4.9	4.91	5.9	3.7	0.394	0.627	4.12	4.3	5.6	5.8
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	31	0.001	0.002	0.01	0.	0.	0.003	0.	0.	0.003	0.007
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	51	0.02	0.166	1.5	0.008	0.103	0.321	0.01	0.01	0.2	0.64
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	51	0.7	0.703	1.11	0.41	0.031	0.176	0.45	0.57	0.84	0.956

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	51	11.5	11.931	23.	2.	33.27	5.768	4.5	7.	18.	19.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	52	20.	20.462	27.	17.	5.548	2.355	18.	18.	22.	23.
00400p	PH (STANDARD UNITS)	52	6.135	6.122	6.74	5.32	0.047	0.217	5.916	6.055	6.208	6.31
00400p	CONVERTED PH (STANDARD UNITS)	52	6.135	6.053	6.74	5.32	0.052	0.228	5.916	6.055	6.208	6.31
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	52	0.733	0.885	4.786	0.182	0.556	0.746	0.49	0.62	0.881	1.214
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	52	20.	20.115	27.	16.	5.32	2.306	17.	18.	22.	23.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	52	26.55	29.521	73.6	1.9	314.165	17.725	10.85	14.4	43.775	56.97
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	52	0.7	0.685	1.	0.6	0.009	0.094	0.6	0.6	0.7	0.8
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	52	0.7	0.708	1.	0.6	0.011	0.106	0.6	0.6	0.8	0.8
00930p	SODIUM, DISSOLVED (MG/L AS NA)	52	0.545	0.547	0.81	0.48	0.003	0.05	0.493	0.51	0.57	0.587

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	52	1.825	1.754	2.17	1.32	0.068	0.261	1.4	1.51	1.988	2.09
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	52	0.8	0.819	1.	0.7	0.006	0.079	0.7	0.8	0.9	0.9
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	52	3.5	3.567	4.3	3.3	0.045	0.213	3.4	3.4	3.675	3.8
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	52	5.	5.023	6.9	4.1	0.347	0.589	4.3	4.6	5.375	5.8
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	50	0.001	0.015	0.17	0.	0.001	0.031	0.	0.	0.01	0.05
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	52	1.35	1.38	3.3	0.	0.675	0.822	0.4	0.8	2.	2.7
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	52	0.74	0.893	4.82	0.18	0.564	0.751	0.49	0.625	0.89	1.222

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	50	10.5	10.71	21.5	2.5	27.144	5.21	4.05	6.5	13.625	18.9
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	52	21.	21.692	27.	18.	3.276	1.81	20.	20.25	23.	24.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	52	6.07	5.995	6.31	5.18	0.063	0.251	5.602	5.973	6.13	6.217
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	52	6.07	5.893	6.31	5.18	0.074	0.271	5.602	5.973	6.13	6.217
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	52	0.851	1.279	6.607	0.49	1.651	1.285	0.607	0.741	1.065	2.503
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	52	21.	21.135	26.	18.	2.785	1.669	19.	20.	22.	23.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	54	15.55	17.25	38.7	1.9	58.888	7.674	8.1	13.175	20.7	28.6
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	52	0.8	0.758	0.9	0.6	0.006	0.075	0.7	0.7	0.8	0.8
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	52	0.8	0.773	0.9	0.7	0.004	0.063	0.7	0.7	0.8	0.87
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	52	0.53	0.533	0.6	0.48	0.001	0.025	0.503	0.52	0.55	0.57
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	52	1.665	1.702	2.11	1.41	0.035	0.187	1.466	1.56	1.858	1.978
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	52	0.9	0.908	1.	0.8	0.002	0.048	0.9	0.9	0.9	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	52	3.2	3.233	3.6	2.9	0.027	0.165	3.	3.1	3.3	3.47
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	52	4.9	4.817	5.8	3.6	0.267	0.517	4.1	4.5	5.2	5.47
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	46	0.002	0.003	0.01	0.	0.	0.003	0.	0.001	0.005	0.008
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	52	3.15	3.154	5.	1.6	0.524	0.724	2.13	2.65	3.5	4.21
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	52	0.86	1.29	6.66	0.49	1.678	1.295	0.613	0.75	1.075	2.521

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	47	11.2	11.621	22.	2.	29.661	5.446	3.9	8.	16.	19.1
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	47	22.	22.064	28.	19.	4.539	2.131	20.	20.	24.	25.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	47	6.05	6.049	6.5	5.19	0.038	0.194	5.862	5.96	6.13	6.266
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	47	6.05	5.991	6.5	5.19	0.041	0.202	5.862	5.96	6.13	6.266
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	47	0.891	1.02	6.457	0.316	0.739	0.86	0.542	0.741	1.096	1.375
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	47	21.	21.298	27.	18.	4.605	2.146	19.	20.	23.	24.2
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	47	27.8	31.574	91.2	3.7	344.693	18.566	12.48	15.3	47.8	56.12
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	47	0.8	0.783	1.	0.7	0.008	0.087	0.7	0.7	0.8	0.9
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	47	0.8	0.785	1.	0.7	0.008	0.088	0.7	0.7	0.8	0.9
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	47	0.53	0.545	0.67	0.47	0.002	0.049	0.49	0.5	0.59	0.612
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	47	1.74	1.819	2.58	1.37	0.096	0.311	1.438	1.54	2.1	2.246
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	47	0.9	0.881	1.	0.8	0.002	0.05	0.8	0.9	0.9	0.9
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	47	3.4	3.445	3.9	3.2	0.045	0.212	3.2	3.3	3.6	3.72
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	47	4.9	5.209	6.4	4.2	0.536	0.732	4.4	4.5	6.	6.24
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	47	0.004	0.012	0.3	0.	0.002	0.043	0.	0.003	0.009	0.02
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	47	2.7	2.564	4.7	0.3	0.729	0.854	1.34	2.1	3.	3.52
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	47	0.9	1.029	6.51	0.32	0.752	0.867	0.544	0.75	1.11	1.386

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	46	12.5	12.609	23.	3.	28.877	5.374	5.35	9.	16.5	21.5
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	46	20.	20.783	24.	18.	2.663	1.632	19.	19.	22.	23.
00400p	PH (STANDARD UNITS)	46	6.135	6.151	6.6	5.38	0.061	0.248	5.9	6.028	6.33	6.472
00400p	CONVERTED PH (STANDARD UNITS)	46	6.135	6.07	6.6	5.38	0.068	0.261	5.9	6.028	6.33	6.472
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	46	0.733	0.852	4.169	0.251	0.484	0.696	0.338	0.468	0.939	1.266
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	46	20.	20.348	24.	18.	2.543	1.595	18.	19.	22.	23.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	47	24.4	33.16	103.7	7.9	382.734	19.564	16.2	17.8	51.2	58.24
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	46	0.7	0.724	0.9	0.6	0.006	0.077	0.6	0.7	0.8	0.8
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	46	0.7	0.717	0.8	0.6	0.005	0.068	0.6	0.7	0.8	0.8
00930p	SODIUM, DISSOLVED (MG/L AS NA)	46	0.53	0.524	0.59	0.45	0.001	0.037	0.47	0.498	0.55	0.573
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	46	1.81	1.78	2.25	1.41	0.071	0.266	1.42	1.52	1.945	2.19
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	46	0.8	0.804	0.9	0.7	0.001	0.029	0.8	0.8	0.8	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	46	3.7	3.678	4.1	3.3	0.027	0.165	3.5	3.6	3.725	3.9
00955p	SILICA, DISSOLVED (MG/L AS SI02)	46	5.15	5.052	6.	3.9	0.441	0.664	4.1	4.375	5.625	5.73
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	37	0.007	0.006	0.02	0.	0.	0.005	0.	0.001	0.01	0.01
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	46	1.3	1.42	2.7	0.1	0.33	0.575	0.78	1.075	1.85	2.23
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	46	0.74	0.86	4.2	0.25	0.491	0.701	0.341	0.47	0.945	1.273

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	50	10.5	11.38	22.	1.5	26.71	5.168	4.55	8.5	16.	18.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	50	19.	19.26	23.	16.	2.237	1.496	18.	18.	20.	22.
00400p	PH (STANDARD UNITS)	50	6.16	6.155	6.69	5.48	0.033	0.182	5.932	6.078	6.225	6.395
00400p	CONVERTED PH (STANDARD UNITS)	50	6.16	6.113	6.69	5.48	0.035	0.187	5.932	6.078	6.225	6.395
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	50	0.692	0.771	3.311	0.204	0.19	0.436	0.403	0.596	0.837	1.17
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	50	18.	18.8	22.	16.	1.918	1.385	18.	18.	19.	21.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	50	20.3	24.22	57.8	7.5	138.871	11.784	12.8	15.3	30.3	44.4
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	50	0.7	0.668	1.1	0.6	0.008	0.089	0.6	0.6	0.7	0.79
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	50	0.6	0.654	1.	0.6	0.006	0.079	0.6	0.6	0.7	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	50	0.51	0.52	1.05	0.44	0.007	0.083	0.471	0.48	0.53	0.568
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	50	1.59	1.622	2.07	1.06	0.047	0.216	1.371	1.45	1.75	1.956
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	50	0.8	0.834	1.	0.8	0.004	0.059	0.8	0.8	0.9	0.9
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	50	3.6	3.638	4.	3.1	0.019	0.138	3.5	3.6	3.7	3.8
00955p	SILICA, DISSOLVED (MG/L AS SI02)	50	4.9	5.118	7.6	4.4	0.315	0.562	4.61	4.7	5.4	5.9
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	42	0.003	0.003	0.007	0.	0.	0.002	0.001	0.002	0.004	0.006
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	50	1.05	1.06	1.9	0.004	0.155	0.394	0.5	0.9	1.325	1.5
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	50	0.7	0.777	3.34	0.21	0.193	0.439	0.405	0.603	0.845	1.175

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	49	12.5	12.122	21.	2.5	29.245	5.408	5.	7.	17.	20.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	49	18.	19.102	25.	17.	3.927	1.982	17.	18.	20.	22.
00400p	PH (STANDARD UNITS)	49	6.06	6.056	6.49	5.56	0.049	0.222	5.72	5.92	6.21	6.34
00400p	CONVERTED PH (STANDARD UNITS)	49	6.06	5.999	6.49	5.56	0.053	0.229	5.72	5.92	6.21	6.34
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	49	0.871	1.003	2.754	0.324	0.32	0.565	0.457	0.617	1.202	1.905
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	49	18.	18.551	24.	16.	4.378	2.092	17.	17.	19.5	22.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	49	17.9	24.671	84.4	3.6	265.445	16.292	9.4	15.15	29.35	45.
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	49	0.6	0.663	0.9	0.6	0.008	0.088	0.6	0.6	0.7	0.8
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	49	0.6	0.647	0.9	0.6	0.006	0.079	0.6	0.6	0.7	0.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	49	0.5	0.513	0.64	0.45	0.002	0.047	0.46	0.485	0.54	0.58
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	49	1.57	1.657	2.27	1.32	0.063	0.251	1.39	1.475	1.845	2.05
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	49	0.8	0.802	0.9	0.7	0.001	0.032	0.8	0.8	0.8	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	49	3.6	3.631	4.	3.4	0.022	0.147	3.5	3.5	3.75	3.8
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	49	4.8	4.924	6.1	4.	0.356	0.596	4.2	4.4	5.3	5.9
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	34	0.001	0.003	0.03	0.	0.	0.006	0.	0.001	0.003	0.009
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	49	1.2	1.104	1.9	0.	0.253	0.503	0.4	0.8	1.5	1.7
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	49	0.88	1.011	2.78	0.33	0.325	0.57	0.46	0.625	1.21	1.92

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

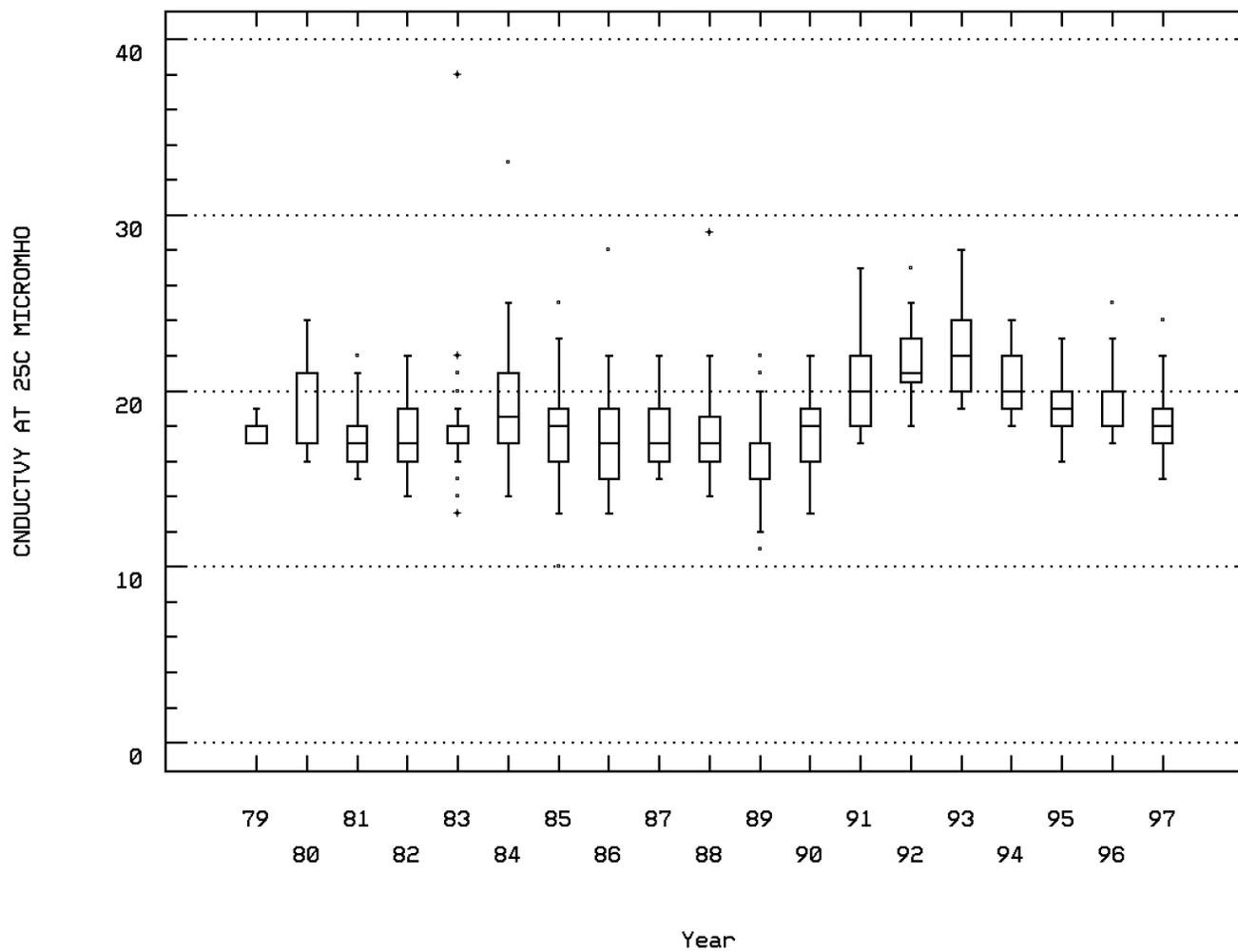
Annual Analysis for 1997 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	42	12.75	12.155	20.	3.	25.384	5.038	5.	8.	17.	18.7
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	30	18.	18.4	24.	15.	3.628	1.905	17.	17.	19.	21.9
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	30	6.105	6.071	6.48	5.23	0.06	0.246	5.864	6.035	6.19	6.346
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	30	6.105	5.974	6.48	5.23	0.07	0.265	5.864	6.035	6.19	6.346
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	30	0.785	1.061	5.888	0.331	1.205	1.098	0.451	0.646	0.923	1.368
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	30	18.	17.967	24.	14.	3.137	1.771	17.	17.	18.25	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	42	23.75	28.438	57.9	7.1	208.082	14.425	13.88	16.075	40.75	51.55
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	30	0.6	0.65	0.9	0.6	0.007	0.082	0.6	0.6	0.7	0.8
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	30	0.6	0.64	0.9	0.6	0.006	0.077	0.6	0.6	0.7	0.79
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	30	0.49	0.501	0.58	0.46	0.001	0.03	0.47	0.48	0.523	0.55
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	30	1.495	1.594	2.22	1.32	0.065	0.254	1.36	1.408	1.718	2.06
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	30	0.7	0.747	0.8	0.7	0.003	0.051	0.7	0.7	0.8	0.8
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	30	3.7	3.683	4.	3.6	0.007	0.083	3.6	3.6	3.7	3.79
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	30	4.5	4.46	5.7	3.3	0.354	0.595	3.6	4.1	4.725	5.19
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	18	0.01	0.016	0.09	0.	0.	0.02	0.002	0.003	0.02	0.027
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	30	1.	1.033	2.3	0.3	0.121	0.348	0.61	0.9	1.2	1.39
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	30	0.79	1.07	5.94	0.33	1.225	1.107	0.454	0.65	0.93	1.378

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0185 Parameter Code: 00095

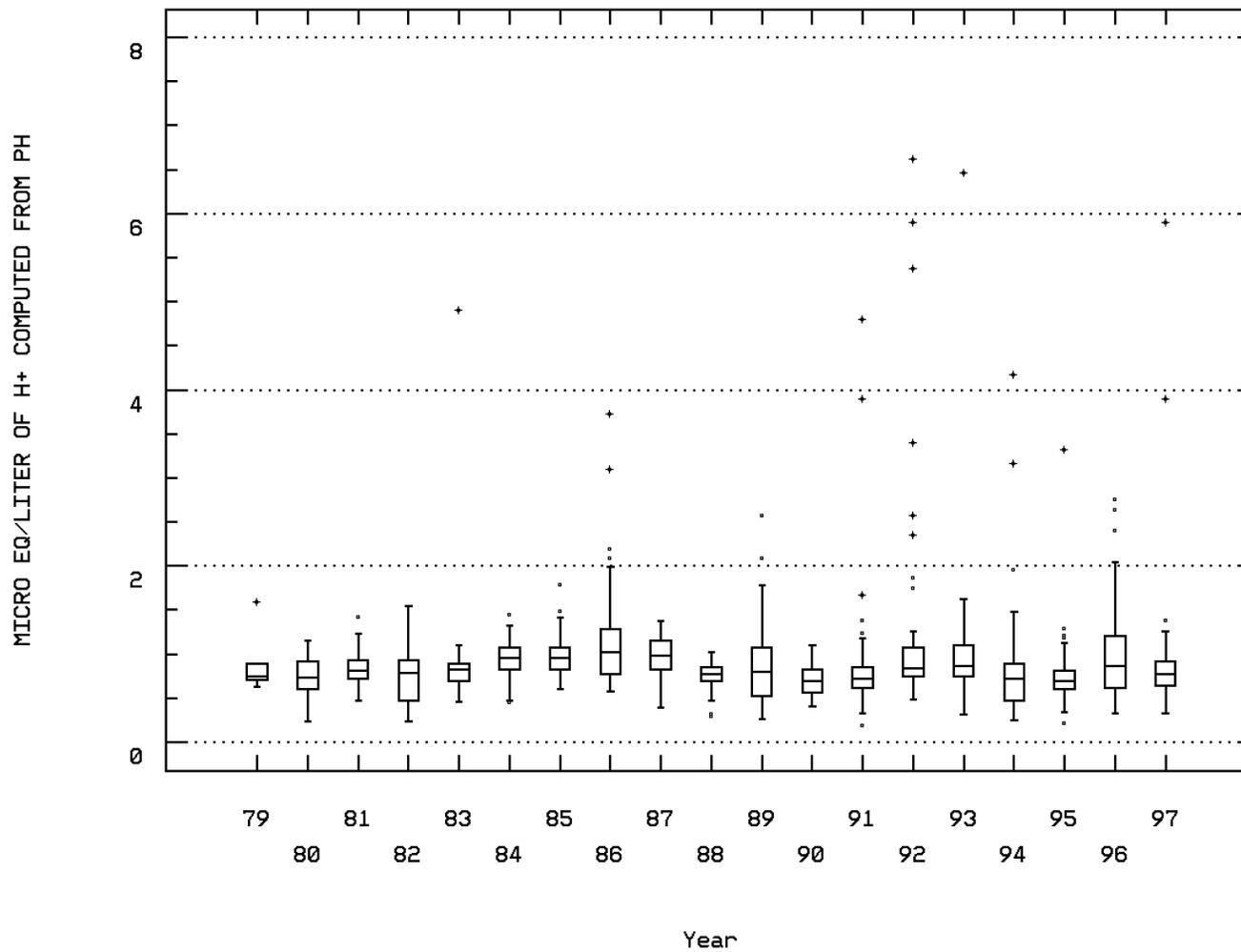
SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00400

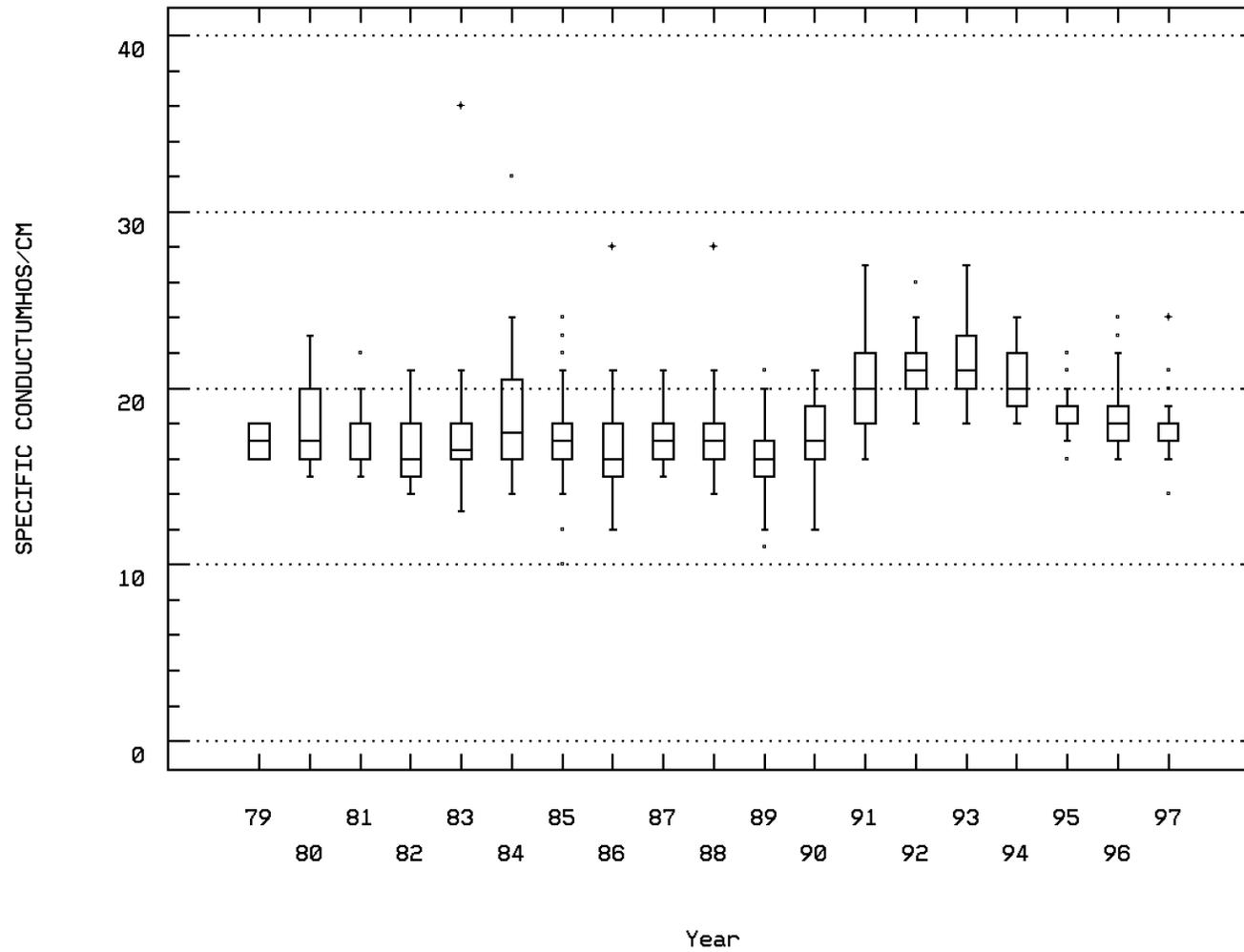
MICRO EQ/LITER OF H+ COMPUTED FROM PH



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00402

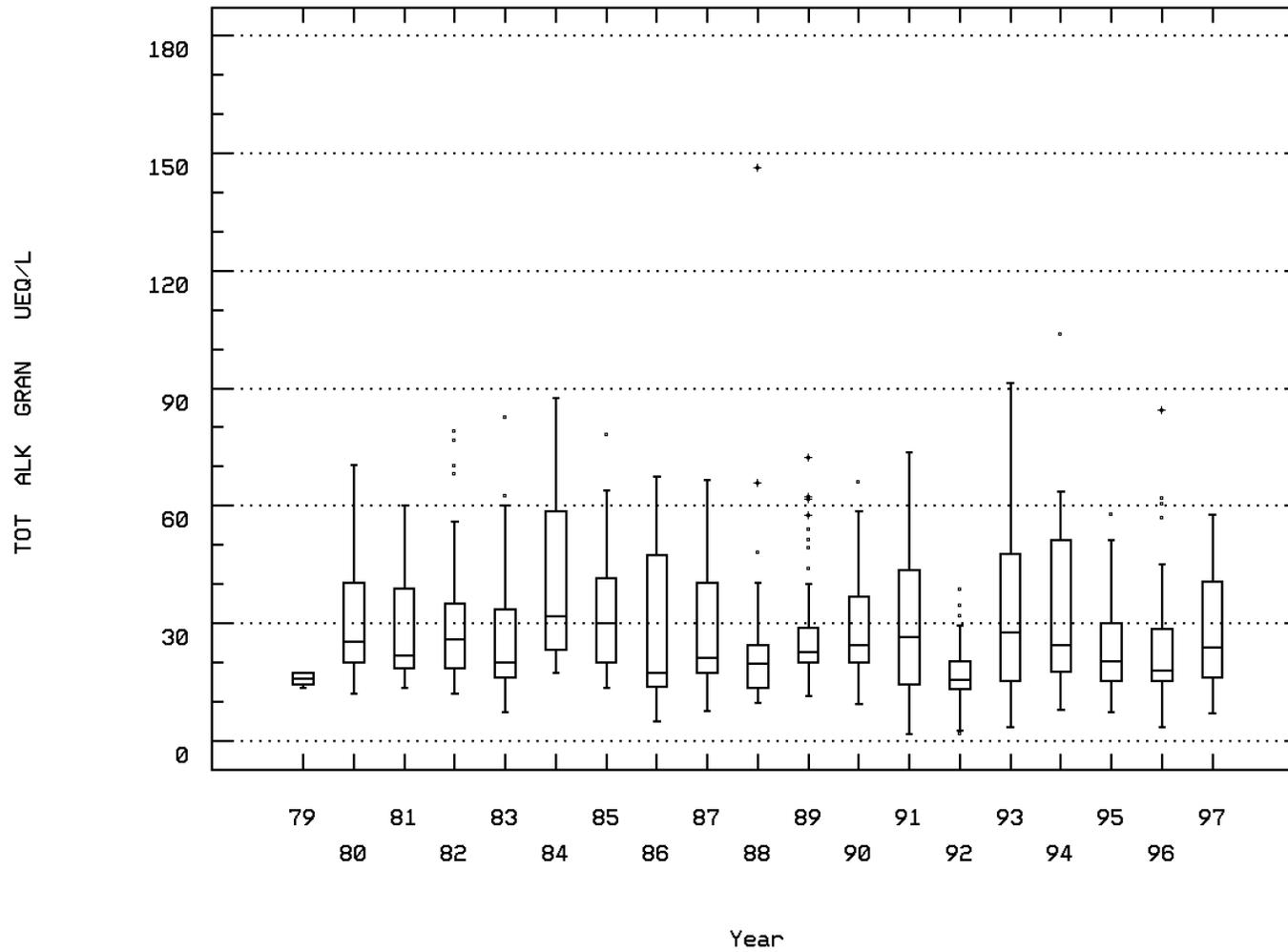
SPECIFIC CONDUCTANCE, NON-TEMPERATURE CO



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00409

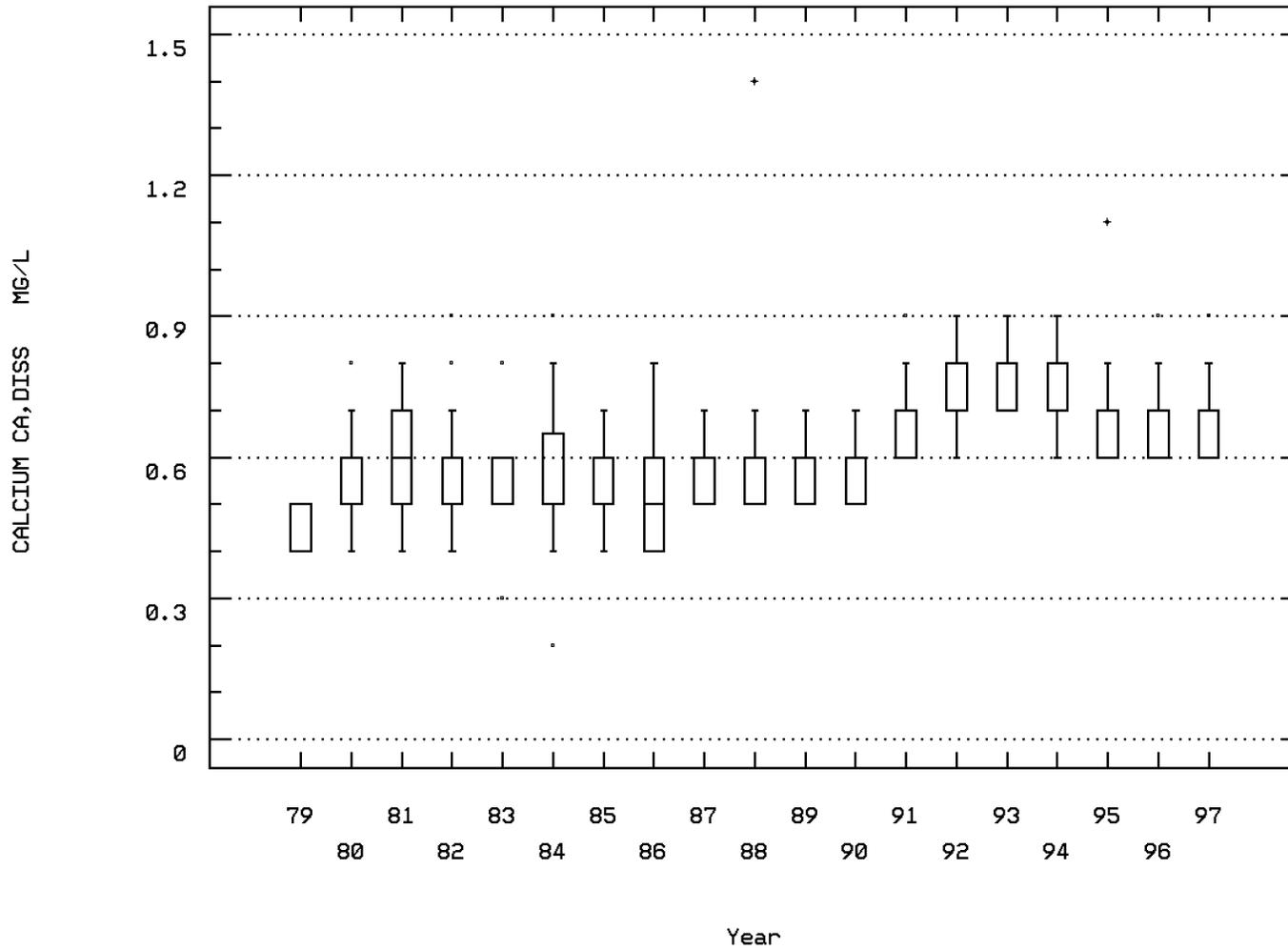
ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSI



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00915

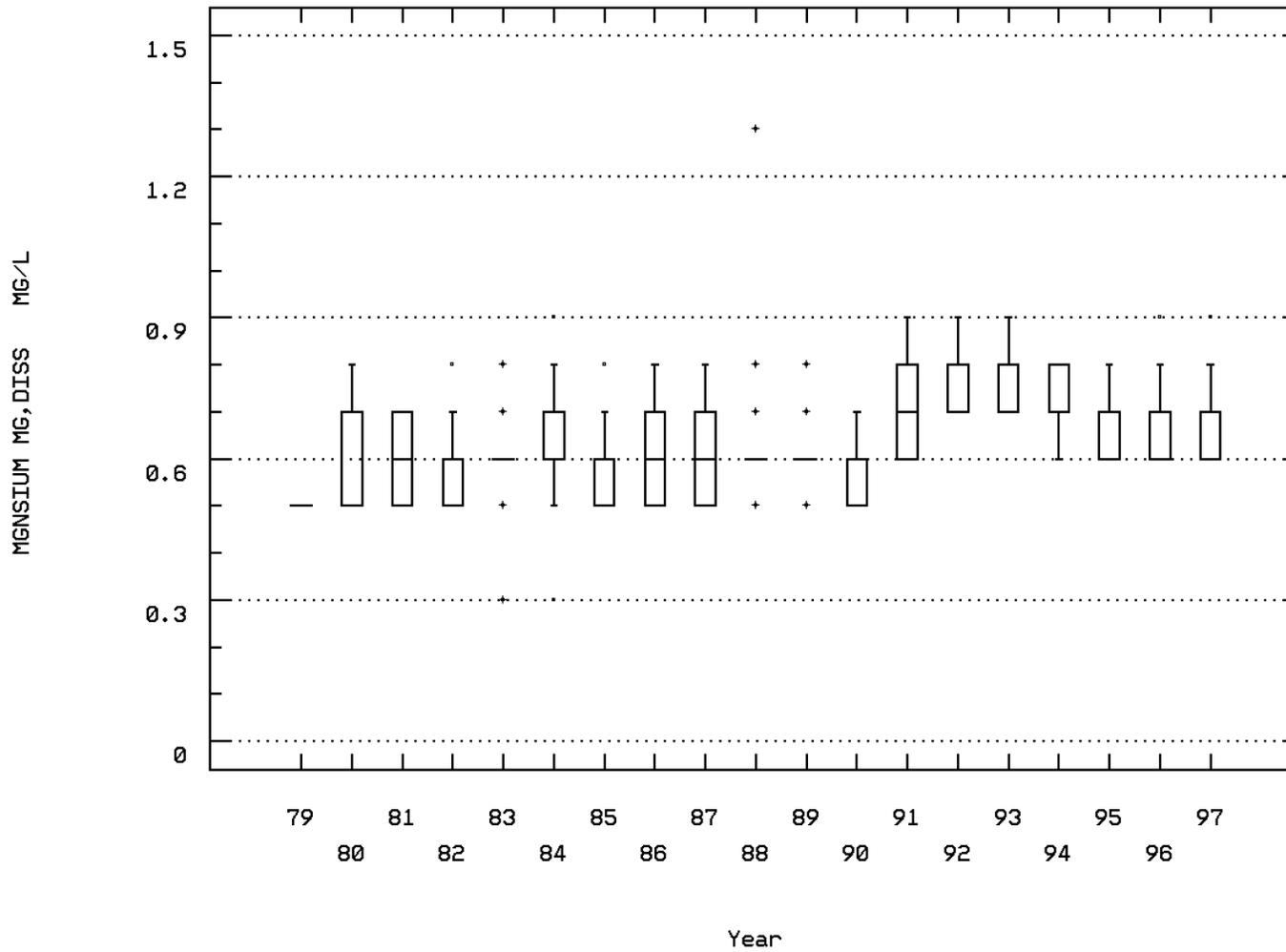
CALCIUM, DISSOLVED (MG/L AS CA)



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00925

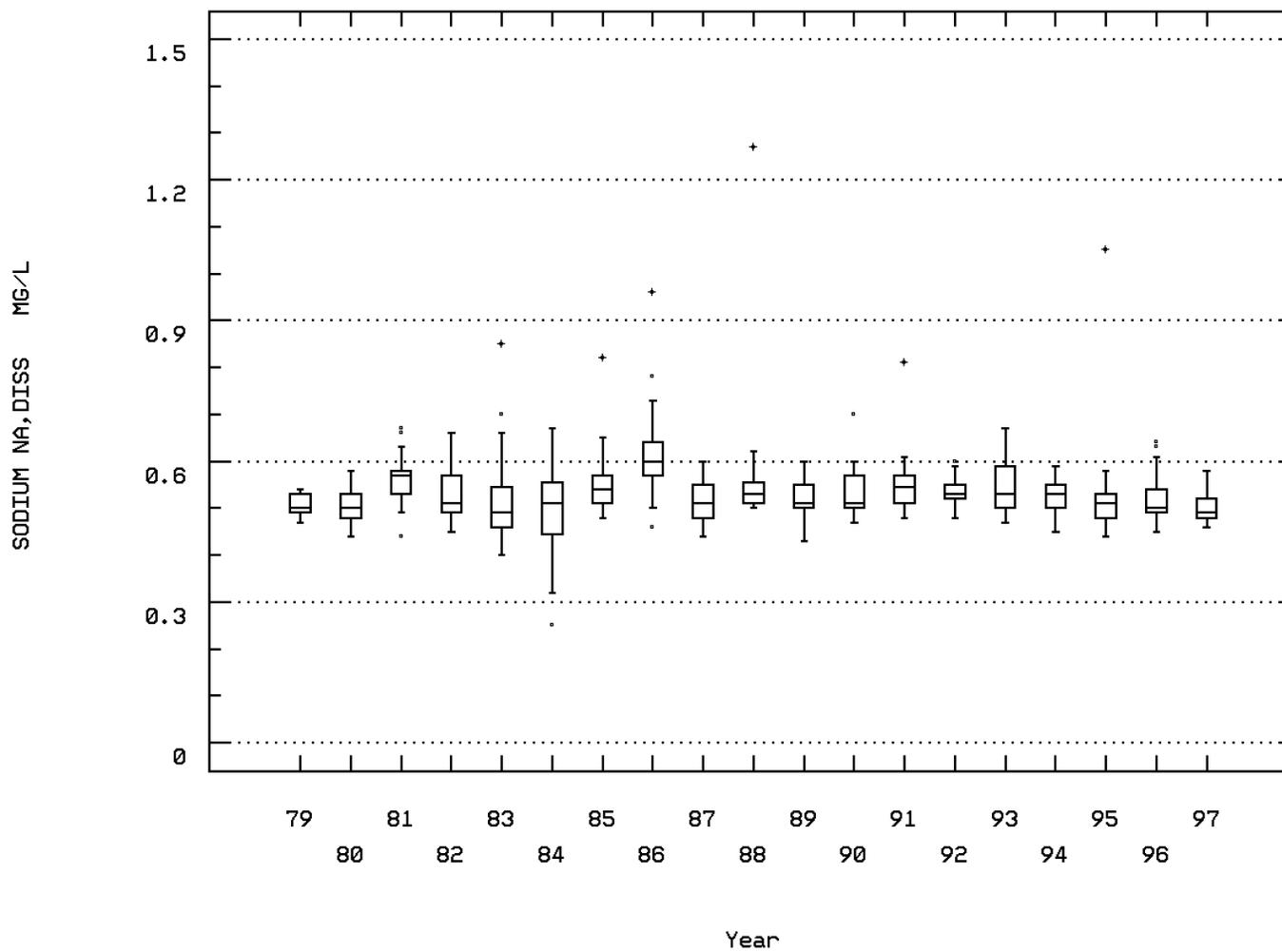
MAGNESIUM, DISSOLVED (MG/L AS MG)



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00930

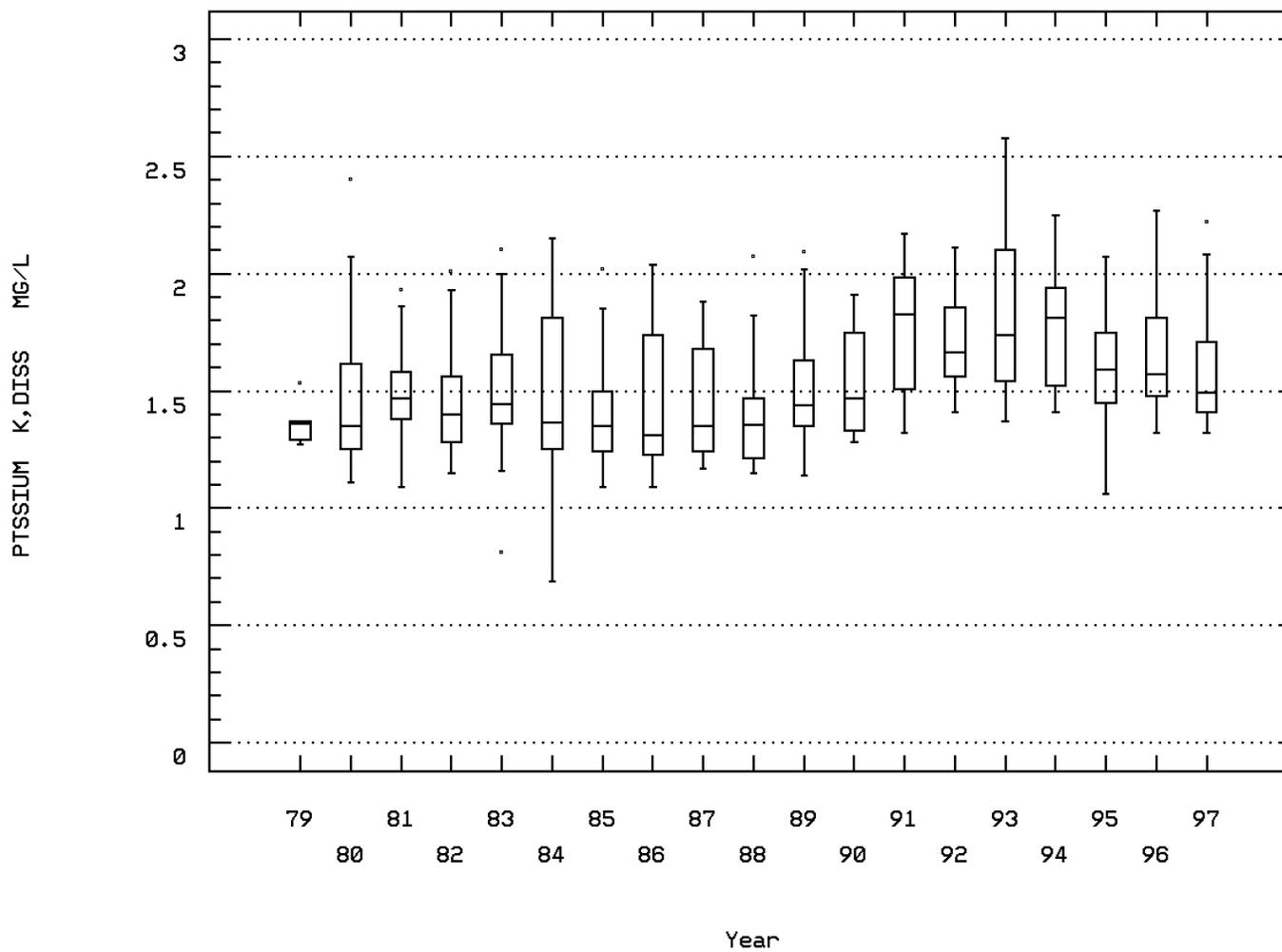
SODIUM, DISSOLVED (MG/L AS NA)



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00935

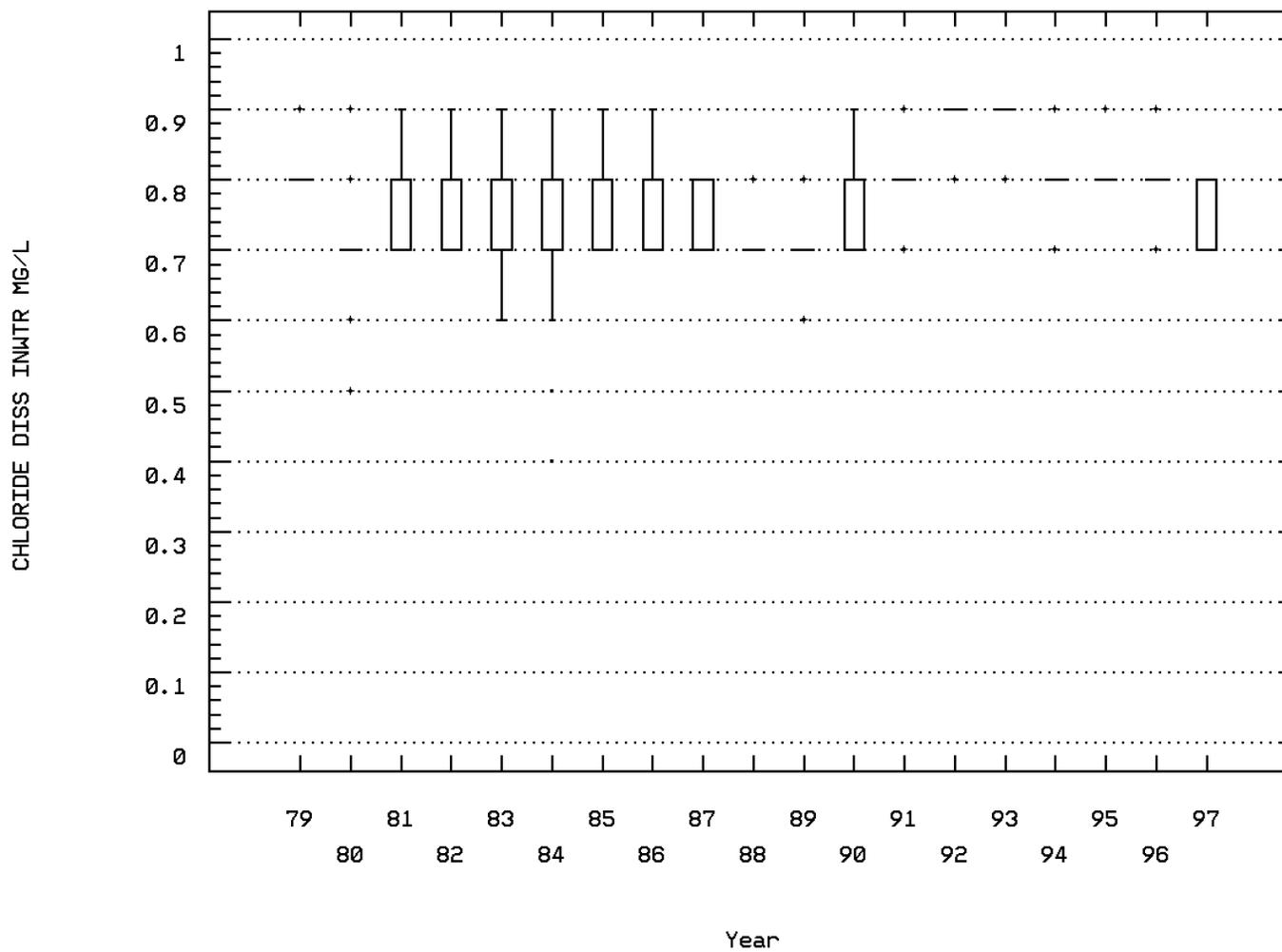
POTASSIUM, DISSOLVED (MG/L AS K)



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00941

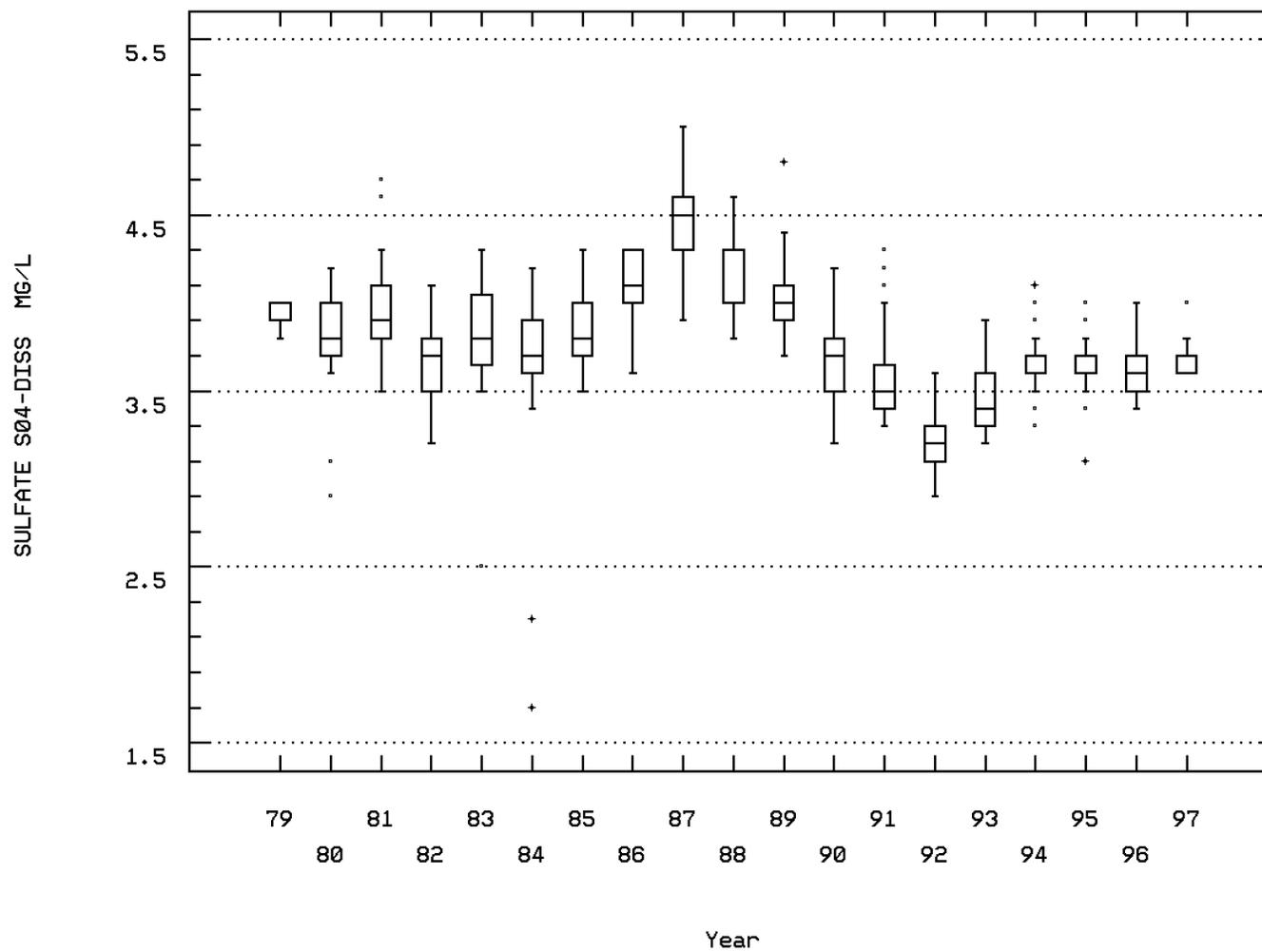
CHLORIDE, DISSOLVED IN WATER



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00946

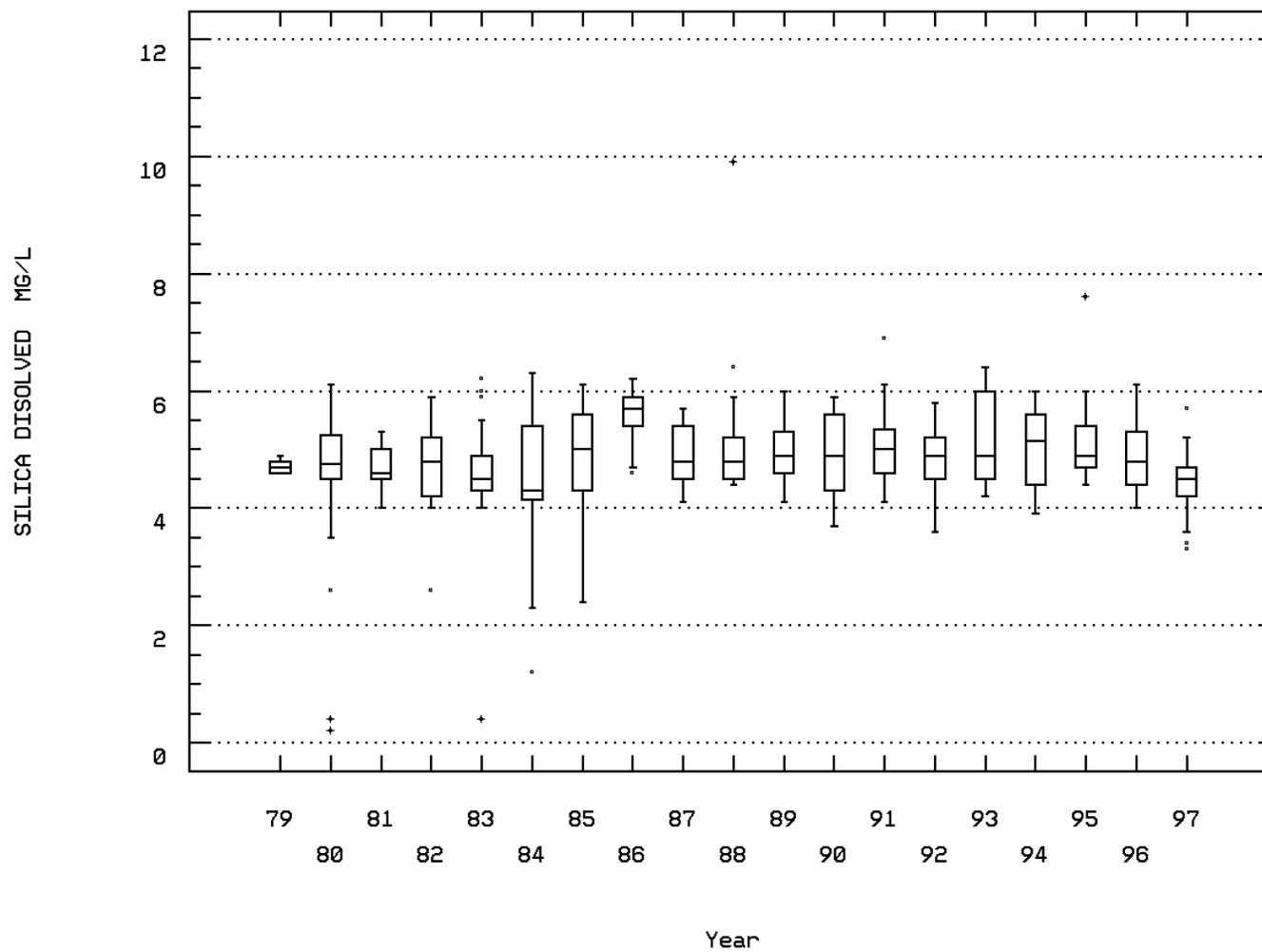
SULFATE, DISSOLVED (MG/L AS S04)



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 00955

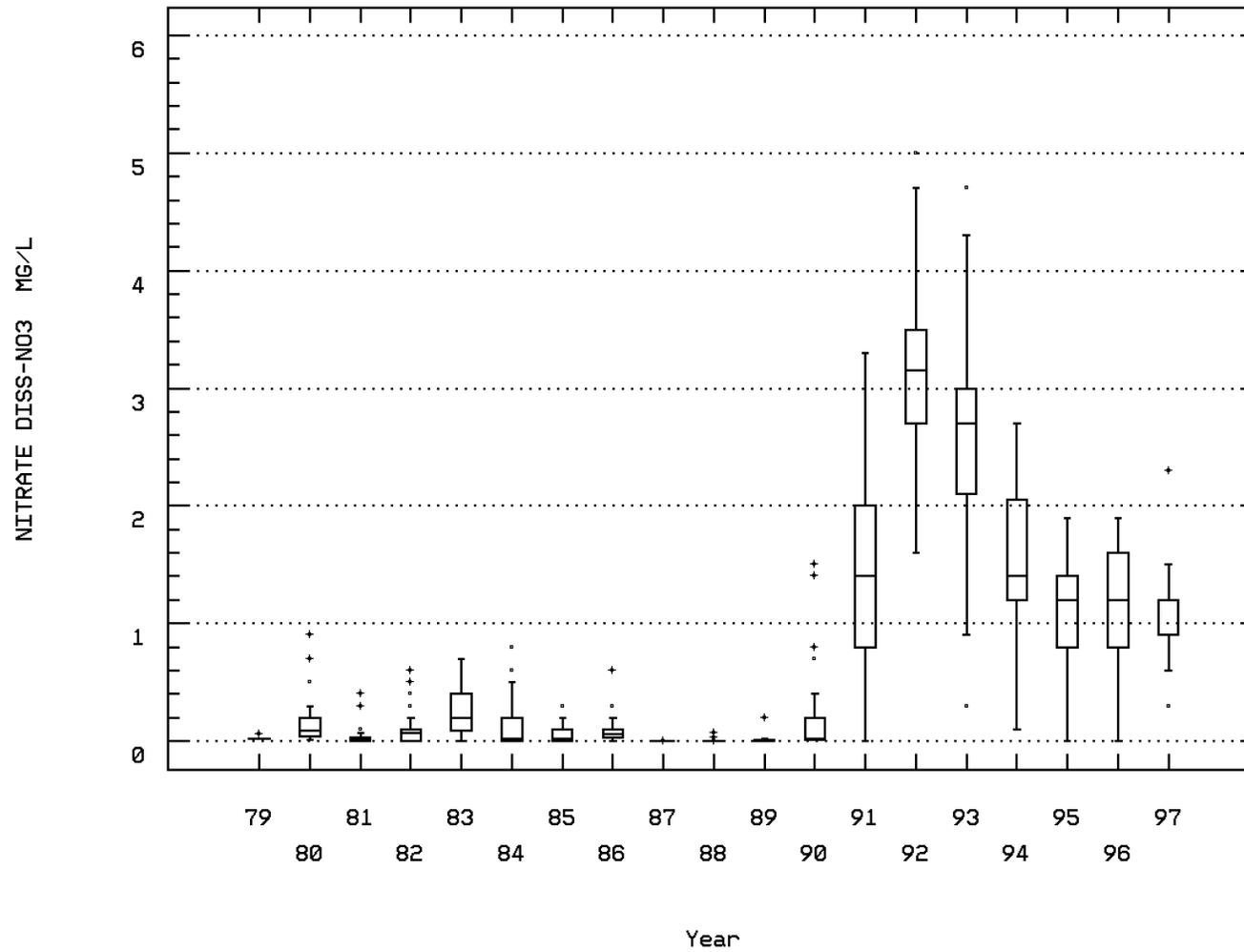
SILICA, DISSOLVED (MG/L AS SI02)



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 71851

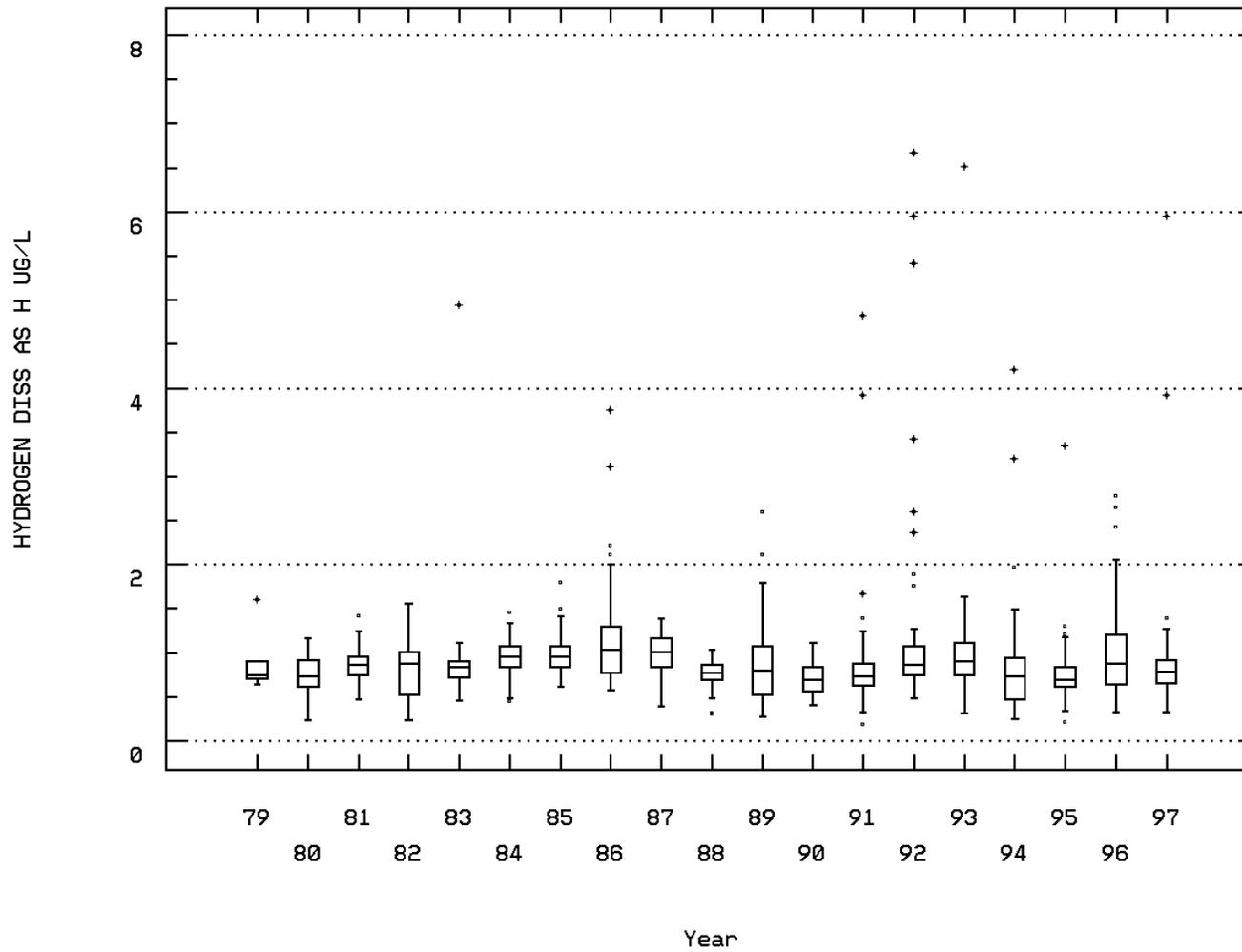
NITRATE NITROGEN, DISSOLVED (MG/L AS NO



WHITEOAK RUN

Station: SHEN0185 Parameter Code: 82042

HYDROGEN, DISSOLVED IN WATER (UG/L AS H



WHITEOAK RUN

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	190	18.	17.519	23.	10.	5.594	2.365	14.5	16.	19.	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	182	21.	21.088	38.	16.	7.318	2.705	18.	19.	23.	24.
00400	PH (STANDARD UNITS)	11/02/79-07/29/97	183	6.22	6.196	6.74	5.31	0.056	0.237	5.908	6.05	6.35	6.49
00400	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	183	6.22	6.121	6.74	5.31	0.062	0.248	5.908	6.05	6.35	6.49
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	183	0.603	0.756	4.898	0.182	0.343	0.586	0.324	0.447	0.891	1.236
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	182	21.	20.473	36.	15.	6.892	2.625	17.3	19.	22.	23.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	194	17.5	18.758	76.5	1.9	78.852	8.88	11.2	14.4	21.	25.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	183	0.7	0.71	1.4	0.5	0.014	0.12	0.6	0.6	0.8	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	183	0.7	0.723	1.3	0.5	0.013	0.113	0.6	0.6	0.8	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	183	0.57	0.57	1.27	0.47	0.006	0.075	0.51	0.54	0.59	0.616
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	183	1.89	1.884	2.4	1.41	0.043	0.206	1.61	1.75	2.03	2.166
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	183	0.8	0.795	1.	0.7	0.007	0.081	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	183	3.6	3.631	4.5	2.9	0.078	0.28	3.34	3.5	3.8	4.
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	183	5.6	5.628	9.9	4.7	0.225	0.474	5.1	5.3	5.9	6.
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	160	0.002	0.006	0.09	0.	0.	0.011	0.	0.	0.006	0.02
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	183	0.8	1.024	5.	0.	1.259	1.122	0.002	0.04	1.7	2.82
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	183	0.61	0.763	4.94	0.18	0.349	0.591	0.33	0.45	0.9	1.246

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	330	6.7	6.913	18.5	1.	9.055	3.009	3.	4.5	9.	11.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	346	18.	18.159	28.	10.	6.58	2.565	16.	16.	20.	21.
00400	PH (STANDARD UNITS)	11/02/79-07/29/97	347	6.06	6.04	6.53	5.18	0.03	0.172	5.89	5.98	6.13	6.18
00400	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	347	6.06	5.993	6.53	5.18	0.032	0.178	5.89	5.98	6.13	6.18
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	347	0.871	1.017	6.607	0.295	0.531	0.729	0.661	0.741	1.047	1.288
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	346	17.	17.624	28.	10.	6.508	2.551	15.	16.	19.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	350	23.	28.199	146.1	1.9	261.126	16.159	13.7	17.5	35.025	51.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	347	0.6	0.589	1.	0.2	0.015	0.122	0.5	0.5	0.7	0.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	347	0.6	0.623	1.	0.3	0.011	0.105	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	347	0.51	0.516	0.7	0.25	0.003	0.05	0.47	0.49	0.54	0.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	347	1.39	1.428	2.58	0.69	0.049	0.222	1.2	1.28	1.53	1.712
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	347	0.8	0.788	1.	0.4	0.008	0.092	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	347	3.8	3.836	5.	1.7	0.132	0.364	3.4	3.6	4.1	4.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	346	4.6	4.633	6.4	0.2	0.564	0.751	4.1	4.3	5.	5.5
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	235	0.001	0.008	0.3	0.	0.001	0.025	0.	0.	0.009	0.02
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	347	0.1	0.699	4.7	0.	1.031	1.016	0.	0.01	1.1	2.52
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	347	0.88	1.026	6.66	0.3	0.54	0.735	0.67	0.75	1.06	1.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	247	12.	12.217	19.	3.	9.794	3.13	8.	10.	14.	17.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	258	18.	18.089	33.	11.	5.451	2.335	16.	17.	19.	21.
00400	PH (STANDARD UNITS)	11/02/79-07/29/97	260	6.08	6.079	6.69	5.27	0.022	0.15	5.93	6.	6.17	6.23
00400	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	260	6.08	6.048	6.69	5.27	0.023	0.153	5.93	6.	6.17	6.23
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	260	0.832	0.894	5.37	0.204	0.202	0.449	0.589	0.676	1.	1.175
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	258	17.	17.601	32.	11.	5.12	2.263	15.	16.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	261	33.7	36.492	91.2	3.7	353.073	18.79	15.36	20.15	50.4	61.52
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	260	0.6	0.58	1.1	0.4	0.012	0.11	0.5	0.5	0.7	0.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	260	0.6	0.602	1.	0.5	0.009	0.092	0.5	0.5	0.7	0.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0185

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	260	0.52	0.523	1.05	0.4	0.004	0.064	0.47	0.49	0.55	0.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	260	1.505	1.531	2.14	1.06	0.039	0.198	1.28	1.39	1.67	1.8
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	260	0.7	0.759	1.	0.6	0.006	0.075	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	260	3.7	3.741	5.	3.1	0.116	0.341	3.3	3.5	3.9	4.19
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	260	4.7	4.751	7.6	3.3	0.308	0.555	4.1	4.4	5.	5.4
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	195	0.001	0.005	0.06	0.	0.	0.008	0.	0.	0.006	0.01
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	260	0.09	0.667	4.7	0.	0.984	0.992	0.	0.	1.075	2.3
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	260	0.84	0.902	5.41	0.21	0.205	0.452	0.59	0.68	1.01	1.18

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0186

NPS Station ID: SHEN0186
 Location: Whiteoak Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.250253/ -78.749171

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_PARK_WOR1
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0186

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/16/97-09/16/97	1	15.2	15.2	15.2	15.2	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/16/97-09/16/97	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	09/16/97-09/16/97	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	09/16/97-09/16/97	1	5.54	5.54	5.54	5.54	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/16/97-09/16/97	1	5.54	5.54	5.54	5.54	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/16/97-09/16/97	1	2.884	2.884	2.884	2.884	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/16/97-09/16/97	1	13.	13.	13.	13.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0186

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00										
	Other-Lo Lim.	6.5	1	1	1.00	1	1	1.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0187

NPS Station ID: SHEN0187
 Location: WHITEOAK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.250253/ -78.749199

Depth of Water: 0
 Elevation: 1500
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_WR01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WR01 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.10 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0187

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/94-11/02/94	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/94-11/02/94	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.16	6.16	6.16	6.16	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/02/94-11/02/94	1	6.16	6.16	6.16	6.16	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/94-11/02/94	1	0.692	0.692	0.692	0.692	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/94-11/02/94	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/94-11/02/94	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/94-11/02/94	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/94-11/02/94	1	0.52	0.52	0.52	0.52	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/94-11/02/94	1	1.88	1.88	1.88	1.88	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/94-11/02/94	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/94-11/02/94	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/94-11/02/94	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/94-11/02/94	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/94-11/02/94	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0187

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0188

NPS Station ID: SHEN0188
 Location: WHITE OAK RUN NEAR GROTTOS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.250281/ -78.749171

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628060
 Within Park Boundary: Yes

Date Created: 05/29/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0188

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/92-06/22/92	1	14.9	14.9	14.9	14.9	0.	0.	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/22/92-06/22/92	1	19.5	19.5	19.5	19.5	0.	0.	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	06/22/92-06/22/92	1	726.	726.	726.	726.	0.	0.	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/22/92-06/22/92	1	85.	85.	85.	85.	0.	0.	**	**	**
00065	STAGE, STREAM (FEET)	06/22/92-06/22/92	1	1.24	1.24	1.24	1.24	0.	0.	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/22/92-06/22/92	1	22.	22.	22.	22.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/22/92-06/22/92	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	06/22/92-06/22/92	1	5.88	5.88	5.88	5.88	0.	0.	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/22/92-06/22/92	1	5.88	5.88	5.88	5.88	0.	0.	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/92-06/22/92	1	1.318	1.318	1.318	1.318	0.	0.	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/22/92-06/22/92	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/22/92-06/22/92	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/92-06/22/92	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	06/22/92-06/22/92	1	0.	0.	0.	0.	0.	0.	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/22/92-06/22/92	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/22/92-06/22/92	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/22/92-06/22/92	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**
00631	NITRITE PLUS NITRATE, DISS. I DET. (MG/L AS N)	06/22/92-06/22/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/22/92-06/22/92	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/22/92-06/22/92	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/22/92-06/22/92	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	06/22/92-06/22/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	06/22/92-06/22/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	06/22/92-06/22/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/22/92-06/22/92	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	06/22/92-06/22/92	1	1.	1.	1.	1.	0.	0.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/22/92-06/22/92	1	3.	3.	3.	3.	0.	0.	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	06/22/92-06/22/92	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/22/92-06/22/92	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**
01046	IRON, DISSOLVED (UG/L AS Fe)	06/22/92-06/22/92	1	4.	4.	4.	4.	0.	0.	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS Mn)	06/22/92-06/22/92	1	1.	1.	1.	1.	0.	0.	**	**	**
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	06/22/92-06/22/92	1	1100.	1100.	1100.	1100.	0.	0.	**	**	**
31673	LOG FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	06/22/92-06/22/92	1	3.041	3.041	3.041	3.041	0.	0.	**	**	**
31673	GM FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	GEOMETRIC MEAN =			1100.							
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	06/22/92-06/22/92	1	18.	18.	18.	18.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0188

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300	OXYGEN, DISSOLVED	4.	1	0	0.00						1	0	0.00				
00400	PH	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00						1	1	1.00				
00403	PH, LAB	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00						1	0	0.00				
00613	NITRITE NITROGEN, DISSOLVED AS N	1.	1	0	0.00						1	0	0.00				
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	10.	1	0	0.00						1	0	0.00				
00940	CHLORIDE, TOTAL IN WATER	860.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00945	SULFATE, TOTAL (AS SO4)	250.	1	0	0.00						1	0	0.00				
00950	FLUORIDE, DISSOLVED AS F	4.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0189

NPS Station ID: SHEN0189
 Location: MADISON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.251253/ -78.746255

Depth of Water: 0
 Elevation: 1460

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_MAD2
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MAD2 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MADISON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.15 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	499	11.	11.386	22.5	0.5	30.573	5.529	4.	6.5	16.5	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	584	24.	24.336	39.	6.	18.035	4.247	19.	22.	27.	30.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	585	6.6	6.579	7.02	5.43	0.042	0.205	6.3	6.47	6.72	6.82
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	585	6.6	6.522	7.02	5.43	0.045	0.213	6.3	6.47	6.72	6.82
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	585	0.251	0.301	3.715	0.095	0.047	0.218	0.151	0.191	0.339	0.501
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/31/81-07/29/97	584	23.	23.642	38.	5.	17.05	4.129	18.	21.	26.75	29.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	586	93.65	100.989	214.	-4.7	1762.523	41.982	57.84	71.2	131.1	158.22
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/29/97	7	0.8	1.086	1.8	0.6	0.228	0.478	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	585	1.1	1.152	1.9	0.6	0.052	0.228	0.9	1.	1.3	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	585	1.	1.061	1.7	0.6	0.041	0.202	0.8	0.9	1.2	1.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	585	1.04	1.058	1.54	0.4	0.028	0.168	0.86	0.94	1.185	1.29
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	585	1.11	1.143	2.24	0.7	0.059	0.243	0.86	0.94	1.32	1.48
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	585	1.	1.013	2.	0.5	0.05	0.223	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	585	3.4	3.446	6.9	2.6	0.247	0.497	2.9	3.1	3.7	4.
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	585	7.4	7.7	10.5	0.6	1.431	1.196	6.4	6.8	8.75	9.4
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	04/30/96-07/29/97	6	6.056	6.377	9.176	3.872	5.568	2.36	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/31/81-07/05/86	133##	0.	0.	0.002	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	585	0.02	0.218	4.9	0.	0.173	0.416	0.	0.	0.3	0.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	585	0.25	0.304	3.74	0.1	0.048	0.219	0.15	0.19	0.34	0.51

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0189

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH		585	0	0.00	163	0	0.00	244	0	0.00	178	0	0.00			
	Fresh Chronic	9.	585														
	Other-Lo Lim.	6.5	585	181	0.31	163	83	0.51	244	72	0.30	178	26	0.15			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS		586	580	0.99	164	163	0.99	244	244	1.00	178	173	0.97			
00941	CHLORIDE, DISSOLVED IN WATER		860.	585	0	0.00	163	0	0.00	244	0	0.00	178	0	0.00		
	Fresh Acute	860.	585														
	Drinking Water	250.	585	0	0.00	163	0	0.00	244	0	0.00	178	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)		250.	585	0	0.00	163	0	0.00	244	0	0.00	178	0	0.00		
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)		44.	585	0	0.00	163	0	0.00	244	0	0.00	178	0	0.00		
	Drinking Water	44.	585														

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1981 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	25	24.	24.28	31.	18.	10.127	3.182	20.6	22.	26.	30.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	25	6.52	6.558	6.89	6.33	0.028	0.168	6.386	6.405	6.715	6.816
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	25	6.52	6.529	6.89	6.33	0.029	0.171	6.386	6.405	6.715	6.816
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	25	0.302	0.296	0.468	0.129	0.011	0.103	0.154	0.193	0.394	0.411
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	25	23.	23.4	30.	18.	9.417	3.069	20.	21.	25.	29.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	25	82.	90.224	181.5	53.	1173.376	34.255	58.6	63.75	105.9	144.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	25	1.2	1.204	1.7	0.9	0.04	0.199	0.9	1.	1.35	1.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	25	1.1	1.064	1.5	0.8	0.032	0.18	0.8	0.9	1.2	1.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	25	1.15	1.154	1.36	0.94	0.016	0.125	0.968	1.055	1.285	1.34
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	25	1.14	1.152	1.76	0.74	0.062	0.249	0.844	0.965	1.285	1.538
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	25	0.9	0.924	2.	0.5	0.065	0.255	0.72	0.8	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	25	3.8	3.8	4.4	3.3	0.106	0.325	3.36	3.5	4.1	4.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	25	8.	8.272	10.4	6.9	0.852	0.923	7.2	7.35	9.05	9.38
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/31/81-07/05/86	25 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	25	0.02	0.042	0.4	0.	0.007	0.087	0.	0.	0.025	0.14
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	25	0.3	0.297	0.47	0.13	0.011	0.103	0.158	0.195	0.395	0.414

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	27	22.	21.815	27.	17.	11.849	3.442	17.8	18.	25.	27.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	27	6.86	6.787	7.02	6.55	0.027	0.165	6.568	6.63	6.94	6.972
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	27	6.86	6.757	7.02	6.55	0.028	0.167	6.568	6.63	6.94	6.972
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	27	0.138	0.175	0.282	0.095	0.004	0.066	0.107	0.115	0.234	0.27
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	27	22.	21.222	27.	17.	11.026	3.32	17.	18.	24.	26.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	27	94.	96.315	180.	47.5	1185.33	34.429	52.5	60.	123.	137.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	27	1.	1.	1.3	0.7	0.03	0.173	0.8	0.9	1.2	1.22
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	27	0.9	0.915	1.1	0.7	0.017	0.129	0.78	0.8	1.	1.1
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	27	1.01	1.017	1.31	0.81	0.015	0.123	0.846	0.93	1.13	1.158
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	27	1.04	1.028	1.29	0.77	0.027	0.166	0.78	0.87	1.17	1.25
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	27	0.9	0.896	1.	0.8	0.003	0.059	0.8	0.9	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	27	3.5	3.489	4.	3.	0.061	0.247	3.2	3.2	3.7	3.82
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	27	7.7	7.678	9.4	6.	1.373	1.172	6.1	6.4	8.8	9.3
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/31/81-07/05/86	27	0.	0.	0.002	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	27 ##	0.	0.028	0.1	0.	0.001	0.038	0.	0.	0.07	0.092
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	27	0.14	0.178	0.28	0.1	0.004	0.067	0.11	0.12	0.24	0.272

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	11	7.	7.409	13.	1.	9.441	3.073	1.8	6.	9.5	12.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	14	21.5	23.357	32.	19.	16.709	4.088	19.5	20.75	25.25	31.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	14	6.55	6.556	6.71	6.16	0.018	0.135	6.31	6.523	6.653	6.69
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	14	6.55	6.533	6.71	6.16	0.019	0.138	6.31	6.522	6.653	6.69
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	14	0.282	0.293	0.692	0.195	0.015	0.123	0.204	0.223	0.3	0.519
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	14	20.5	22.429	31.	19.	16.11	4.014	19.	19.75	24.25	30.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	14	60.	62.036	85.	50.	79.749	8.93	51.25	56.875	65.	80.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	14	0.9	0.929	1.4	0.7	0.031	0.177	0.75	0.8	1.	1.25
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	14	0.8	0.857	1.3	0.7	0.024	0.155	0.7	0.775	0.9	1.15
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	14	0.92	0.921	1.3	0.52	0.044	0.209	0.575	0.768	1.108	1.22
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	14	0.97	1.077	1.86	0.81	0.089	0.298	0.83	0.88	1.148	1.685

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	14	0.95	1.014	2.	0.8	0.084	0.291	0.85	0.9	1.	1.5
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	14	3.45	3.493	4.3	3.	0.182	0.427	3.	3.1	3.925	4.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/31/81-07/29/97	14	6.7	6.657	8.6	4.3	0.936	0.968	5.15	6.2	7.225	8.1
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/31/81-07/05/86	14 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	14 ##	0.005	0.075	0.6	0.	0.029	0.171	0.	0.	0.053	0.45
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	14	0.28	0.296	0.7	0.2	0.015	0.124	0.21	0.228	0.305	0.525

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	33	11.	11.379	20.	2.	33.672	5.803	3.7	7.	17.75	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	33	21.	22.424	31.	17.	22.689	4.763	17.	18.	27.	29.6
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	33	6.57	6.548	6.71	6.27	0.012	0.109	6.378	6.46	6.645	6.66
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	33	6.57	6.534	6.71	6.27	0.012	0.11	6.378	6.46	6.645	6.66
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	33	0.269	0.293	0.537	0.195	0.006	0.08	0.219	0.226	0.347	0.419
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/31/81-07/29/97	33	21.	21.697	30.	16.	20.905	4.572	16.	18.	26.	28.6
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	33	108.5	119.333	214.	65.	2054.854	45.33	69.8	77.	153.75	191.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	33	0.9	0.867	1.	0.6	0.01	0.102	0.74	0.8	0.95	1.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	33	0.9	0.836	1.	0.6	0.012	0.108	0.7	0.9	0.96	0.96
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	33	0.86	0.877	1.11	0.65	0.011	0.103	0.762	0.82	0.905	1.05
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	33	0.95	0.966	1.34	0.71	0.027	0.166	0.76	0.835	1.06	1.25
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	33	0.9	0.864	1.	0.7	0.004	0.06	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	33	3.4	3.739	5.5	2.9	0.759	0.871	3.	3.15	4.4	5.26
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/31/81-07/29/97	33	6.7	6.382	7.6	0.6	1.757	1.325	5.94	6.35	6.95	7.2
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/31/81-07/05/86	33 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	33 ##	0.	0.009	0.2	0.	0.001	0.035	0.	0.	0.	0.022
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	33	0.27	0.295	0.54	0.2	0.006	0.08	0.22	0.23	0.35	0.422

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	12	12.75	10.75	16.	3.	21.75	4.664	3.3	6.25	14.75	15.85
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	12	23.5	22.917	31.	15.	24.447	4.944	15.9	18.25	26.5	30.7
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	12	6.48	6.488	6.81	6.24	0.022	0.149	6.264	6.425	6.52	6.774
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	12	6.48	6.466	6.81	6.24	0.023	0.151	6.264	6.425	6.52	6.774
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	12	0.331	0.342	0.575	0.155	0.012	0.11	0.17	0.302	0.376	0.546
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/31/81-07/29/97	12	23.	22.167	30.	15.	23.424	4.84	15.6	17.25	25.5	29.7
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	12	84.	86.875	115.	66.	225.097	15.003	67.8	75.125	99.5	111.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	12	0.95	1.142	1.6	0.8	0.101	0.318	0.83	0.9	1.525	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	12	0.9	1.092	1.6	0.8	0.101	0.318	0.8	0.825	1.425	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	12	1.105	1.213	1.54	0.99	0.043	0.206	0.993	1.053	1.405	1.534
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	12	1.15	1.21	1.75	0.87	0.072	0.268	0.891	0.992	1.408	1.696
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	12	1.	0.983	1.	0.9	0.002	0.039	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	12	3.7	3.65	4.	3.2	0.065	0.254	3.23	3.425	3.875	3.97
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/31/81-07/29/97	12	6.85	6.767	7.3	6.1	0.13	0.36	6.13	6.55	6.975	7.27
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/31/81-07/05/86	12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	12	0.2	0.182	0.3	0.08	0.005	0.074	0.086	0.1	0.2	0.3
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	12	0.33	0.344	0.58	0.16	0.012	0.11	0.175	0.3	0.378	0.55

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	42	12.75	11.779	20.	0.5	37.262	6.104	3.	5.3	17.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	45	22.	22.378	34.	6.	25.877	5.087	16.6	18.5	26.	28.4
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	45	6.27	6.337	6.75	5.95	0.049	0.222	6.07	6.175	6.54	6.724
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	45	6.27	6.286	6.75	5.95	0.052	0.228	6.07	6.175	6.54	6.724
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	45	0.537	0.517	1.122	0.178	0.057	0.238	0.189	0.288	0.668	0.853
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	45	22.	21.578	33.	5.	25.386	5.038	16.	18.	25.	28.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	45	69.	102.184	203.5	39.5	3121.401	55.869	47.9	57.	153.5	190.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	45	1.2	1.222	1.7	0.8	0.078	0.28	0.9	0.9	1.4	1.64
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	45	1.1	1.149	1.6	0.8	0.073	0.269	0.8	0.9	1.4	1.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	45	1.27	1.245	1.49	0.78	0.02	0.142	1.07	1.14	1.34	1.394
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	45	1.3	1.226	1.62	0.8	0.061	0.247	0.862	0.935	1.435	1.502
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	45	1.	0.964	1.	0.8	0.004	0.061	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	45	3.7	3.698	4.8	2.8	0.178	0.422	3.2	3.4	3.85	4.36
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	45	7.1	7.944	10.	5.9	1.755	1.325	6.66	6.85	9.4	9.78
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/31/81-07/05/86	22 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	45	0.09	0.122	0.7	0.	0.026	0.161	0.	0.	0.2	0.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	45	0.54	0.522	1.13	0.18	0.058	0.241	0.19	0.29	0.675	0.86

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	44	11.25	11.416	21.	3.	34.806	5.9	4.	5.25	17.75	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	47	23.	24.596	37.	17.	31.724	5.632	18.	20.	29.	34.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	48	6.455	6.401	6.87	5.9	0.046	0.216	6.106	6.205	6.55	6.64
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	48	6.455	6.347	6.87	5.9	0.049	0.222	6.106	6.205	6.55	6.64
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	48	0.351	0.45	1.259	0.135	0.059	0.243	0.229	0.282	0.624	0.784
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	47	23.	23.851	36.	17.	30.738	5.544	17.	19.	28.	33.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	48	90.8	104.569	200.4	56.1	1963.44	44.311	58.56	66.4	133.775	185.32
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	48	1.1	1.142	1.9	0.8	0.083	0.288	0.8	0.9	1.3	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	48	1.05	1.056	1.7	0.7	0.071	0.267	0.7	0.8	1.3	1.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	48	1.04	1.032	1.43	0.75	0.034	0.183	0.809	0.865	1.15	1.301
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	48	1.075	1.089	1.62	0.7	0.073	0.271	0.739	0.833	1.258	1.492
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	48	1.	0.954	2.	0.8	0.031	0.176	0.8	0.825	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	48	3.55	3.612	4.3	3.	0.149	0.386	3.1	3.3	3.975	4.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	48	7.8	7.758	10.	5.8	1.635	1.279	6.4	6.5	8.8	9.8
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	48 ##	0.	0.003	0.1	0.	0.	0.015	0.	0.	0.	0.006
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	48	0.355	0.454	1.27	0.14	0.06	0.245	0.23	0.28	0.633	0.788

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	33	11.	10.576	20.	0.5	35.064	5.922	2.	6.	14.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	46	24.5	26.022	36.	18.	26.288	5.127	20.	21.	31.	34.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	46	6.6	6.567	6.78	6.26	0.016	0.128	6.375	6.47	6.66	6.71
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	46	6.6	6.547	6.78	6.26	0.017	0.129	6.375	6.47	6.66	6.71
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	46	0.251	0.283	0.55	0.166	0.008	0.09	0.195	0.219	0.339	0.422
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	46	24.	25.348	35.	17.	23.832	4.882	20.	21.	30.	33.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	46	83.2	108.211	205.1	44.5	2904.939	53.897	55.47	66.95	164.4	196.61
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	46	1.1	1.202	1.8	0.8	0.101	0.318	0.9	0.9	1.5	1.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	46	1.	1.146	1.7	0.9	0.077	0.277	0.9	0.9	1.4	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	46	1.07	1.1	1.38	0.83	0.029	0.17	0.88	0.948	1.248	1.353

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	46	1.065	1.143	1.74	0.73	0.103	0.32	0.767	0.83	1.473	1.603
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	46	1.	1.148	2.	0.8	0.134	0.366	1.	1.	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	46	3.5	3.704	4.8	3.2	0.169	0.411	3.3	3.4	3.825	4.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	46	7.85	7.896	10.5	4.7	1.889	1.374	6.37	6.7	9.2	9.86
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	46 ##	0.	0.034	1.5	0.	0.049	0.221	0.	0.	0.	0.002
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	46	0.255	0.287	0.55	0.17	0.008	0.091	0.2	0.22	0.34	0.425

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	49	11.	11.684	20.	2.	29.788	5.458	4.	7.5	18.	18.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	49	22.	22.776	30.	12.	15.303	3.912	18.	21.	25.5	28.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	49	6.58	6.568	6.79	6.	0.029	0.17	6.36	6.505	6.665	6.75
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	49	6.58	6.528	6.79	6.	0.031	0.175	6.36	6.505	6.665	6.75
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	49	0.263	0.297	1.	0.162	0.028	0.168	0.178	0.216	0.313	0.437
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/31/81-07/29/97	49	22.	22.245	29.	12.	14.73	3.838	17.	20.	25.	27.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	49	85.8	92.504	141.2	31.7	572.279	23.922	70.	78.55	108.8	137.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	49	1.	1.11	1.5	0.9	0.026	0.161	0.9	1.	1.25	1.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	49	1.	1.02	1.3	0.8	0.015	0.124	0.9	0.9	1.1	1.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	49	0.98	1.005	1.43	0.65	0.021	0.144	0.84	0.915	1.095	1.22
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	49	1.1	1.129	2.12	0.79	0.059	0.243	0.86	0.93	1.26	1.42
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	49	1.	1.265	2.	1.	0.199	0.446	1.	1.	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	49	3.4	3.535	6.1	3.	0.251	0.501	3.2	3.2	3.8	4.
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	49	7.6	7.788	9.9	5.6	1.224	1.106	6.5	6.85	8.85	9.4
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	49	0.007	0.007	0.02	0.	0.	0.007	0.	0.	0.01	0.02
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	49	0.27	0.3	1.01	0.16	0.029	0.17	0.18	0.22	0.315	0.44

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	46	10.	11.391	20.	3.	29.288	5.412	5.	6.5	16.125	19.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	52	24.	24.038	30.	13.	7.92	2.814	21.	22.	26.	28.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	52	6.625	6.609	6.89	6.2	0.017	0.132	6.453	6.54	6.68	6.764
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	52	6.625	6.587	6.89	6.2	0.018	0.134	6.453	6.54	6.68	6.764
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	52	0.237	0.259	0.631	0.129	0.009	0.092	0.172	0.209	0.288	0.352
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/31/81-07/29/97	52	23.	23.365	29.	13.	7.099	2.664	21.	22.	25.	27.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	52	96.6	100.844	158.6	43.5	801.49	28.311	67.7	77.2	128.925	141.39
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	52	1.1	1.125	1.4	1.	0.015	0.123	1.	1.	1.2	1.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	52	1.	1.029	1.3	0.9	0.012	0.111	0.9	0.9	1.1	1.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	52	0.985	1.015	1.19	0.85	0.01	0.098	0.88	0.952	1.1	1.16
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	52	1.075	1.102	1.38	0.87	0.027	0.165	0.89	0.945	1.26	1.337
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	52	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	52	3.	3.048	4.	2.6	0.066	0.258	2.7	2.9	3.2	3.37
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	52	7.55	7.95	9.5	6.1	0.872	0.934	6.9	7.2	8.9	9.37
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	52	0.02	0.077	1.3	0.008	0.042	0.205	0.01	0.01	0.02	0.2
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	52	0.24	0.261	0.64	0.13	0.009	0.094	0.173	0.21	0.29	0.357

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	51	12.	11.833	22.5	3.	32.237	5.678	4.5	6.5	18.	18.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	52	27.	26.404	32.	21.	10.559	3.249	22.	23.	29.	31.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	52	6.695	6.679	6.93	6.38	0.018	0.136	6.48	6.58	6.797	6.854
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	52	6.695	6.658	6.93	6.38	0.019	0.138	6.48	6.58	6.797	6.854
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	52	0.202	0.22	0.417	0.117	0.005	0.072	0.14	0.159	0.263	0.331
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	52	26.	25.904	33.	21.	10.206	3.195	22.	23.	28.	30.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	52	112.	113.344	189.4	52.5	1208.934	34.77	74.58	80.275	142.7	163.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	52	1.25	1.225	1.5	1.	0.028	0.168	1.	1.1	1.4	1.47
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	52	1.2	1.138	1.4	0.9	0.023	0.152	0.93	1.	1.275	1.37
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	52	1.085	1.082	1.29	0.86	0.017	0.131	0.9	0.962	1.2	1.261
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	52	1.28	1.238	1.78	0.87	0.051	0.225	0.943	1.02	1.41	1.53
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	52	1.	1.038	2.	1.	0.038	0.194	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	52	3.1	3.25	4.4	2.6	0.165	0.407	2.8	2.925	3.4	3.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	52	7.65	7.783	9.3	5.7	0.924	0.961	6.7	6.9	8.75	9.1
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	52	0.3	0.42	3.1	0.	0.363	0.602	0.001	0.023	0.6	1.04
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	52	0.205	0.222	0.42	0.12	0.005	0.073	0.143	0.16	0.27	0.33

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	49	10.5	10.969	22.	3.	26.921	5.189	4.5	7.	14.	19.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	52	23.5	24.077	28.	21.	3.131	1.77	22.3	23.	25.	27.7
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	52	6.81	6.714	6.93	5.43	0.061	0.246	6.446	6.595	6.83	6.88
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	52	6.81	6.574	6.93	5.43	0.081	0.284	6.446	6.595	6.83	6.88
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	52	0.155	0.266	3.715	0.117	0.247	0.497	0.132	0.148	0.255	0.358
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	52	23.	23.385	28.	20.	2.79	1.67	22.	22.	24.	26.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	52	86.9	91.612	141.2	6.2	753.896	27.457	61.26	76.2	113.775	133.16
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	52	1.1	1.131	1.4	1.	0.012	0.109	1.	1.	1.2	1.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	52	1.	1.037	1.2	0.9	0.007	0.084	0.9	1.	1.1	1.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	52	0.98	0.999	1.22	0.49	0.013	0.113	0.913	0.95	1.058	1.154
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	52	1.075	1.112	1.62	0.82	0.03	0.174	0.92	0.982	1.198	1.364
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	52	1.	0.998	1.	0.9	0.	0.014	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	52	3.	2.985	3.7	2.6	0.043	0.207	2.7	2.825	3.1	3.27
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	52	7.35	7.46	9.1	4.4	0.902	0.95	6.4	6.7	8.175	9.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	52	0.7	0.781	4.9	0.02	0.486	0.697	0.13	0.425	0.975	1.37
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	52	0.16	0.269	3.74	0.12	0.251	0.501	0.13	0.15	0.26	0.364

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	52	12.5	12.183	22.	1.	33.226	5.764	3.65	8.125	16.875	19.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	51	26.	26.588	34.	21.	16.407	4.051	22.	23.	30.	32.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	51	6.5	6.524	6.87	6.03	0.033	0.181	6.342	6.44	6.59	6.816
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	51	6.5	6.486	6.87	6.03	0.034	0.185	6.342	6.44	6.59	6.816
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	51	0.316	0.327	0.933	0.135	0.022	0.149	0.153	0.257	0.363	0.455
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	51	25.	25.647	34.	21.	14.633	3.825	21.	22.	29.	31.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	52	115.35	114.362	198.8	53.7	1546.472	39.325	60.54	77.45	144.325	162.88
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	51	1.3	1.271	1.7	0.9	0.048	0.218	1.	1.1	1.5	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	51	1.1	1.157	1.5	0.9	0.035	0.188	0.92	1.	1.3	1.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	51	1.06	1.087	1.34	0.4	0.036	0.188	0.892	0.96	1.26	1.28
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	51	1.18	1.245	2.24	0.85	0.074	0.273	0.904	1.02	1.47	1.55

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	51	1.	0.994	1.	0.7	0.002	0.042	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	51	3.3	3.51	6.9	2.9	0.452	0.672	3.	3.	3.9	4.28
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	51	7.9	8.014	9.8	3.9	1.668	1.291	6.72	7.1	9.2	9.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	51	0.6	0.599	1.9	0.003	0.184	0.429	0.007	0.3	0.9	1.1
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	51	0.32	0.33	0.94	0.14	0.023	0.15	0.152	0.26	0.37	0.458

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	47	12.5	12.617	22.	3.	27.122	5.208	5.	9.	16.5	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	48	26.	25.979	39.	20.	16.617	4.076	21.	22.25	29.	30.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	48	6.65	6.638	6.86	6.26	0.014	0.118	6.469	6.583	6.717	6.782
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	48	6.65	6.621	6.86	6.26	0.014	0.119	6.469	6.583	6.717	6.782
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	48	0.224	0.24	0.55	0.138	0.006	0.076	0.165	0.192	0.262	0.34
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/31/81-07/29/97	48	25.5	25.313	38.	19.	15.453	3.931	21.	22.	28.	30.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	48	117.35	117.752	174.5	55.3	1018.002	31.906	74.6	93.2	146.2	158.77
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	48	1.3	1.244	1.6	0.9	0.04	0.2	1.	1.1	1.4	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	48	1.1	1.125	1.4	0.9	0.026	0.162	0.9	1.	1.3	1.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	48	1.145	1.098	1.34	0.79	0.028	0.168	0.848	0.955	1.24	1.282
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	48	1.25	1.224	1.59	0.86	0.047	0.216	0.899	1.043	1.37	1.512
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	48	1.	0.994	2.	0.8	0.024	0.156	0.9	0.925	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	48	3.4	3.458	4.	3.	0.062	0.248	3.1	3.3	3.675	3.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	48	8.25	7.915	9.6	5.5	1.395	1.181	6.19	6.875	8.95	9.41
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	48	0.1	0.234	1.2	0.004	0.081	0.285	0.006	0.008	0.4	0.61
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	48	0.23	0.243	0.55	0.14	0.006	0.076	0.169	0.193	0.268	0.341

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	24	9.25	8.521	16.5	0.5	15.25	3.905	1.	6.125	11.25	12.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	25	22.	22.88	27.	21.	2.527	1.59	21.	22.	24.	25.4
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	25	6.75	6.725	6.92	6.08	0.026	0.161	6.574	6.695	6.81	6.868
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	25	6.75	6.684	6.92	6.08	0.028	0.167	6.574	6.695	6.81	6.868
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	25	0.178	0.207	0.832	0.12	0.019	0.136	0.136	0.155	0.202	0.268
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/31/81-07/29/97	25	22.	22.36	27.	21.	2.073	1.44	21.	21.	23.	24.4
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	25	101.9	71.736	168.6	-4.7	3936.977	62.745	5.8	-0.65	125.75	155.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	25	1.1	1.14	1.4	1.	0.012	0.108	1.	1.05	1.2	1.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	25	1.	1.02	1.2	0.9	0.008	0.087	0.9	1.	1.1	1.14
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	25	1.01	1.011	1.16	0.81	0.01	0.1	0.872	0.935	1.11	1.144
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	25	1.01	1.045	1.42	0.86	0.023	0.151	0.878	0.93	1.105	1.314
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	25	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	25	3.2	3.252	3.8	2.9	0.045	0.212	3.02	3.1	3.35	3.64
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	25	7.4	7.524	8.8	6.5	0.397	0.63	6.84	7.1	7.7	8.8
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	25	0.1	0.195	0.7	0.003	0.046	0.215	0.005	0.014	0.35	0.54
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	25	0.18	0.209	0.84	0.12	0.019	0.137	0.136	0.16	0.205	0.27

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3	12.	14.333	19.	12.	16.333	4.041	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	3	25.	25.	27.	23.	4.	2.	**	**	**	**
00400	PH (STANDARD UNITS)	3	6.55	6.607	6.79	6.48	0.026	0.163	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	3	6.55	6.588	6.79	6.48	0.027	0.164	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.282	0.258	0.331	0.162	0.008	0.087	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	3	24.	24.333	27.	22.	6.333	2.517	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	3	6.1	9.433	17.8	4.4	53.223	7.295	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	3	1.3	1.333	1.5	1.2	0.023	0.153	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	3	1.1	1.1	1.2	1.	0.01	0.1	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	3	1.09	1.13	1.24	1.06	0.009	0.096	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	3	1.2	1.243	1.39	1.14	0.017	0.131	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	3	0.9	0.933	1.	0.9	0.003	0.058	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	3	3.	2.967	3.1	2.8	0.023	0.153	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	3	7.9	8.133	9.2	7.3	0.943	0.971	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	3	0.004	0.068	0.2	0.	0.013	0.114	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	3	0.28	0.257	0.33	0.16	0.008	0.087	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3	13.	12.667	20.5	4.5	64.083	8.005	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	3	23.	24.333	29.	21.	17.333	4.163	**	**	**	**
00400	PH (STANDARD UNITS)	3	6.76	6.72	6.87	6.53	0.03	0.173	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	3	6.76	6.696	6.87	6.53	0.031	0.176	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.174	0.201	0.295	0.135	0.007	0.084	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	3	23.	24.	28.	21.	13.	3.606	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	3	-0.6	8.033	15.3	-0.6	64.603	8.038	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	3	1.2	1.267	1.5	1.1	0.043	0.208	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	3	1.	1.067	1.3	0.9	0.043	0.208	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	3	1.06	1.08	1.24	0.94	0.023	0.151	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	3	1.04	1.137	1.45	0.92	0.077	0.278	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	3	0.9	0.933	1.	0.9	0.003	0.058	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	3	3.2	3.167	3.2	3.1	0.003	0.058	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	3	7.6	7.833	9.1	6.8	1.363	1.168	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	3	0.2	0.4	0.8	0.2	0.12	0.346	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	3	0.18	0.207	0.3	0.14	0.007	0.083	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	136	18.	17.79	22.5	11.	5.65	2.377	14.	16.5	19.5	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	163	28.	28.	37.	19.	10.667	3.266	24.	26.	30.	32.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	163	6.5	6.505	7.02	5.9	0.053	0.229	6.18	6.38	6.65	6.81
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	163	6.5	6.443	7.02	5.9	0.056	0.238	6.18	6.38	6.65	6.81
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	163	0.316	0.361	1.259	0.095	0.045	0.212	0.155	0.224	0.417	0.661
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	163	27.	27.178	36.	18.	10.061	3.172	23.	25.	29.	31.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	164	77.7	85.124	203.5	4.4	951.725	30.85	57.25	64.675	96.725	132.85
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	163	1.3	1.329	1.9	0.7	0.042	0.205	1.1	1.2	1.5	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	163	1.2	1.225	1.7	0.7	0.033	0.183	1.	1.1	1.3	1.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	163	1.21	1.187	1.54	0.52	0.024	0.155	0.98	1.11	1.3	1.35
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	163	1.37	1.371	1.86	0.97	0.027	0.164	1.15	1.26	1.49	1.57
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	163	1.	1.021	2.	0.5	0.068	0.261	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	163	3.3	3.385	5.5	2.6	0.268	0.518	2.8	3.	3.6	4.
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	163	9.1	8.88	10.5	6.1	0.881	0.939	7.3	8.6	9.5	9.8
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	163	0.02	0.153	1.5	0.	0.059	0.242	0.	0.002	0.2	0.46
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	163	0.32	0.364	1.27	0.1	0.046	0.214	0.16	0.23	0.42	0.67

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	214	6.	6.728	16.5	0.5	11.171	3.342	3.	4.	9.	11.75
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	243	22.	22.868	39.	12.	15.04	3.878	18.	21.	24.	29.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	244	6.6	6.577	6.88	6.01	0.032	0.18	6.33	6.473	6.708	6.8
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	244	6.6	6.536	6.88	6.01	0.034	0.185	6.33	6.472	6.708	6.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	244	0.251	0.291	0.977	0.132	0.021	0.146	0.158	0.196	0.337	0.468
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	243	22.	22.235	38.	12.	14.172	3.765	18.	20.	23.	28.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	244	84.75	91.591	189.4	6.1	952.454	30.862	58.55	68.925	113.575	132.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	244	1.	1.084	1.8	0.7	0.047	0.217	0.9	0.9	1.175	1.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	244	1.	1.009	1.7	0.7	0.035	0.187	0.8	0.9	1.1	1.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	244	0.97	1.	1.36	0.4	0.022	0.147	0.835	0.91	1.098	1.22
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	244	0.94	1.006	2.24	0.7	0.048	0.22	0.79	0.87	1.09	1.285
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	244	1.	1.032	2.	0.7	0.056	0.236	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	244	3.5	3.598	6.9	2.7	0.258	0.507	3.1	3.2	3.9	4.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	244	7.	7.071	9.2	0.6	0.763	0.873	6.2	6.6	7.5	8.15
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	244	0.02	0.269	3.1	0.	0.208	0.457	0.	0.	0.4	0.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	244	0.25	0.294	0.99	0.13	0.022	0.148	0.16	0.2	0.338	0.47

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/19/83-07/29/97	149	12.	12.23	19.	3.5	11.864	3.444	8.	9.75	14.25	17.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/81-07/29/97	178	23.	22.983	32.	6.	11.915	3.452	18.	21.	25.	27.
00400	PH (STANDARD UNITS)	03/31/81-07/29/97	178	6.65	6.65	6.96	5.43	0.036	0.19	6.469	6.55	6.78	6.87
00400	CONVERTED PH (STANDARD UNITS)	03/31/81-07/29/97	178	6.65	6.588	6.96	5.43	0.04	0.2	6.469	6.55	6.78	6.87
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/81-07/29/97	178	0.224	0.259	3.715	0.11	0.08	0.284	0.135	0.166	0.282	0.34
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/31/81-07/29/97	178	22.	22.326	31.	5.	11.599	3.406	18.	21.	24.	27.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/81-07/29/97	178	136.	128.488	214.	-4.7	2525.779	50.257	62.16	104.425	160.6	190.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/81-07/29/97	178	1.1	1.081	1.5	0.6	0.028	0.166	0.9	1.	1.2	1.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/81-07/29/97	178	1.	0.981	1.4	0.6	0.022	0.147	0.8	0.9	1.1	1.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/81-07/29/97	178	1.02	1.02	1.49	0.49	0.021	0.144	0.84	0.93	1.1	1.202
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/81-07/29/97	178	1.09	1.12	1.62	0.75	0.029	0.172	0.91	1.	1.223	1.34

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0189

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/81-07/29/97	178	1.	0.98	2.	0.7	0.023	0.151	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/81-07/29/97	178	3.2	3.294	5.3	2.6	0.157	0.396	2.9	3.	3.5	3.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/81-07/29/97	178	7.4	7.481	9.5	2.5	0.992	0.996	6.4	6.8	8.1	8.8
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/81-07/29/97	178	0.01	0.207	4.9	0.	0.223	0.472	0.	0.	0.2	0.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/31/81-07/29/97	178	0.23	0.261	3.74	0.11	0.081	0.285	0.14	0.17	0.28	0.341

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0190

NPS Station ID: SHEN0190
 Location: MADISON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.251392/ -78.747198

Depth of Water: 0
 Elevation: 1460
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH46
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RH46 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MADISON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0190

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.33	6.33	6.33	6.33	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.33	6.33	6.33	6.33	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.468	0.468	0.468	0.468	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.98	0.98	0.98	0.98	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0190

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0191

NPS Station ID: SHEN0191 LAT/LON: 38.251392/ -78.747226
 Location: MADISON RUN ABOVE WHITE OAK RUN NR GROTTOS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070006014600.00 RF3 Mile Point: 0.00
 Description:

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628050
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 7.00
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0191

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/24/82	6	14.5	11.583	17.5	1.	39.442	6.28	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/24/82	6	0.7	1.422	5.	0.05	3.572	1.89	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/24/82	6	6.3	6.35	6.8	6.	0.151	0.389	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/24/82	6	6.204	6.221	6.8	6.	0.171	0.414	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/24/82	6	0.626	0.602	1.	0.158	0.191	0.437	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/24/82	6	6.45	6.467	6.6	6.3	0.015	0.121	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/24/82	6	6.447	6.453	6.6	6.3	0.015	0.122	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/24/82	6	0.357	0.353	0.501	0.251	0.01	0.098	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/24/82	6##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/24/82	6	0.025	0.025	0.04	0.01	0.	0.01	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/24/82	6	7.	5.817	7.	0.9	5.962	2.442	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/24/82	6	1.05	1.033	1.1	0.9	0.007	0.082	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/24/82	6	1.	0.967	1.1	0.8	0.019	0.137	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	08/18/81-06/24/82	6	1.	1.05	1.4	0.9	0.035	0.187	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/24/82	6	0.2	0.2	0.2	0.	0.	0.	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/24/82	6	22.5	22.833	27.	21.	4.967	2.229	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/24/82	6	1.	0.95	1.1	0.7	0.031	0.176	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/24/82	6	0.9	0.9	1.	0.8	0.004	0.063	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/24/82	6	3.5	3.5	4.	3.	0.3	0.548	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/24/82	6	7.3	7.217	8.7	5.9	1.166	1.08	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0191

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	3	0.50	2	1	0.50	2	1	0.50	2	1	0.50			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	4	0.67	2	2	1.00	2	2	1.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0191

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0192

NPS Station ID: SHEN0192
 Location: Madison Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.254477/ -78.758254

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F025
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Grottoes VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0192

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/96-05/21/97	3	14.1	12.6	19.	4.7	52.81	7.267	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/26/96-05/21/97	3	20.	19.333	21.	17.	4.333	2.082	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/26/96-05/21/97	3	10.5	10.7	13.1	8.5	5.32	2.307	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/26/96-05/21/97	3	6.29	6.337	6.47	6.25	0.014	0.117	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/26/96-05/21/97	3	6.29	6.327	6.47	6.25	0.014	0.118	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/26/96-05/21/97	3	0.513	0.471	0.562	0.339	0.014	0.117	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	02/06/97-05/21/97	2	12.	12.	13.	11.	2.	1.414	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/26/96-06/26/96	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**
83509	STREAM, WIDTH METER	06/26/96-06/26/96	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/26/96-06/26/96	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0192

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	2	2	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0193

NPS Station ID: SHEN0193
 Location: MADISON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.256531/ -78.768253

Depth of Water: 0
 Elevation: 1360
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_MAD1
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MAD1 IS LOCATED ON THE GROTTOS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MADISON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 14.97 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	415	11.	11.344	23.	0.5	30.225	5.498	4.	7.	16.5	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	435	22.	22.039	34.	10.	10.111	3.18	18.	20.	24.	26.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	437	6.36	6.357	6.87	5.52	0.031	0.177	6.16	6.255	6.46	6.56
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	437	6.36	6.317	6.87	5.52	0.033	0.182	6.16	6.255	6.46	6.56
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	437	0.437	0.482	3.02	0.135	0.069	0.263	0.275	0.347	0.556	0.692
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	435	21.	21.453	33.	9.	9.705	3.115	18.	19.	23.	25.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	437	45.2	51.958	162.5	10.	621.121	24.922	27.9	33.7	64.5	86.36
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	437	0.8	0.835	1.2	0.6	0.017	0.129	0.7	0.7	0.9	1.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	437	0.9	0.863	1.3	0.6	0.015	0.124	0.7	0.8	0.9	1.
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	437	0.73	0.747	1.08	0.49	0.009	0.092	0.65	0.69	0.805	0.88
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	437	1.51	1.562	2.26	1.02	0.081	0.284	1.22	1.33	1.79	1.97
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	437	1.	1.036	2.	0.7	0.07	0.265	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	437	4.4	4.376	7.7	2.5	0.221	0.47	3.9	4.1	4.7	4.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	437	6.2	6.253	7.9	2.	0.625	0.791	5.3	5.6	6.9	7.3
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/29/83-07/05/86	82 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	437	0.02	0.382	3.	0.	0.412	0.642	0.	0.	0.5	1.5
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	437	0.44	0.486	3.03	0.14	0.07	0.265	0.28	0.35	0.56	0.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0193

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	437	0	0.00	124	0	0.00	186	0	0.00	127	0	0.00				
	Other-Lo Lim.	6.5	437	361	0.83	124	89	0.72	186	166	0.89	127	106	0.83				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	437	437	1.00	124	124	1.00	186	186	1.00	127	127	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	437	0	0.00	124	0	0.00	186	0	0.00	127	0	0.00				
	Fresh Acute	860.	437	0	0.00	124	0	0.00	186	0	0.00	127	0	0.00				
	Drinking Water	250.	437	0	0.00	124	0	0.00	186	0	0.00	127	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	437	0	0.00	124	0	0.00	186	0	0.00	127	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	437	0	0.00	124	0	0.00	186	0	0.00	127	0	0.00				
	Drinking Water	44.	437	0	0.00	124	0	0.00	186	0	0.00	127	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1983 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	14	9.5	9.343	13.5	2.5	8.984	2.997	4.25	7.725	11.875	13.25
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	14	21.5	21.929	26.	19.	4.225	2.056	19.5	20.	23.25	25.5
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	14	6.33	6.323	6.52	6.14	0.011	0.103	6.18	6.248	6.363	6.51
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	14	6.33	6.312	6.52	6.14	0.011	0.103	6.18	6.248	6.363	6.51
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	14	0.468	0.488	0.724	0.302	0.012	0.112	0.309	0.434	0.566	0.663
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	14	21.	21.286	25.	18.	4.22	2.054	18.5	19.75	23.	24.5
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	14	30.	30.214	35.	22.5	14.874	3.857	25.	27.5	35.	35.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	14	0.7	0.771	1.	0.6	0.013	0.114	0.65	0.7	0.9	0.95
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	14	0.75	0.764	0.9	0.7	0.006	0.074	0.7	0.7	0.8	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	14	0.71	0.697	0.84	0.52	0.006	0.076	0.575	0.64	0.735	0.81
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	14	1.425	1.454	1.86	1.24	0.03	0.173	1.25	1.34	1.533	1.79
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	14	0.9	0.914	1.	0.8	0.004	0.066	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	14	4.1	4.193	5.8	3.7	0.295	0.543	3.75	3.8	4.3	5.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	14	5.7	5.786	7.6	2.	1.817	1.348	3.6	5.3	6.7	7.45
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/29/83-07/05/86	14 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	14 ##	0.015	0.143	0.8	0.	0.068	0.261	0.	0.	0.16	0.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	14	0.47	0.491	0.73	0.3	0.013	0.114	0.31	0.438	0.573	0.67

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	33	11.5	11.418	20.	2.	29.927	5.471	4.	7.	17.	18.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	34	21.	21.471	27.	17.	8.923	2.987	18.	19.	24.25	26.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	34	6.35	6.349	6.59	6.11	0.011	0.103	6.215	6.29	6.4	6.51
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	34	6.35	6.337	6.59	6.11	0.011	0.104	6.215	6.29	6.4	6.51
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	34	0.447	0.46	0.776	0.257	0.012	0.111	0.309	0.398	0.513	0.61
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	34	20.	20.853	26.	17.	8.008	2.83	18.	18.	24.	25.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	34	53.75	56.529	101.5	10.	567.348	23.819	29.75	35.125	75.25	93.25
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	34	0.8	0.821	1.1	0.6	0.027	0.165	0.6	0.7	1.	1.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	34	0.8	0.806	1.	0.6	0.013	0.115	0.65	0.7	0.9	0.95
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	34	0.655	0.73	1.	0.5	0.028	0.168	0.535	0.59	0.893	0.96
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	34	1.215	1.205	1.42	1.02	0.012	0.107	1.055	1.1	1.283	1.345
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	34	0.9	0.844	0.9	0.7	0.004	0.066	0.75	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	34	4.5	4.429	5.4	3.	0.422	0.649	3.15	4.2	4.725	5.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	34	5.5	5.956	7.3	4.9	0.675	0.821	5.1	5.275	6.925	7.
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/29/83-07/05/86	34 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	34 ##	0.	0.013	0.3	0.	0.003	0.051	0.	0.	0.002	0.02
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	34	0.45	0.464	0.78	0.26	0.012	0.111	0.315	0.4	0.52	0.615

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	12	13.	11.083	16.5	3.	19.083	4.368	3.75	7.25	14.25	16.35
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	13	19.	20.462	26.	15.	11.436	3.382	15.8	18.	23.	26.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	13	6.23	6.205	6.43	5.52	0.055	0.234	5.732	6.165	6.37	6.426
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	13	6.23	6.123	6.43	5.52	0.062	0.249	5.732	6.165	6.37	6.426
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	13	0.589	0.754	3.02	0.372	0.485	0.696	0.375	0.428	0.684	2.168
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	13	19.	20.	25.	14.	10.833	3.291	15.2	18.	22.5	25.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	13	36.5	35.692	45.5	24.5	40.231	6.343	25.9	31.	41.25	44.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	13	0.7	0.762	1.	0.6	0.016	0.126	0.6	0.7	0.9	0.96
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	13	0.8	0.808	1.	0.7	0.011	0.104	0.7	0.7	0.85	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	13	0.78	0.831	1.08	0.61	0.017	0.129	0.658	0.745	0.95	1.032
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	13	1.71	1.729	2.21	1.33	0.072	0.269	1.362	1.485	1.96	2.15
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	13	1.	0.992	1.	0.9	0.001	0.028	0.94	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	13	4.9	4.815	6.	4.4	0.181	0.426	4.4	4.4	4.9	5.6
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	13	7.	6.946	7.4	6.2	0.126	0.355	6.32	6.75	7.2	7.4
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/29/83-07/05/86	13 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	13	0.1	0.136	0.4	0.04	0.009	0.095	0.052	0.08	0.2	0.32
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	13	0.59	0.758	3.03	0.37	0.488	0.699	0.374	0.43	0.69	2.178

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	43	11.5	11.405	20.5	1.	33.77	5.811	3.4	6.	17.	19.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	45	20.	19.644	34.	10.	14.689	3.833	15.	17.	22.	23.4
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	45	6.19	6.189	6.41	5.93	0.014	0.119	6.02	6.115	6.285	6.338
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	45	6.19	6.172	6.41	5.93	0.015	0.12	6.02	6.115	6.285	6.338
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	45	0.646	0.672	1.175	0.389	0.037	0.192	0.459	0.519	0.767	0.957
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/29/83-07/22/93	45	19.	19.067	33.	9.	13.609	3.689	15.	17.	21.	22.4
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	45	42.5	53.818	110.5	19.5	835.069	28.898	24.6	28.05	77.75	101.6
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	45	0.8	0.78	1.2	0.6	0.023	0.15	0.6	0.65	0.9	1.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	45	0.8	0.847	1.2	0.7	0.02	0.141	0.7	0.7	0.95	1.04
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	45	0.85	0.846	1.05	0.62	0.008	0.088	0.732	0.785	0.9	0.972
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	45	1.68	1.658	2.13	1.21	0.078	0.28	1.286	1.345	1.91	1.994
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	45	1.	0.953	1.	0.8	0.003	0.059	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	45	4.5	4.613	7.7	4.	0.281	0.53	4.22	4.4	4.8	4.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	45	6.9	6.838	7.7	5.2	0.248	0.498	5.96	6.7	7.1	7.4
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/29/83-07/05/86	21 ##	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	45	0.07	0.096	0.6	0.	0.016	0.125	0.	0.	0.2	0.2
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	45	0.65	0.678	1.18	0.39	0.037	0.193	0.462	0.525	0.775	0.964

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	46	11.	11.872	23.	3.	42.297	6.504	3.85	6.	18.	21.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	47	22.	22.702	34.	16.	20.431	4.52	18.	19.	25.	31.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	48	6.245	6.241	6.45	5.98	0.01	0.101	6.119	6.18	6.318	6.371
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	48	6.245	6.229	6.45	5.98	0.01	0.102	6.119	6.18	6.317	6.371
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	48	0.569	0.59	1.047	0.355	0.021	0.145	0.426	0.481	0.661	0.76
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/29/83-07/22/93	47	21.	22.064	33.	15.	19.191	4.381	17.	19.	24.	30.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	48	41.55	49.575	106.8	23.7	630.048	25.101	26.85	28.225	63.375	96.77
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	48	0.8	0.827	1.2	0.6	0.028	0.166	0.7	0.7	0.9	1.11
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	48	0.9	0.879	1.3	0.7	0.028	0.166	0.7	0.7	1.	1.11
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	48	0.72	0.731	0.98	0.59	0.009	0.094	0.63	0.65	0.778	0.883
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	48	1.555	1.574	2.26	1.1	0.112	0.335	1.16	1.26	1.815	2.093
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	48	1.	0.965	2.	0.8	0.03	0.173	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	48	4.7	4.69	5.4	4.2	0.082	0.287	4.3	4.425	4.9	5.1
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	48	6.15	6.196	7.7	5.	0.641	0.801	5.2	5.5	6.8	7.4
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	48 ##	0.	0.072	1.1	0.	0.06	0.245	0.	0.	0.	0.096
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	48	0.575	0.595	1.06	0.36	0.022	0.147	0.429	0.483	0.67	0.771

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	43	11.	11.163	21.	0.5	35.39	5.949	3.5	7.	17.	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	51	23.	23.235	34.	18.	15.304	3.912	18.2	20.	26.	28.8
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	51	6.38	6.403	6.69	6.11	0.019	0.139	6.254	6.29	6.48	6.628
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	51	6.38	6.382	6.69	6.11	0.02	0.141	6.254	6.29	6.48	6.628
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	51	0.417	0.414	0.776	0.204	0.016	0.126	0.236	0.331	0.513	0.557
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	51	22.	22.588	33.	17.	13.807	3.716	18.	19.	26.	27.8
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	51	40.7	55.206	118.1	25.4	844.752	29.065	27.56	30.	86.1	98.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	51	0.8	0.849	1.2	0.6	0.03	0.174	0.6	0.7	1.	1.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	51	0.9	0.914	1.3	0.7	0.035	0.187	0.7	0.7	1.1	1.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	51	0.75	0.767	0.94	0.65	0.006	0.076	0.67	0.71	0.82	0.87
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	51	1.55	1.646	2.25	1.15	0.151	0.388	1.182	1.27	2.06	2.208
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	51	1.	1.231	2.	0.9	0.208	0.456	0.9	1.	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	51	4.6	4.653	5.2	4.2	0.053	0.229	4.32	4.5	4.8	5.
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	51	6.4	6.422	7.9	5.2	0.707	0.841	5.3	5.5	7.2	7.5
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	51 ##	0.	0.022	0.5	0.	0.008	0.09	0.	0.	0.	0.004
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	51	0.42	0.418	0.78	0.21	0.016	0.127	0.24	0.33	0.52	0.564

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	49	11.	11.694	19.	1.5	29.602	5.441	4.	8.	18.	18.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	49	21.	21.245	28.	16.	9.272	3.045	17.	19.	23.5	25.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	49	6.37	6.324	6.58	5.8	0.021	0.145	6.14	6.24	6.425	6.47
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	49	6.37	6.297	6.58	5.8	0.022	0.147	6.14	6.24	6.425	6.47
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	49	0.427	0.505	1.585	0.263	0.047	0.217	0.339	0.376	0.576	0.724
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	49	21.	20.633	28.	15.	9.779	3.127	16.	18.	23.	25.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	49	40.2	43.837	77.6	22.7	147.803	12.157	31.4	36.35	52.2	63.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	49	0.8	0.82	1.1	0.7	0.013	0.114	0.7	0.7	0.9	1.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	49	0.8	0.863	1.1	0.7	0.01	0.101	0.8	0.8	0.9	1.
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	49	0.72	0.731	0.94	0.6	0.005	0.069	0.66	0.685	0.77	0.83
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	49	1.51	1.556	2.08	1.09	0.063	0.251	1.28	1.35	1.735	2.
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	49	1.	1.306	2.	1.	0.217	0.466	1.	1.	2.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	49	4.6	4.531	5.3	3.1	0.114	0.337	4.2	4.3	4.75	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	49	6.1	6.306	7.7	5.1	0.566	0.753	5.5	5.6	7.	7.5
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	49	0.007	0.013	0.3	0.	0.002	0.042	0.	0.	0.01	0.02
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	49	0.43	0.51	1.6	0.27	0.048	0.219	0.34	0.38	0.58	0.73

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	47	10.	11.362	19.5	3.	25.964	5.096	5.4	7.	17.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	50	21.	21.6	26.	18.	2.939	1.714	20.	20.	23.	23.9
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	51	6.4	6.39	6.55	6.22	0.008	0.087	6.256	6.32	6.46	6.52
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	51	6.4	6.381	6.55	6.22	0.008	0.088	6.256	6.32	6.46	6.52
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	51	0.398	0.416	0.603	0.282	0.007	0.085	0.302	0.347	0.479	0.555
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	50	20.5	20.86	25.	17.	2.817	1.678	19.	20.	22.	23.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	51	47.7	52.255	88.8	26.2	291.151	17.063	33.6	38.8	70.	81.58
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	51	0.8	0.792	0.9	0.7	0.004	0.063	0.7	0.8	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	51	0.8	0.812	1.	0.7	0.006	0.077	0.7	0.8	0.9	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	51	0.71	0.731	0.82	0.65	0.003	0.051	0.68	0.69	0.78	0.81
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	51	1.46	1.499	1.84	1.25	0.04	0.2	1.262	1.32	1.72	1.82

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	51	1.	0.998	1.	0.9	0.	0.014	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	51	4.1	4.09	4.6	3.4	0.047	0.217	3.8	4.	4.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	51	6.1	6.278	7.6	5.2	0.579	0.761	5.4	5.6	7.1
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	51	0.02	0.064	0.9	0.007	0.03	0.172	0.01	0.01	0.02
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	51	0.4	0.419	0.61	0.28	0.007	0.086	0.3	0.35	0.48

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	51	12.	11.804	23.	4.	32.181	5.673	4.6	6.5	18.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	52	23.5	23.173	27.	20.	3.205	1.79	21.	22.	24.75
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	52	6.43	6.455	6.8	6.21	0.019	0.136	6.29	6.355	6.538
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	52	6.43	6.436	6.8	6.21	0.019	0.138	6.29	6.355	6.538
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	52	0.372	0.367	0.617	0.158	0.011	0.106	0.222	0.29	0.442
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	52	23.	22.692	28.	19.	3.864	1.966	20.	21.	24.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	52	50.7	50.775	79.4	26.1	265.322	16.289	31.68	33.875	64.075
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	52	0.9	0.875	1.1	0.8	0.005	0.068	0.8	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	52	0.9	0.894	1.1	0.7	0.007	0.083	0.8	0.8	0.975
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	52	0.725	0.733	0.83	0.65	0.002	0.047	0.66	0.7	0.77
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	52	1.695	1.646	1.98	1.23	0.051	0.226	1.323	1.45	1.838
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	52	1.	0.996	1.	0.8	0.001	0.028	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	52	4.3	4.263	5.2	2.8	0.097	0.311	4.	4.1	4.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	52	6.1	6.167	7.1	5.1	0.334	0.578	5.5	5.6	6.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	52	0.4	0.552	2.9	0.	0.327	0.571	0.002	0.1	0.775
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	52	0.38	0.37	0.62	0.16	0.011	0.107	0.223	0.293	0.445

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	49	11.	10.935	21.	3.	25.694	5.069	4.5	7.	14.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	52	23.	22.712	27.	18.	2.758	1.661	21.	22.	24.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	52	6.52	6.484	6.87	5.6	0.068	0.26	6.169	6.403	6.608
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	52	6.52	6.379	6.87	5.6	0.079	0.281	6.169	6.403	6.607
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	52	0.302	0.417	2.512	0.135	0.199	0.446	0.153	0.247	0.396
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	52	22.	22.269	26.	18.	2.318	1.523	21.	21.	23.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	52	43.95	44.979	86.2	20.4	178.335	13.354	28.89	34.625	54.225
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	52	0.9	0.894	1.1	0.8	0.006	0.075	0.8	0.8	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	52	0.9	0.888	1.	0.8	0.004	0.062	0.8	0.825	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	52	0.71	0.725	0.85	0.64	0.003	0.051	0.67	0.683	0.75
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	52	1.535	1.57	1.94	1.2	0.039	0.197	1.33	1.41	1.718
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	52	1.	1.	1.	1.	0.	0.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	52	4.	3.875	4.5	2.5	0.145	0.381	3.33	3.6	4.1
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	52	5.95	5.933	7.	4.8	0.421	0.649	5.	5.425	6.4
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	52	1.5	1.543	3.	0.01	0.326	0.571	0.9	1.3	1.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	52	0.3	0.421	2.53	0.14	0.202	0.449	0.153	0.25	0.398

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	28	11.	10.929	21.	2.	31.921	5.65	3.4	4.75	15.625	19.05
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	28	22.	22.893	27.	21.	4.099	2.025	21.	21.25	24.	27.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	28	6.44	6.424	6.62	5.72	0.028	0.168	6.304	6.358	6.523	6.611
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	28	6.44	6.378	6.62	5.72	0.03	0.174	6.304	6.358	6.522	6.611
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	28	0.363	0.419	1.905	0.24	0.091	0.302	0.245	0.3	0.439	0.497
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/29/83-07/22/93	28	22.	22.357	27.	20.	3.72	1.929	20.9	21.	23.	26.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	28	78.7	88.839	162.5	37.8	1587.968	39.849	46.51	54.3	127.875	154.25
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	28	0.9	0.911	1.1	0.8	0.004	0.063	0.8	0.9	0.9	1.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	28	0.9	0.907	1.1	0.8	0.004	0.066	0.8	0.9	0.9	1.
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	28	0.7	0.705	0.84	0.49	0.005	0.074	0.636	0.66	0.75	0.811
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	28	1.545	1.595	2.04	1.26	0.056	0.237	1.319	1.375	1.793	2.03
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	28	1.	0.982	1.	0.8	0.002	0.048	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	28	4.1	4.161	5.6	3.8	0.106	0.326	3.89	4.	4.2	4.41
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	28	5.75	5.989	7.4	3.9	0.633	0.796	5.37	5.5	6.55	7.22
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	28	1.35	1.457	2.7	1.1	0.103	0.32	1.2	1.225	1.575	1.81
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	28	0.37	0.423	1.92	0.24	0.093	0.304	0.249	0.305	0.443	0.498

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	118	18.	17.78	23.	11.	7.212	2.685	13.	16.5	19.	21.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	123	25.	24.691	34.	17.	7.937	2.817	22.	23.	26.	28.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	124	6.39	6.386	6.84	5.6	0.046	0.214	6.14	6.233	6.528	6.66
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	124	6.39	6.327	6.84	5.6	0.049	0.222	6.14	6.233	6.528	6.66
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	124	0.407	0.471	2.512	0.145	0.102	0.319	0.219	0.297	0.585	0.724
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/29/83-07/22/93	123	24.	24.057	33.	16.	7.251	2.693	21.	23.	25.	27.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	124	37.7	47.044	162.5	22.5	762.334	27.61	26.95	30.55	50.9	79.55
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	124	0.9	0.945	1.2	0.8	0.009	0.097	0.8	0.9	1.	1.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	124	0.9	0.969	1.3	0.7	0.013	0.112	0.9	0.9	1.	1.1
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	124	0.82	0.823	1.08	0.52	0.007	0.085	0.73	0.77	0.877	0.945
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	124	1.865	1.828	2.26	1.05	0.074	0.273	1.505	1.743	2.	2.115
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	124	1.	1.162	2.	0.8	0.164	0.405	0.9	1.	1.	2.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	124	4.3	4.238	5.4	2.8	0.255	0.505	3.45	4.	4.5	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	124	7.1	7.083	7.9	6.	0.151	0.389	6.6	6.8	7.4	7.5
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	124	0.02	0.412	3.	0.	0.463	0.68	0.	0.	0.7	1.6
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	124	0.41	0.475	2.53	0.15	0.103	0.321	0.22	0.3	0.587	0.73

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	178	6.5	6.74	15.	0.5	9.243	3.04	3.	4.	8.425	11.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	185	21.	20.886	34.	13.	7.612	2.759	17.6	19.	22.	24.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	186	6.31	6.32	6.87	5.52	0.029	0.171	6.137	6.23	6.43	6.513
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	186	6.31	6.283	6.87	5.52	0.031	0.175	6.137	6.23	6.43	6.513
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	186	0.49	0.521	3.02	0.135	0.076	0.275	0.307	0.372	0.589	0.729
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/29/83-07/22/93	185	20.	20.33	33.	13.	7.57	2.751	17.	19.	22.	23.4
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	186	37.95	41.531	79.4	19.5	169.93	13.036	27.5	32.5	50.15	57.06
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	186	0.8	0.781	1.2	0.6	0.015	0.123	0.6	0.7	0.9	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	186	0.8	0.827	1.3	0.7	0.012	0.108	0.7	0.8	0.9	1.
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	186	0.7	0.709	0.95	0.49	0.005	0.069	0.65	0.67	0.74	0.81
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	186	1.36	1.422	2.13	1.1	0.043	0.207	1.21	1.28	1.51	1.723
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	186	1.	0.991	2.	0.8	0.02	0.14	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	186	4.5	4.454	6.	2.5	0.193	0.44	3.9	4.1	4.725	4.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	186	5.7	5.845	7.4	2.	0.45	0.67	5.2	5.4	6.2	6.83
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	186	0.02	0.361	2.9	0.	0.374	0.612	0.	0.	0.4	1.5
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	186	0.49	0.526	3.03	0.14	0.076	0.276	0.307	0.38	0.59	0.736

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/29/83-07/22/93	119	11.5	11.85	18.5	4.5	11.386	3.374	7.5	9.	14.	17.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/29/83-07/22/93	127	21.	21.15	27.	10.	6.414	2.533	18.	20.	23.	25.
00400	PH (STANDARD UNITS)	09/29/83-07/22/93	127	6.37	6.384	6.84	5.8	0.018	0.132	6.24	6.32	6.45	6.552
00400	CONVERTED PH (STANDARD UNITS)	09/29/83-07/22/93	127	6.37	6.363	6.84	5.8	0.018	0.134	6.24	6.32	6.45	6.552
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/29/83-07/22/93	127	0.427	0.434	1.585	0.145	0.025	0.158	0.281	0.355	0.479	0.575
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/29/83-07/22/93	127	21.	20.567	26.	9.	6.089	2.468	17.8	19.	22.	24.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/29/83-07/22/93	127	73.7	72.026	142.5	10.	565.423	23.779	43.72	56.	87.	101.92
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/29/83-07/22/93	127	0.8	0.806	1.1	0.6	0.01	0.099	0.7	0.7	0.9	0.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/29/83-07/22/93	127	0.8	0.814	1.	0.6	0.009	0.093	0.7	0.7	0.9	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/29/83-07/22/93	127	0.71	0.727	1.01	0.57	0.007	0.087	0.63	0.67	0.76	0.85
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/29/83-07/22/93	127	1.5	1.506	1.99	1.02	0.043	0.207	1.24	1.36	1.65	1.792

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0193

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/29/83-07/22/93	127	1.	0.977	2.	0.7	0.032	0.178	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/29/83-07/22/93	127	4.3	4.396	7.7	3.3	0.205	0.453	4.	4.1	4.6	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/29/83-07/22/93	127	6.	6.04	7.3	4.8	0.387	0.622	5.2	5.5	6.6	6.9
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/29/83-07/22/93	127	0.01	0.382	2.7	0.	0.422	0.65	0.	0.	0.6	1.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/29/83-07/22/93	127	0.43	0.437	1.6	0.15	0.025	0.16	0.28	0.36	0.48	0.58

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0194

NPS Station ID: SHEN0194
 Location: MADISON RUN NEAR GROTTOS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005000508.51
 Description:

LAT/LON: 38.256670/ -78.768337

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 11.28

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628080
 Within Park Boundary: Yes

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 1.30
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0194

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/27/68-06/24/82	12	11.	10.542	17.5	2.	23.112	4.807	2.9	6.875	14.625	17.05
00060	FLOW, STREAM, MEAN DAILY CFS	03/27/68-12/13/68	6	3.	4.	11.	1.	13.2	3.633	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/24/82	6	2.	3.6	13.	0.2	23.088	4.805	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/27/68-12/13/68	6	1.	2.	5.	0.	6.	2.449	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/27/68-12/13/68	6	19.5	19.667	22.	17.	3.067	1.751	**	**	**	**
00400	PH (STANDARD UNITS)	03/27/68-06/24/82	11	6.5	6.491	7.	6.	0.065	0.255	6.06	6.3	6.6	6.94
00400	CONVERTED PH (STANDARD UNITS)	03/27/68-06/24/82	11	6.5	6.423	7.	6.	0.07	0.264	6.06	6.3	6.6	6.94
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/27/68-06/24/82	11	0.316	0.377	1.	0.1	0.057	0.239	0.12	0.251	0.501	0.9
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/24/82	6	6.6	6.567	6.8	6.3	0.051	0.225	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/24/82	6	6.6	6.518	6.8	6.3	0.054	0.231	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/24/82	6	0.251	0.304	0.501	0.158	0.025	0.159	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/27/68-12/13/68	6	4.	4.167	5.	3.	0.567	0.753	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/27/68-12/13/68	6	5.	5.167	6.	4.	0.567	0.753	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/27/68-12/13/68	6	0.	0.	0.	0.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/24/82	6##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/24/82	6	0.015	0.018	0.04	0.005	0.	0.013	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/27/68-12/13/68	6	0.	0.007	0.03	0.	0.	0.012	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/27/68-06/24/82	12	5.	4.917	6.	4.	0.447	0.669	4.	4.25	5.	6.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	03/27/68-12/13/68	6	0.5	0.5	1.	0.	0.3	0.548	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	03/27/68-06/24/82	12	0.8	1.033	1.8	0.7	0.17	0.412	0.7	0.7	1.2	1.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/27/68-06/24/82	12	0.65	0.55	0.8	0.1	0.059	0.243	0.1	0.425	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/27/68-06/24/82	12	0.7	0.758	1.	0.7	0.012	0.108	0.7	0.7	0.85	0.97
00931	SODIUM ADSORPTION RATIO	03/27/68-06/24/82	12	0.1	0.133	0.2	0.1	0.002	0.049	0.1	0.1	0.2	0.2
00932	SODIUM, PERCENT	03/27/68-06/24/82	12	20.	20.333	26.	16.	10.061	3.172	16.	17.5	22.75	25.4
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/27/68-06/24/82	12	1.3	1.342	1.7	0.8	0.072	0.268	0.89	1.2	1.6	1.67
00940	CHLORIDE, TOTAL IN WATER MG/L	03/27/68-06/24/82	12	0.9	1.067	2.	0.4	0.215	0.464	0.55	0.9	1.	2.
00945	SULFATE, TOTAL (MG/L AS SO4)	03/27/68-06/24/82	12	3.5	3.333	4.	2.	0.606	0.778	2.	3.	4.	4.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/27/68-12/13/68	6	0.	0.	0.	0.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/27/68-06/24/82	12	5.1	5.183	6.5	4.1	0.516	0.718	4.19	4.625	5.575	6.41
01046	IRON, DISSOLVED (UG/L AS FE)	03/27/68-12/13/68	6	0.	10.	50.	0.	400.	20.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	03/27/68-12/13/68	6	20.5	21.333	26.	18.	7.867	2.805	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/27/68-12/13/68	6	15.5	15.333	17.	14.	1.467	1.211	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	03/27/68-12/13/68	6	0.15	0.233	0.65	0.08	0.046	0.215	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/27/68-12/13/68	6	0.03	0.03	0.04	0.02	0.	0.006	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/27/68-12/13/68	6	0.35	0.35	0.4	0.3	0.003	0.055	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0194

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	11	0	0.00	2	0	0.00	3	0	0.00	6	0	0.00				
	Other-Lo Lim.	6.5	11	7	0.64	2	1	0.50	3	2	0.67	6	4	0.67				
00403	PH, LAB																	
	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	6	2	0.33	2	0	0.00	2	2	1.00	2	0	0.00				
00631	NITRITE PLUS NITRATE, DISS. 1 DET.																	
	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
00940	CHLORIDE, TOTAL IN WATER																	
	Fresh Acute	860.	12	0	0.00	2	0	0.00	4	0	0.00	6	0	0.00				
	Drinking Water	250.	12	0	0.00	2	0	0.00	4	0	0.00	6	0	0.00				
00945	SULFATE, TOTAL (AS SO4)																	
	Drinking Water	250.	12	0	0.00	2	0	0.00	4	0	0.00	6	0	0.00				
00950	FLUORIDE, DISSOLVED AS F																	
	Drinking Water	4.	6	0	0.00				2	0	0.00	4	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	6	0	0.00				2	0	0.00	4	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0195

NPS Station ID: SHEN0195
 Location: Madison Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.258087/ -78.778421

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F024
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Grottoes VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0195

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/15/94-06/15/94	3	17.4	17.533	17.8	17.4	0.053	0.231	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/15/94-06/15/94	3	8.	8.	8.	8.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/15/94-06/15/94	3	7.14	7.07	7.14	6.93	0.015	0.121	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/15/94-06/15/94	3	7.14	7.058	7.14	6.93	0.015	0.122	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/15/94-06/15/94	3	0.072	0.087	0.117	0.072	0.001	0.026	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0195

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00							3	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00							3	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00							3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0196

NPS Station ID: SHEN0196
 Location: SOUTH RIV S OF RT 865 GROTTUES63
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005027
 RF3 Index: 02080204002700.00
 Description:

LAT/LON: 38.259170/ -78.826948

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 3.560
 RF3 Mile Point: 12.64

Agency: 1112A9WQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): UP-POT-063 /063
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.48

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0196

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/72-04/16/73	4	15.5	14.75	22	6	43.583	6.602	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/23/72-04/16/73	4	10.2	10.35	12.6	8.4	4.897	2.213	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/23/72-05/23/72	1	3.2	3.2	3.2	0	0	0	**	**	**	**
00400	PH (STANDARD UNITS)	05/23/72-02/13/73	2	7.25	7.25	8	6.5	1.125	1.061	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/23/72-02/13/73	2	6.788	6.788	8	6.5	1.553	1.246	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/72-02/13/73	2	0.163	0.163	0.316	0.01	0.047	0.217	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	38	38	38	38	0	0	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/23/72-05/23/72	1	1	1	1	1	0	0	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/23/72-04/16/73	4	0.19	0.274	0.66	0.055	0.074	0.272	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/23/72-04/16/73	4	0.98	0.92	1.181	0.54	0.076	0.275	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/23/72-04/16/73	4	0.92	1.208	2.35	0.64	0.6	0.775	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/23/72-04/16/73	4	0.205	0.275	0.54	0.15	0.032	0.18	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/23/72-02/13/73	3	3.1	4.233	7.2	2.4	6.723	2.593	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/23/72-02/13/73	3	16.8	19.067	27.6	12.8	58.613	7.656	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/23/72-04/16/73	2 ##	7	7	10	4	18	4.243	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/23/72-05/23/72	1 ##	0.005	0.005	0.005	0.005	0	0	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	2 ##	53.75	53.75	105	2.5	5253.125	72.478	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/23/72-05/23/72	1	0.03	0.03	0.03	0.03	0	0	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/23/72-04/16/73	3	50	57	113	8	2793	52.849	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/23/72-05/23/72	1 ##	0.05	0.05	0.05	0.05	0	0	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/23/72-05/23/72	1	0.2	0.2	0.2	0.2	0	0	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/23/72-05/23/72	1	0.04	0.04	0.04	0.04	0	0	**	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	3	1	1	1	1	0	0	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/23/72-04/16/73	4	0.52	0.49	0.67	0.25	0.046	0.214	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/23/72-02/13/73	2 ##	0.001	0.001	0.001	0	0	0.001	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0196

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400	PH	Fresh Chronic	9	2	0	0.00				1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	2	1	0.50				1	0	0.00	1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0196

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00630	NITRITE PLUS NITRATE, TOTAL I DET.																	
	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00				
00945	SULFATE, TOTAL (AS SO4)	250.	2	0	0.00							2	0	0.00				
01027	CADMIUM, TOTAL	3.9	1	0	0.00							1	0	0.00				
	Drinking Water	5.	1	0	0.00							1	0	0.00				
01034	CHROMIUM, TOTAL	100.	2	1	0.50	1	0	0.00	1	1	1.00							
01042	COPPER, TOTAL	18.	1	0	0.00							1	0	0.00				
	Drinking Water	1300.	1	0	0.00							1	0	0.00				
01051	LEAD, TOTAL	82.	1	0	0.00							1	0	0.00				
	Drinking Water	15.	1	0	0.00							1	0	0.00				
01092	ZINC, TOTAL	120.	1	0	0.00							1	0	0.00				
	Drinking Water	5000.	1	0	0.00							1	0	0.00				
71900	MERCURY, TOTAL	2.4	2	0	0.00							1	0	0.00				
	Drinking Water	2.	2	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0197

NPS Station ID: SHEN0197
 Location: Big Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.260392/ -78.702476

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F101
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0197

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/05/94-07/05/94	4	19.05	19.05	19.3	18.8	0.057	0.238	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/05/94-07/05/94	3	9.	8.667	9.	8.	0.333	0.577	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/05/94-07/05/94	3	7.53	7.557	7.65	7.49	0.007	0.083	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/05/94-07/05/94	3	7.53	7.552	7.65	7.49	0.007	0.084	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/05/94-07/05/94	3	0.03	0.028	0.032	0.022	0.	0.005	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0197

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00					
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0198

NPS Station ID: SHEN0198
 Location: MIDDLE R. RTE 256 BR WST GROTTTOE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005012
 RF3 Index: 02070005000400.00
 Description:

LAT/LON: 38.261670/ -78.861948

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 1.560
 RF3 Mile Point: 0.88

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 012 /012 /MID S-6
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.08

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0198

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/22/67	4	23.5	23.75	25.	23.	0.917	0.957	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	5	6.2	6.48	7.3	5.9	0.352	0.593	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	5	4.3	4.72	7.7	2.7	3.352	1.831	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	3	1300.	1116.667	1720.	330.	508233.333	712.905	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	06/21/67-06/22/67	3	3.114	2.956	3.236	2.519	0.147	0.384	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			903.64								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	3	330.	430.	790.	170.	103600.	321.87	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	3	2.519	2.549	2.898	2.23	0.112	0.335	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			353.886								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0198

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00						5	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	3	2	0.67						3	2	0.67			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	3	2	0.67						3	2	0.67			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0199

NPS Station ID: SHEN0199
 Location: MIDDLE R. RTE 256 BR W GROTTOS
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005012
 RF3 Index: 02070005000400.00
 Description:

LAT/LON: 38.261670/ -78.861948

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 1.560
 RF3 Mile Point: 0.88

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 065 /065 /MID-S6
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.08

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0199

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	24.75	24.75	26.5	23.	6.125	2.475	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	52.5	52.5	55.	50.	12.5	3.536	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	6.55	6.55	6.8	6.3	0.125	0.354	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	08/18/69-08/18/69	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.06	0.06	0.073	0.047	0.	0.018	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	0.839	0.839	1.003	0.676	0.053	0.231	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.005	1.005	1.21	0.8	0.084	0.29	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	56950.	56950.	91800.	22100.	2429045000.	49285.343	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	4.654	4.654	4.963	4.344	0.191	0.437	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =		45041.98									
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	115995.	115995.	160900.	71090.	4032918050.	63505.26	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	5.029	5.029	5.207	4.852	0.063	0.251	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =		106950.367									
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	11.25	11.25	15.75	6.75	40.5	6.364	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.735	0.735	0.86	0.61	0.031	0.177	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0199

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	2	1.00	2	2	1.00							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0200

NPS Station ID: SHEN0200
 Location: MIDDLE R. RTE 256 BR W GROTTOS
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005012
 RF3 Index: 02070005001200.02
 Description:

LAT/LON: 38.261670/ -78.861948

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 1.560
 RF3 Mile Point: 1.72

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 066 /066 /MID-S6A
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0200

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	23.75	23.75	24.5	23.	1.125	1.061	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	52.	52.	80.	24.	1568.	39.598	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	6.9	6.9	7.3	6.5	0.32	0.566	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	4.75	4.75	6.2	3.3	4.205	2.051	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.123	0.123	0.198	0.047	0.011	0.107	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	1.248	1.248	1.746	0.749	0.497	0.705	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.54	1.54	1.94	1.14	0.32	0.566	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	97850.	97850.	160900.	34800.	7950605000.	89166.165	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	4.874	4.874	5.207	4.542	0.221	0.47	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =		74828.604									
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	81650.	81650.	160900.	2400.12561125000.	112076.425		**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	4.293	4.293	5.207	3.38	1.668	1.291	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =		19650.954									
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	9.75	9.75	11.25	8.25	4.5	2.121	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.76	0.76	0.94	0.58	0.065	0.255	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0200

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	1	0.50	2	1	0.50							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0201

NPS Station ID: SHEN0201
 Location: MIDDLE RIVER NEAR GROTTOS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070008000100.00
 Description:

LAT/LON: 38.261670/ -78.862227

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 5.15

Agency: 112WRD
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 01625000
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 3.50
 Distance from RF3: 0.07

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0201

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/05/68-06/06/94	7	18.5	15.271	22.5	3	69.632	8.345	**	**	**	
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	06/23/92-06/06/94	2	25.25	25.25	29.	21.5	28.125	5.303	**	**	**	
00025	BAROMETRIC PRESSURE (MM OF HG)	06/23/92-06/06/94	2	734.	734.	734.	734.	0.	0.	**	**	**	
00060	FLOW, STREAM, MEAN DAILY CFS	09/04/30-05/21/69	22	312.	315.727	740.	67.	41609.446	203.984	70.6	121.25	410.25	683.4
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/23/92-06/23/92	1	261.	261.	261.	261.	0.	0.	**	**	**	
00065	STAGE, STREAM (FEET)	06/23/92-06/06/94	4	3.625	3.723	4.12	3.52	0.079	0.281	**	**	**	
00080	COLOR (PLATINUM-COBALT UNITS)	09/04/30-05/21/69	22	7.	7.682	17.	3.	12.132	3.483	4.	5.	10.	13.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/12/48-06/06/94	22	354.5	349.273	450.	191.	2745.065	52.393	311.2	320.25	377.75	419.1
00300	OXYGEN, DISSOLVED MG/L	06/23/92-06/06/94	3	8.5	8.3	9.2	7.2	1.03	1.015	**	**	**	
00400	PH (STANDARD UNITS)	10/12/48-06/06/94	22	8.	7.978	8.44	7.4	0.086	0.293	7.43	7.8	8.125	8.4
00400	CONVERTED PH (STANDARD UNITS)	10/12/48-06/06/94	22	8.	7.877	8.44	7.4	0.097	0.311	7.43	7.8	8.125	8.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/12/48-06/06/94	22	0.01	0.013	0.04	0.004	0.	0.01	0.004	0.008	0.016	0.037
00403	PH, LAB, STANDARD UNITS SU	06/23/92-06/23/92	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	
00403	CONVERTED PH, LAB, STANDARD UNITS	06/23/92-06/23/92	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/23/92-06/23/92	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	
00405	CARBON DIOXIDE (MG/L AS CO2)	04/08/69-04/08/69	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/05/68-05/21/69	4	168.	165.	191.	133.	573.333	23.944	**	**	**	
00440	BICARBONATE ION (MG/L AS HCO3)	09/04/30-05/21/69	22	201.5	194.818	251.	94.	1442.156	37.976	116.6	192.25	214.25	232.7
00445	CARBONATE ION (MG/L AS CO3)	09/04/30-05/21/69	6	0.	2.	7.	0.	10.	3.162	**	**	**	
00452	CARBONATE, WATER, DISS, INCR TTT, FIELD, AS CO3, MG/L	06/06/94-06/06/94	1	4.	4.	4.	4.	0.	0.	**	**	**	
00453	BICARBONATE, WATER, DISS, INCR TTT, FIELD, AS HCO3, MG/L	06/06/94-06/06/94	1	233.	233.	233.	233.	0.	0.	**	**	**	
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/23/92-06/06/94	2	0.03	0.03	0.04	0.02	0.	0.014	**	**	**	
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/23/92-06/06/94	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	06/06/94-06/06/94	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/23/92-06/06/94	2##	0.2	0.2	0.3	0.1	0.02	0.141	**	**	**	
00631	NITRITE PLUS NITRATE, DISS, 1 DET. (MG/L AS N)	06/23/92-06/06/94	2	1.4	1.4	1.4	1.4	0.	0.	**	**	**	
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/05/68-05/21/69	3	0.56	0.54	0.69	0.37	0.026	0.161	**	**	**	
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/23/92-06/06/94	2	0.055	0.055	0.07	0.04	0.	0.021	**	**	**	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/23/92-06/06/94	2	0.065	0.065	0.07	0.06	0.	0.007	**	**	**	
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	06/23/92-06/06/94	2	0.05	0.05	0.06	0.04	0.	0.014	**	**	**	
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/04/30-05/21/69	22	178.5	172.773	218.	93.	973.422	31.2	108.1	166.	189.75	206.5
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/12/48-05/21/69	19	13.	12.895	26.	0.	38.099	6.172	7.	8.	17.	20.
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/04/30-06/23/92	23	46.	46.652	65.	27.	82.51	9.083	31.4	40.	54.	57.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/04/30-06/23/92	23	15.	14.03	21.	6.2	13.139	3.625	7.9	12.	16.	19.
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/04/30-06/23/92	21	3.1	3.486	11.	0.6	5.666	2.38	0.8	2.15	4.05	7.4
00931	SODIUM ADSORPTION RATIO	03/05/68-05/21/69	4	0.15	0.175	0.3	0.1	0.009	0.096	**	**	**	
00932	SODIUM, PERCENT	03/05/68-05/21/69	4	5.5	6.5	11.	4.	11.	3.317	**	**	**	
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/04/30-06/23/92	11	1.8	1.845	2.7	1.	0.211	0.459	1.1	1.6	2.2	2.62

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0201

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00940	CHLORIDE,TOTAL IN WATER MG/L	09/04/30-06/23/92	23	3.	4.696	19.	2.	17.04	4.128	2.	3.	4.	11.4
00945	SULFATE, TOTAL (MG/L AS SO4)	09/04/30-06/23/92	23	9.	9.696	22.	4.	15.494	3.936	5.4	6.	12.	14.6
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/05/45-06/23/92	21	0.1	0.069	0.2	0.	0.005	0.072	0.	0.	0.1	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/04/30-06/23/92	23	4.6	4.53	12.	0.4	9.076	3.013	0.68	1.6	5.2	9.76
01046	IRON, DISSOLVED (UG/L AS FE)	03/05/68-06/23/92	4	33.5	31.75	60.	0.	1072.25	32.745	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/69-04/08/69	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/23/92-06/23/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
04024	PROPACHLOR,DISSOLVED,WATER,TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1##	0.009	0.009	0.009	0.009	0.	0.	**	**	**	**
04040	DEETHYL ATRAZINE,DISSOLVED,WATER,TOT REC UG/L	06/23/92-06/23/92	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
04041	CYANAZINE,DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1##	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1##	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
30282	METHIOCARB, WATER, WHOLE, RECOVERABLE, UG/L	06/23/92-06/23/92	1##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
30296	PROPOXUR, WATER, WHOLE, RECOVERABLE, UG/L	06/23/92-06/23/92	1##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
31625	FECAL COLIFORM, MF,M-FC, 0.7 UM	06/23/92-06/23/92	1	325.	325.	325.	325.	0.	0.	**	**	**	**
31625	LOG FECAL COLIFORM, MF,M-FC, 0.7 UM	06/23/92-06/23/92	1	2.512	2.512	2.512	2.512	0.	0.	**	**	**	**
31625	GM FECAL COLIFORM, MF,M-FC, 0.7 UM	06/23/92-06/23/92			325.								
31673	FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	06/23/92-06/23/92	1	390.	390.	390.	390.	0.	0.	**	**	**	**
31673	LOG FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	06/23/92-06/23/92	1	2.591	2.591	2.591	2.591	0.	0.	**	**	**	**
31673	GM FECAL STREPTOCOCCI, MBR FILT,KF AGAR,35C,48HR	06/23/92-06/23/92			390.								
34253	A-BHC-ALPHA DISSUG/L	06/23/92-06/23/92	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
34653	P,P'-DDE DISSUG/L	06/23/92-06/23/92	1##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
34790	SURFACTANTS, AS CTAS, WATER MG/L	08/18/92-08/18/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
34795	ANTIMONY,SED,BOT,	08/18/92-08/18/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
34800	ARSENIC,SED,BOT,WET SIEVE,	08/18/92-08/18/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
34810	BERYLLIUM,SED,BOT,WET SIEVE,	08/18/92-08/18/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
34816	BISMUTH,SED,BOT,WET SIEVE,	08/18/92-08/18/92	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34825	CADMIUM,SED,BOT,	08/18/92-08/18/92	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
34830	CALCIUM,SED,BOT,	08/18/92-08/18/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
34835	CERIUM,SED,BOT,	08/18/92-08/18/92	1	79.	79.	79.	79.	0.	0.	**	**	**	**
34840	CHROMIUM,SED,BOT,	08/18/92-08/18/92	1	55.	55.	55.	55.	0.	0.	**	**	**	**
34845	COBALT,SED,BOT,	08/18/92-08/18/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
34850	COPPER,SED,BOT,	08/18/92-08/18/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
34855	EUROPIUM,SED,BOT,	08/18/92-08/18/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
34860	GALLIUM,SED,BOT,	08/18/92-08/18/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
34870	GOLD,SED,BOT,	08/18/92-08/18/92	1##	4.	4.	4.	4.	0.	0.	**	**	**	**
34875	HOLMIUM,SED,BOT,	08/18/92-08/18/92	1##	2.	2.	2.	2.	0.	0.	**	**	**	**
34880	IRON,SED,BOT,	08/18/92-08/18/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
34885	LANTHANUM,SED,BOT,	08/18/92-08/18/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
34890	LEAD,SED,BOT,	08/18/92-08/18/92	1	24.	24.	24.	24.	0.	0.	**	**	**	**
34895	LITHIUM,SED,BOT,	08/18/92-08/18/92	1	50.	50.	50.	50.	0.	0.	**	**	**	**
34900	MAGNESIUM,SED,BOT,	08/18/92-08/18/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
34905	MANGANESE,SED,BOT,	08/18/92-08/18/92	1	900.	900.	900.	900.	0.	0.	**	**	**	**
34910	MERCURY,SED,BOT,	08/18/92-08/18/92	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
34915	MOLYBDENUM,SED,BOT,	08/18/92-08/18/92	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34920	NEODYMIUM,SED,BOT,	08/18/92-08/18/92	1	34.	34.	34.	34.	0.	0.	**	**	**	**
34925	NICKEL,SED,BOT,	08/18/92-08/18/92	1	27.	27.	27.	27.	0.	0.	**	**	**	**
34930	NIOBIUM,SED,BOT,	08/18/92-08/18/92	1	7.	7.	7.	7.	0.	0.	**	**	**	**
34935	PHOSPHORUS,SED,BOT,	08/18/92-08/18/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
34940	POTASSIUM,SED,BOT,	08/18/92-08/18/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
34945	SCANDIUM,SED,BOT,	08/18/92-08/18/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
34950	SELENIUM,SED,BOT,	08/18/92-08/18/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34955	SILVER,SED,BOT,	08/18/92-08/18/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
34960	SODIUM,SED,BOT,	08/18/92-08/18/92	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
34965	STRONTIUM,SED,BOT,	08/18/92-08/18/92	1	88.	88.	88.	88.	0.	0.	**	**	**	**
34970	SULFUR,SED,BOT,	08/18/92-08/18/92	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**
34975	TANTALUM,SED,BOT,	08/18/92-08/18/92	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
34980	THORIUM,SED,BOT,	08/18/92-08/18/92	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
34985	TIN,SED,BOT,	08/18/92-08/18/92	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
35000	URANIUM,SED,BOT,	08/18/92-08/18/92	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
35005	VANADIUM,SED,BOT,	08/18/92-08/18/92	1	68.	68.	68.	68.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0201

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
35010	YTTRIUM,SED,BOT,	08/18/92-08/18/92	1	23.	23.	23.	23.	23.	0.	0.	**	**	**
35015	YTTERBIUM,SED,BOT,	08/18/92-08/18/92	1	2.	2.	2.	2.	2.	0.	0.	**	**	**
35020	ZINC,SED,BOT,	08/18/92-08/18/92	1	90.	90.	90.	90.	90.	0.	0.	**	**	**
38933	CHLORPYRIFOS,DISSOLVED UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
39051	METHOMYL IN WHOLE WATER (UG/L)	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39052	PROPHAM IN WHOLE WATER (UG/L)	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CACO3,MG/L	06/06/94-06/06/94	1	197.	197.	197.	197.	197.	0.	0.	**	**	**
39341	GAMMA-BHC(LINDANE),DISSOLVED,UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
39415	METOLACHLOR, WATER, DISSOLVED UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.003	0.003	0.003	0.003	0.003	0.	0.	**	**	**
39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
39632	ATRAZINE DISSOLVED IN WATER PPB	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
39720	PICLORAM IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39750	SEVIN IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.005	0.	0.	**	**	**
46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/04/30-06/23/92	22	189.5	188.	248.	107.	1119.238	33.455	123.6	176.5	205.5	234.3
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/05/68-05/21/69	4	207.	201.25	229.	162.	922.917	30.38	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	03/05/68-05/21/69	4	86.3	84.075	117.	46.7	1173.809	34.261	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/05/68-05/21/69	4	0.28	0.285	0.34	0.24	0.002	0.044	**	**	**	**
71835	OXYGEN CONSUMED, FILTERED MG/L	09/04/30-03/31/31	2	2.35	2.35	2.6	2.1	0.125	0.354	**	**	**	**
71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/04/30-03/31/31	2	2.6	2.6	3.4	1.8	1.28	1.131	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/04/30-05/21/69	22	2.85	3.305	7.2	1.2	2.442	1.563	1.56	2.275	4.325	6.11
71885	IRON (UG/L AS FE)	09/04/30-01/16/56	18	30.	32.778	100.	0.	633.007	25.16	9.	10.	40.	82.
77441	1-NAPHTHOL WHOLE WATER,UG/L	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
82052	BANVEL (DICAMBA) WHOLE WATER,UG/L	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82183	2,4-DP (DICHLORPROP) TOTAL UG/L	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82584	3-HYDROXY CARBOFURAN, WATER,TOTAL RECOVERABLE,UG/L	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
82586	ALDICARB SULFOXIDE, WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
82587	ALDICARB SULFONE, WH WATER, TOTAL RECOVERABLE,UG/L	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
82613	OXYAMYL, WHOLE WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
82615	CARBOFURAN, WHOLE WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
82619	ALDICARB, WHOLE WATER, TOTAL RECOVERABLE UG/L	06/23/92-06/23/92	1 ##	0.25	0.25	0.25	0.25	0.25	0.	0.	**	**	**
82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82660	DIETHYLANILINE, 2, 6-0.7UM FILT,TOT RECV,WTR UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	06/23/92-06/06/94	2 ##	0.	0.	0.	0.	0.	0.	0.	**	**	**
82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.004	0.004	0.004	0.004	0.004	0.	0.	**	**	**
82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	06/23/92-06/23/92	1 ##	0.003	0.003	0.003	0.003	0.003	0.	0.	**	**	**
82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.01	0.01	0.01	0.01	0.01	0.	0.	**	**	**
82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**
82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.002	0.002	0.002	0.002	0.002	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0201

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**
82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	06/23/92-06/23/92	1 ##	0.003	0.003	0.003	0.003	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0201

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	4.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00400	PH	9.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
00403	PH, LAB	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	1.	2	0	0.00							2	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	10.	2	0	0.00							2	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00			
	Drinking Water	250.	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	4.	21	0	0.00	6	0	0.00	9	0	0.00	6	0	0.00			
04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVER	4.	1	0	0.00							1	0	0.00			
31625	FECAL COLIFORM, MF	200.	1	1	1.00							1	1	1.00			
34653	P,P'-DDE, DISSOLVED	1050.	1	0	0.00							1	0	0.00			
38933	CHLORPYRIFOS, DISSOLVED	0.083	1	0	0.00							1	0	0.00			
39341	GAMMA-BHC(LINDANE), DISSOLVED	2.	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE	2.5	1	0	0.00							1	0	0.00			
39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE	0.065	1	0	0.00							1	0	0.00			
39632	ATRAZINE DISSOLVED IN WATER	3.	1	0	0.00							1	0	0.00			
39720	PICLORAM IN WHOLE WATER SAMPLE	500.	1	0	0.00							1	0	0.00			
39730	2,4-D IN WHOLE WATER SAMPLE	70.	1	0	0.00							1	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	50.	1	0	0.00							1	0	0.00			
46342	ALACHLOR (LASSO), WATER, DISSOLVED	2.	1	0	0.00							1	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	22	0	0.00	7	0	0.00	9	0	0.00	6	0	0.00			
82586	ALDICARB SULFOXIDE, WATER, TOTAL RECOVER	4.	1	0	0.00							1	0	0.00			
82587	ALDICARB SULFONE, WHOLE WATER, TOTAL REC	2.	1	0	0.00							1	0	0.00			
82613	OXAMYL, WHOLE WATER, TOTAL RECOVERABLE	200.	1	0	0.00							1	0	0.00			
82615	CARBOFURAN, WHOLE WATER, TOTAL RECOVERAB	40.	1	0	0.00							1	0	0.00			
82619	ALDICARB, WHOLE WATER, TOTAL RECOVERABLE	3.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0202

NPS Station ID: SHEN0202
 Location: MIDDLE RIVER AT RT 256 070
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005012
 RF3 Index: 02070005001212.93
 Description:

LAT/LON: 38.261670/ -78.862227

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 1.560
 RF3 Mile Point: 13.71

Agency: 1112A9WQ
 FIPS State/County: 51013 VIRGINIA/ARLINGTON
 STORET Station ID(s): UP-POT-070 /SHEN-070 /070 /MID RIV 70
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0202

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	3	14.	13.333	23.	3.	100.333	10.017	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/19/72-04/16/73	3	11.5	11.133	13.5	8.4	6.603	2.57	**	**	**	**
00400	PH (STANDARD UNITS)	02/13/73-02/13/73	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/13/73-02/13/73	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/13/73-02/13/73	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/72-04/16/73	3	0.055	0.072	0.105	0.055	0.001	0.029	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/19/72-04/16/73	3	0.474	0.543	0.705	0.45	0.02	0.141	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/19/72-04/16/73	3	1.12	1.197	1.4	1.07	0.032	0.178	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/19/72-04/16/73	3	0.13	0.257	0.51	0.13	0.048	0.219	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-02/13/73	2	1.95	1.95	2.4	1.5	0.405	0.636	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	09/19/72-02/13/73	2	40.45	40.45	44.6	36.3	34.445	5.869	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/72-04/16/73	3	0.18	0.33	0.65	0.16	0.077	0.277	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0202

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0203

NPS Station ID: SHEN0203
 Location: T 769 BR (FORMERLY RT 256).
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: SHENANDOAH RIVER
 Minor Basin: NORTH RIVER MIDDLE R AT R
 RF1 Index: 02070005012
 RF3 Index: 02070007000500.00

LAT/LON: 38.261670/ -78.863060

Depth of Water: 999
 Elevation: 0
 RF1 Mile Point: 1.410
 RF3 Mile Point: 2.98

Agency: 1113VABD
 FIPS State/County: 54000 WEST VIRGINIA/
 STORET Station ID(s): MID 1 /MIDDLE RIVER
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.05

On/Off RF1: OFF
 On/Off RF3:

Description:
 REQUESTED BY AIR AND WATER DIVISION IN CONNECTION WITH A LAWSUIT. NEEDED TO AID IN MODEL VERIFICATION AND IN THE EVALUATION OF WASTE TREATMENT NEEDS FOR HARRISONBURG AREA.

Parameter Inventory for Station: SHEN0203

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0204

NPS Station ID: SHEN0204
 Location: ROUTE 769 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH-ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005012
 RF3 Index: 02070005002405.98
 Description:

LAT/LON: 38.261949/ -78.862227

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 1.410
 RF3 Mile Point: 12.82

Agency: 21VASWCB
 FIPS State/County: 51015 VIRGINIA/AUGUSTA
 STORET Station ID(s): 1BMDL001.83 /VA1B04-X0096/VA1B6X0096
 Within Park Boundary: No

Date Created: 06/14/80

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: MIDDLE RIVER SECTION: 04 TOPO MAP #: 0055 TOPO MAP NAME: GROTTOS, VA

Parameter Inventory for Station: SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	207	15.	14.588	30.5	0.2	64.281	8.018	3.6	7.1	22.	24.72
00061	FLOW, STREAM, INSTANTANEOUS CFS	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	25	4.9	16.82	178.	0.6	1443.548	37.994	0.76	2.2	11.1	51.6
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	54	6.95	14.346	178.	1.	723.993	26.907	1.85	2.9	12.225	37.6
00080	COLOR (PLATINUM-COBALT UNITS)	22	17.5	21.818	62.	9.	159.299	12.621	11.3	13.75	27.25	42.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	104	389.	406.538	2690.	165.	54520.387	233.496	305.5	349.25	423.5	456.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	97	395.	384.031	463.	183.	3229.551	56.829	299.8	366.	424.	444.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	80	9.75	10.083	14.9	6.7	4.81	2.193	7.42	8.1	11.975	13.45
00300	OXYGEN, DISSOLVED MG/L	126	10.55	10.66	15.8	6.8	4.635	2.153	7.8	8.775	12.2	13.56
00310	BOD, 5 DAY, 20 DEG C MG/L	193	1.	1.487	9.	0.5	1.134	1.065	0.5	1.	2.	2.48
00340	COD, .25N K2CR2O7 MG/L	200	7.	7.91	52.	0.5	37.183	6.098	2.	5.	10.	14.
00400	PH (STANDARD UNITS)	203	8.25	8.29	9.5	6.9	0.192	0.438	7.752	8.	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	203	8.25	8.072	9.5	6.9	0.239	0.489	7.752	8.	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	203	0.006	0.008	0.126	0.	0.	0.012	0.001	0.003	0.01	0.018
00403	PH, LAB, STANDARD UNITS SU	144	8.2	8.174	9.1	5.8	0.115	0.34	7.9	8.	8.4	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	144	8.2	7.719	9.1	5.8	0.324	0.569	7.9	8.	8.4	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	144	0.006	0.019	1.585	0.001	0.017	0.132	0.003	0.004	0.01	0.013
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	143	178.	171.664	218.	3.	1161.563	34.082	126.4	154.	195.	205.2
00500	RESIDUE, TOTAL (MG/L)	37	241.	259.568	569.	180.	5503.808	74.188	206.2	227.5	264.	318.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	36	60.	69.583	353.	26.	2824.364	53.145	39.4	48.25	68.5	95.4
00510	RESIDUE, TOTAL FIXED (MG/L)	37	188.	190.838	340.	117.	1787.306	42.277	144.8	169.	203.5	221.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	201	8.	19.898	538.	0.5	2155.536	46.428	1.5	2.5	21.5	41.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	200	2.5	3.805	54.	0.	25.731	5.073	1.	1.5	5.	7.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	201	6.	16.577	484.	0.	1730.54	41.6	1.5	2.5	16.	35.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	199##	0.05	0.057	0.4	0.02	0.003	0.055	0.02	0.02	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	199	0.02	0.02	0.09	0.	0.	0.016	0.005	0.01	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	199	1.21	1.282	10.	0.02	0.539	0.734	0.88	1.	1.42	1.7
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	197	0.3	0.377	4.1	0.05	0.117	0.342	0.2	0.2	0.4	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	196	0.1	0.133	0.8	0.05	0.01	0.101	0.05	0.05	0.2	0.203
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	124	0.09	0.112	0.8	0.005	0.009	0.092	0.03	0.05	0.158	0.21
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	168	3.6	4.834	34.	0.5	21.538	4.641	1.4	2.	6.	9.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	141	198.	191.723	294.	86.	999.916	31.621	146.	172.	214.	222.8
00940	CHLORIDE, TOTAL IN WATER MG/L	102	11.	11.059	24.	5.	9.026	3.004	8.	9.	12.25	14.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	101	12.	12.812	41.	7.	19.454	4.411	9.	10.	14.	18.
00951	FLUORIDE, TOTAL (MG/L AS F)	01/17/89-04/12/93	30	0.125	0.128	0.27	0.03	0.004	0.064	0.05	0.088	0.15	0.249
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/13/89-02/08/93	31	5.3	4.79	9.1	0.3	7.604	2.757	0.62	2.2	6.6	8.74
01002	ARSENIC, TOTAL (UG/L AS AS)	07/14/82-07/14/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/15/79-07/22/96	4 ##	6.75	7.075	14.3	0.5	43.923	6.627	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/02/83-07/22/96	2 ##	1.8	1.8	2.5	1.1	0.98	0.99	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/14/82-07/14/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	4 ##	0.395	0.85	2.5	0.11	1.235	1.111	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	4	23.	23.275	28.5	18.6	16.436	4.054	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/14/82-07/14/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/14/82-07/14/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/15/79-07/22/96	4	20.1	18.4	24.	9.4	41.787	6.464	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/14/82-07/14/82	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/15/79-07/22/96	4	15.	18.575	32.9	11.4	94.082	9.7	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	1	751.	751.	751.	751.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/14/82-07/14/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/15/79-07/22/96	4	20.5	20.775	30.7	11.4	70.349	8.387	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/02/91-07/22/96	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/14/82-07/14/82	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/15/79-07/22/96	4	66.1	75.475	128.7	41.	1594.009	39.925	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	1	23400.	23400.	23400.	23400.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/02/83-07/22/96	2 ##	6.8	6.8	13.1	0.5	79.38	8.91	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	1	23100.	23100.	23100.	23100.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/30/79-12/21/98	184	200.	773.967	8000.	10.	2715242.644	1647.799	50.	50.	700.	1500.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/30/79-12/21/98	184	2.301	2.34	3.903	1.	0.418	0.646	1.699	1.699	2.845	3.175
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			218.945								
32240	TANNIN AND LIGNIN (MG/L)	06/04/92-12/01/92	2	0.25	0.25	0.4	0.1	0.045	0.212	**	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/16/82-01/18/83	2	0.003	0.003	0.003	0.002	0.	0.001	**	**	**	**
34480	THALLIUM DRY WGTBOTMG/KG	06/02/83-06/02/83	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/02/91-07/22/96	2 ##	17.503	17.503	35.	0.005	612.325	24.745	**	**	**	**
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/14/82	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/02/83-07/22/96	3 ##	15.	21.673	50.	0.02	657.9	25.65	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/02/91-07/22/96	2 ##	10.25	10.25	20.	0.5	190.125	13.789	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	7.525	7.525	15.	0.05	111.751	10.571	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	7.525	7.525	15.	0.05	111.751	10.571	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	2 ##	40.25	40.25	80.	0.5	3160.125	56.215	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/02/91-07/22/96	2 ##	132.5	132.5	250.	15.	27612.5	166.17	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/14/82-07/14/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/02/83-06/02/83	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/15/79-07/10/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/29/82-08/12/85	7	0.	0.029	0.2	0.	0.006	0.076	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	75	0.05	0.06	0.2	0.005	0.001	0.036	0.02	0.03	0.08	0.104

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71900	MERCURY, TOTAL (UG/L AS HG)	07/14/82-07/14/82	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/15/79-07/22/96	4 ##	0.2	0.238	0.5	0.05	0.037	0.193	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/02/91-07/22/96	2 ##	27.5	27.5	50.	5.	1012.5	31.82	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/02/91-07/22/96	2 ##	42.5	42.5	50.	35.	112.5	10.607	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/18/92-06/20/94	23	3.6	7.422	44.	0.6	120.875	10.994	0.78	2.	4.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0204

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	25	2	0.08	6	1	0.17	13	1	0.08	6	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	54	3	0.06	17	1	0.06	21	1	0.05	16	1	0.06			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	80	0	0.00	25	0	0.00	31	0	0.00	24	0	0.00			
00300	OXYGEN, DISSOLVED	4.	126	0	0.00	39	0	0.00	50	0	0.00	37	0	0.00			
00400	PH	9.	203	25	0.12	63	4	0.06	80	10	0.13	60	11	0.18			
	Other-Lo Lim.	6.5	203	0	0.00	63	0	0.00	80	0	0.00	60	0	0.00			
00403	PH, LAB	9.	144	2	0.01	43	1	0.02	60	1	0.02	41	0	0.00			
	Other-Lo Lim.	6.5	144	1	0.01	43	0	0.00	60	1	0.02	41	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	199	0	0.00	57	0	0.00	79	0	0.00	63	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	199	1	0.01	57	0	0.00	79	1	0.01	63	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	102	0	0.00	28	0	0.00	43	0	0.00	31	0	0.00			
	Drinking Water	250.	102	0	0.00	28	0	0.00	43	0	0.00	31	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	101	0	0.00	28	0	0.00	42	0	0.00	31	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	30	0	0.00	9	0	0.00	14	0	0.00	7	0	0.00			
01002	ARSENIC, TOTAL	360.	1	0	0.00	1	0	0.00									
	Drinking Water	50.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	3.9	1	0	0.00	1	0	0.00									
	Drinking Water	5.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	18.	1	0	0.00	1	0	0.00									
	Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	82.	1	0	0.00	1	0	0.00									
	Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	1400.	1	0	0.00	1	0	0.00									
	Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	120.	1	0	0.00	1	0	0.00									
	Drinking Water	5000.	1	0	0.00	1	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	184	94	0.51	53	35	0.66	73	27	0.37	58	32	0.55			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	20.	2	0	0.00	2	0	0.00									
	Drinking Water	1.	2	0	0.00	2	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE	1.1	2	0	0.00	2	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	0.6	2	0	0.00	2	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	1050.	2	0	0.00	2	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	3.	3	0	0.00	3	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	2.4	2	0	0.00	2	0	0.00									
	Drinking Water	2.	2	0	0.00	2	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.5	2	0	0.00	2	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	0.18	2	0	0.00	2	0	0.00									
	Drinking Water	2.	2	0	0.00	2	0	0.00									
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	40.	2	0	0.00	2	0	0.00									
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	6.	2	0	0.00	2	0	0.00									
	Drinking Water	1.	2	0	0.00	2	0	0.00									
50060	CHLORINE, TOTAL RESIDUAL	0.019	7	1	0.14	4	1	0.25				3	0	0.00			
71900	MERCURY, TOTAL	2.4	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									
82078	TURBIDITY, FIELD	50.	23	0	0.00	5	0	0.00	9	0	0.00	9	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1979 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	18.2	17.056	22.3	9.	22.	4.69	9.	13.5	20.75	22.3
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	9	335.	346.889	422.	274.	3018.861	54.944	274.	292.	402.5	422.
00300	OXYGEN, DISSOLVED MG/L	9	9.8	10.344	13.4	8.5	2.335	1.528	8.5	9.45	11.4	13.4
00310	BOD, 5 DAY, 20 DEG C MG/L	8	1.	1.125	2.	1.	0.125	0.354	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	9	6.	7.111	16.	2.	15.111	3.887	2.	5.	8.	16.
00400	PH (STANDARD UNITS)	9	8.5	8.522	9.	8.	0.192	0.438	8.	8.	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	9	8.5	8.338	9.	8.	0.23	0.48	8.	8.	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.003	0.005	0.01	0.001	0.	0.004	0.001	0.001	0.01	0.01
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	9	27.	22.167	58.	2.5	302.875	17.403	2.5	7.	29.5	58.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	8	6.	5.188	7.	2.	4.281	2.069	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	9	17.	16.722	51.	2.5	242.194	15.563	2.5	4.	23.	51.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	9##	0.05	0.067	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	9	0.01	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	9	1.1	1.078	1.5	0.7	0.054	0.233	0.7	0.9	1.2	1.5
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	9	0.2	0.278	0.7	0.1	0.032	0.179	0.1	0.2	0.35	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	9	0.1	0.083	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	9	0.05	0.051	0.1	0.005	0.001	0.033	0.005	0.023	0.08	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	9	8.	7.444	13.	3.	9.778	3.127	3.	4.5	9.5	13.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	7	400.	635.714	1600.	50.	388928.571	623.641	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	7	2.602	2.513	3.204	1.699	0.372	0.61	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			325.508								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10	11.85	15.37	30.5	5.	74.791	8.648	5.14	8.725	23.4	29.85
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	10	434.5	416.1	465.	319.	2335.878	48.331	323.	380.	455.25	464.7
00300	OXYGEN, DISSOLVED MG/L	10	10.45	10.75	13.	8.4	2.054	1.433	8.52	9.75	12.025	12.94
00310	BOD, 5 DAY, 20 DEG C MG/L	10	2.	1.7	2.	1.	0.233	0.483	1.	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	10	6.	6.3	13.	0.5	21.289	4.614	0.5	1.625	10.5	12.9
00400	PH (STANDARD UNITS)	10	9.	9.05	9.5	8.7	0.047	0.217	8.72	8.975	9.15	9.48
00400	CONVERTED PH (STANDARD UNITS)	10	9.	9.006	9.5	8.7	0.049	0.222	8.72	8.975	9.15	9.48
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.001	0.001	0.002	0.	0.	0.	0.	0.001	0.001	0.002
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10	18.5	18.1	45.	2.5	248.878	15.776	2.5	2.5	30.5	44.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10	2.5	3.6	8.	2.	4.156	2.039	2.	2.375	5.25	7.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10	16.	15.5	40.	2.5	181.278	13.464	2.5	2.5	23.75	39.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10	0.02	0.019	0.04	0.01	0.	0.01	0.01	0.01	0.023	0.039
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10	1.2	2.049	10.	0.7	7.887	2.808	0.72	0.975	1.6	9.16
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	9	0.2	0.233	0.3	0.2	0.002	0.05	0.2	0.2	0.3	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	9	0.1	0.128	0.2	0.05	0.003	0.057	0.05	0.1	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10	0.095	0.1	0.21	0.01	0.006	0.076	0.012	0.03	0.17	0.209
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10	8.	9.9	23.	6.	26.989	5.195	6.	6.75	12.25	22.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	125.	391.	2100.	10.	407921.111	638.687	14.	50.	475.	1960.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	2.	2.134	3.322	1.	0.481	0.693	1.07	1.699	2.663	3.275
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			136.251								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11	14.5	13.836	25.5	2.	71.445	8.452	2.2	5.5	23.5	25.1
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	11	478.	450.909	515.	256.	5301.891	72.814	284.4	433.	494.	513.
00300	OXYGEN, DISSOLVED MG/L	11	11.2	11.136	14.2	8.2	3.165	1.779	8.28	9.7	12.2	13.96
00310	BOD, 5 DAY, 20 DEG C MG/L	11	2.	2.273	4.	1.	1.018	1.009	1.	2.	3.	4.
00340	COD, .25N K2CR2O7 MG/L	11	9.	12.682	52.	0.5	183.414	13.543	1.4	8.	13.	44.4
00400	PH (STANDARD UNITS)	10	9.	8.736	9.5	7.9	0.265	0.515	7.918	8.148	9.003	9.451
00400	CONVERTED PH (STANDARD UNITS)	10	9.	8.456	9.5	7.9	0.352	0.593	7.918	8.148	9.002	9.451
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.001	0.003	0.013	0.	0.	0.004	0.	0.001	0.007	0.012
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	11.	11.5	28.	2.5	62.9	7.931	2.5	2.5	16.	26.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11	4.	4.045	7.	2.	3.573	1.89	2.	2.5	5.	7.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11	6.	8.136	21.	2.5	34.255	5.853	2.5	2.5	12.	19.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11 ##	0.05	0.105	0.3	0.05	0.01	0.099	0.05	0.05	0.1	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11	0.01	0.021	0.08	0.005	0.001	0.024	0.005	0.005	0.02	0.074
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11	0.9	1.122	3.3	0.39	0.641	0.801	0.412	0.7	1.4	2.92
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11	0.4	0.436	0.9	0.2	0.045	0.211	0.2	0.3	0.6	0.84
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11	0.2	0.245	0.8	0.1	0.039	0.197	0.1	0.1	0.3	0.7
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11	0.18	0.228	0.8	0.1	0.038	0.195	0.1	0.14	0.22	0.688
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11	10.	10.591	34.	0.5	77.441	8.8	0.8	5.	12.	29.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	100.	622.727	5000.	50.	2202681.818	1484.143	50.	50.	200.	4220.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	2.	2.14	3.699	1.699	0.43	0.656	1.699	1.699	2.301	3.567
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	137.93							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	13.	14.378	24.	3.	64.792	8.049	3.	6.8	23.5	24.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	9	413.	370.333	449.	165.	8168.5	90.38	165.	325.	429.	449.
00300	OXYGEN, DISSOLVED MG/L	9	11.5	10.667	12.2	7.2	2.51	1.584	7.2	9.65	11.7	12.2
00310	BOD, 5 DAY, 20 DEG C MG/L	9	2.	2.556	6.	1.	3.278	1.81	1.	1.	4.	6.
00340	COD, .25N K2CR2O7 MG/L	9	13.	15.222	33.	5.	113.194	10.639	5.	5.5	26.	33.
00400	PH (STANDARD UNITS)	9	8.18	8.108	9.	7.49	0.228	0.477	7.49	7.65	8.4	9.
00400	CONVERTED PH (STANDARD UNITS)	9	8.18	7.913	9.	7.49	0.27	0.52	7.49	7.65	8.4	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.007	0.012	0.032	0.001	0.	0.011	0.001	0.004	0.023	0.032
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	9	16.	88.556	538.	2.5	31052.215	176.216	2.5	6.75	95.5	538.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	9	4.	11.111	54.	2.	293.549	17.133	2.	2.5	13.5	54.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	9	10.	78.	484.	2.5	25234.938	158.855	2.5	4.75	83.5	484.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	9 ##	0.05	0.144	0.4	0.05	0.022	0.149	0.05	0.05	0.275	0.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	9	0.03	0.024	0.06	0.005	0.	0.017	0.005	0.008	0.03	0.06
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	9	1.2	1.138	1.6	0.5	0.134	0.366	0.5	0.835	1.385	1.6
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	9	0.4	0.428	0.9	0.1	0.062	0.249	0.1	0.25	0.6	0.9
00665	PHOSPHORUS, TOTAL (MG/L AS P)	9	0.2	0.219	0.4	0.05	0.013	0.115	0.05	0.11	0.3	0.4
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	9	0.16	0.191	0.36	0.07	0.009	0.093	0.07	0.12	0.265	0.36
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	9	8.	8.111	15.	3.	20.111	4.485	3.	4.5	12.5	15.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	1800.	2881.25	8000.	50.	11309955.357	3363.028	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	3.175	2.976	3.903	1.699	0.719	0.848	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	946.684							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11	15.8	14.527	26.	1.8	71.544	8.458	2.08	9.	24.8	25.8
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	11	382.	599.364	2690.	352.	481557.655	693.944	355.	372.	426.	2240.2
00300	OXYGEN, DISSOLVED MG/L	11	10.9	11.064	13.7	7.1	3.995	1.999	7.5	9.8	13.2	13.64
00310	BOD, 5 DAY, 20 DEG C MG/L	10	1.	1.4	3.	1.	0.489	0.699	1.	1.	2.	2.9
00340	COD, .25N K2CR2O7 MG/L	11	5.	7.227	18.	0.5	29.868	5.465	0.8	4.	10.	17.6
00400	PH (STANDARD UNITS)	10	8.575	8.412	9.	7.4	0.431	0.656	7.405	7.653	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	10	8.569	7.968	9.	7.4	0.65	0.806	7.405	7.653	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.003	0.011	0.04	0.001	0.	0.015	0.001	0.001	0.023	0.039
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	11.	25.045	96.	2.5	1099.073	33.152	2.5	2.5	31.	93.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11	5.	4.682	9.	2.	6.164	2.483	2.	2.5	7.	8.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11	6.	21.045	89.	1.	976.673	31.252	1.3	2.5	25.	86.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11 ##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11	0.02	0.018	0.04	0.01	0.	0.01	0.01	0.01	0.02	0.038
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11	1.1	1.049	1.5	0.16	0.118	0.344	0.306	0.99	1.3	1.46
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11	0.4	0.591	1.5	0.1	0.235	0.485	0.12	0.2	1.2	1.44
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11	0.12	0.133	0.3	0.05	0.007	0.085	0.05	0.05	0.2	0.282
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11	0.12	0.125	0.22	0.04	0.004	0.064	0.044	0.07	0.2	0.218
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11	3.	3.545	9.	1.	7.073	2.659	1.	2.	4.	8.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	250.	1505.	8000.	50.	7491916.667	2737.137	50.	50.	1925.	7700.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	2.389	2.521	3.903	1.699	0.624	0.79	1.699	1.699	3.14	3.883
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			331.857								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	8	13.05	13.7	20.	4.5	32.163	5.671	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	8	355.5	351.375	421.	279.	2920.839	54.045	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	8	10.55	10.888	15.	7.6	7.867	2.805	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	8	1.5	1.438	2.	0.5	0.388	0.623	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	8	5.	4.25	7.	1.	4.214	2.053	**	**	**	**
00400	PH (STANDARD UNITS)	8	8.21	8.462	9.1	7.98	0.23	0.479	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	8	8.21	8.285	9.1	7.98	0.266	0.515	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	8	0.006	0.005	0.01	0.001	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	1	186.	186.	186.	186.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	8	8.	13.75	42.	2.5	211.857	14.555	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	8	3.	4.375	11.	2.	9.054	3.009	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	8	5.	10.	36.	2.	144.5	12.021	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	8 ##	0.05	0.056	0.1	0.05	0.	0.018	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	8	0.02	0.023	0.03	0.01	0.	0.007	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	8	1.405	1.408	1.92	0.93	0.138	0.372	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	8	0.3	0.3	0.5	0.2	0.011	0.107	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	8	0.1	0.119	0.2	0.05	0.005	0.07	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	8	0.08	0.089	0.2	0.03	0.003	0.057	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	8	2.5	3.438	9.	0.5	8.96	2.993	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	100.	506.25	2500.	50.	732455.357	855.836	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	2.	2.241	3.398	1.699	0.414	0.644	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			174.091								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	11	11.5	12.891	25.	0.2	67.507	8.216	0.56	8.3	20.	24.36
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	11	379.	368.909	438.	260.	2467.691	49.676	272.4	338.	411.	433.
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	11	11.	10.964	14.	7.4	6.399	2.53	7.56	8.3	13.8	14.
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	11	1.	0.955	1.	0.5	0.023	0.151	0.6	1.	1.	1.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	11	3.	4.091	9.	1.	8.091	2.844	1.	2.	7.	8.6
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	10	8.2	8.18	8.7	7.6	0.1	0.316	7.62	7.95	8.4	8.67
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	10	8.2	8.071	8.7	7.6	0.113	0.336	7.62	7.95	8.4	8.67
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	10	0.006	0.008	0.025	0.002	0.	0.007	0.002	0.004	0.011	0.024
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	11	8.2	8.182	8.5	8.	0.026	0.16	8.	8.	8.2	8.48
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	11	8.2	8.157	8.5	8.	0.026	0.162	8.	8.	8.2	8.48
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	11	0.006	0.007	0.01	0.003	0.	0.002	0.003	0.006	0.01	0.01
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	11	175.	170.909	213.	112.	861.691	29.355	117.8	147.	199.	210.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	11	9.	14.318	33.	2.5	123.814	11.127	3.	5.	25.	32.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	11	4.	3.409	8.	0.	4.541	2.131	0.2	2.	4.	7.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	11	7.	11.136	25.	0.	92.405	9.613	0.2	2.5	21.	24.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	10 ##	0.05	0.065	0.2	0.05	0.002	0.047	0.05	0.05	0.05	0.185
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	10	0.02	0.018	0.04	0.	0.	0.012	0.001	0.009	0.023	0.039
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	10	1.27	1.349	1.92	0.9	0.149	0.386	0.907	0.978	1.75	1.918
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	8	0.3	0.306	0.7	0.05	0.042	0.204	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	8	0.15	0.15	0.3	0.05	0.008	0.089	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	10	0.095	0.112	0.2	0.05	0.003	0.052	0.051	0.075	0.165	0.198
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	11	4.	5.136	10.	0.5	9.405	3.067	1.	3.	8.	9.8
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	10	194.5	193.3	294.	126.	1972.011	44.407	129.6	163.5	209.5	286.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	11 ##	50.	236.364	800.	50.	89045.455	298.405	50.	50.	400.	800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	11 ##	1.699	2.082	2.903	1.699	0.255	0.505	1.699	1.699	2.602	2.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			120.809								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	13	15.	13.538	25.	1.5	66.218	8.137	2.9	5.6	21.5	24.2
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	13	382.	385.077	428.	315.	1213.744	34.839	328.6	356.	419.	426.4
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	13	10.4	10.731	15.	7.4	6.659	2.58	7.44	8.3	13.15	14.76
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	13	1.	1.192	3.	0.5	0.397	0.63	0.7	1.	1.	2.6
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	13	6.	5.923	12.	1.	11.244	3.353	1.	3.5	9.	11.2
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	13	8.5	8.358	8.7	7.4	0.128	0.358	7.64	8.175	8.6	8.7
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	13	8.5	8.16	8.7	7.4	0.17	0.413	7.64	8.175	8.6	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	13	0.003	0.007	0.04	0.002	0.	0.01	0.002	0.003	0.007	0.028
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	13	8.2	8.031	8.5	5.8	0.474	0.688	6.68	8.05	8.35	8.46
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	13	8.2	6.893	8.5	5.8	1.876	1.37	6.68	8.05	8.35	8.46
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	13	0.006	0.128	1.585	0.003	0.192	0.438	0.003	0.004	0.009	0.955
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	13	167.	163.154	204.	3.	2615.308	51.14	61.	159.	191.5	201.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	13	5.	12.962	61.	2.5	286.603	16.929	2.5	2.5	18.	49.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	13	3.	3.808	9.	2.	4.314	2.077	2.2	2.5	5.5	7.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	13	2.5	10.115	52.	1.	213.673	14.618	1.4	2.25	14.5	41.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	13 ##	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	13	0.02	0.025	0.09	0.01	0.001	0.023	0.01	0.01	0.03	0.074
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	13	1.18	1.098	1.7	0.09	0.14	0.374	0.406	0.94	1.3	1.568
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	13	0.4	0.338	0.5	0.1	0.018	0.133	0.14	0.2	0.45	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	13	0.2	0.219	0.3	0.05	0.006	0.08	0.07	0.2	0.3	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	13	0.14	0.138	0.22	0.03	0.005	0.074	0.042	0.065	0.215	0.22
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	13	4.	4.077	5.	3.	0.41	0.641	3.	4.	4.5	5.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	12	197.	196.667	224.	172.	312.97	17.691	173.2	178.	212.	222.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	13	100.	269.231	800.	50.	92724.359	304.507	50.	50.	550.	800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	13	2.	2.148	2.903	1.699	0.266	0.516	1.699	1.699	2.724	2.903

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			140.612								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	10	13.05	14.31	27.3	4.5	88.285	9.396	4.53	5.25	24.85	27.25
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	10	362.5	360.2	408.	299.	1444.844	38.011	300.1	333.25	395.75	407.3
00300 OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	10	10.25	10.2	13.8	6.8	4.889	2.211	6.9	8.325	12.	13.62
00310 BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	10	1.5	2.25	9.	0.5	6.181	2.486	0.55	1.	2.25	8.4
00340 COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	10	7.5	8.1	17.	2.	14.1	3.755	2.4	6.75	9.	16.2
00400 PH (STANDARD UNITS)	04/30/79-12/21/98	9	8.2	8.2	8.8	7.55	0.126	0.354	7.55	8.	8.425	8.8
00400 CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	9	8.2	8.067	8.8	7.55	0.145	0.381	7.55	8.	8.425	8.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	9	0.006	0.009	0.028	0.002	0.	0.008	0.002	0.004	0.01	0.028
00403 PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	10	8.15	8.07	8.4	7.4	0.102	0.32	7.43	7.85	8.325	8.4
00403 CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	10	8.147	7.944	8.4	7.4	0.12	0.346	7.43	7.85	8.325	8.4
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	10	0.007	0.011	0.04	0.004	0.	0.011	0.004	0.005	0.014	0.038
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	10	156.5	159.4	191.	123.	532.267	23.071	124.1	144.5	183.	190.8
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	12.5	33.3	195.	2.5	3377.289	58.114	2.5	6.625	29.5	179.8
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	4.25	7.3	23.	0.	54.567	7.387	0.25	2.5	11.	22.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	7.5	26.55	172.	2.5	2740.192	52.347	2.5	2.5	22.75	158.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	10 ##	0.05	0.065	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	10	0.015	0.019	0.06	0.005	0.	0.016	0.006	0.01	0.02	0.056
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	10	1.295	1.268	2.04	0.88	0.115	0.34	0.881	0.973	1.4	1.976
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	10	0.3	0.315	0.6	0.05	0.022	0.149	0.065	0.2	0.4	0.58
00665 PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	10	0.1	0.13	0.3	0.05	0.008	0.089	0.05	0.05	0.2	0.29
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	10	0.075	0.087	0.16	0.04	0.002	0.047	0.04	0.048	0.143	0.159
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	8	3.5	3.75	6.	3.	1.071	1.035	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	10	180.	168.8	206.	86.	1306.844	36.15	91.8	145.5	194.5	205.
31616 FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	9	200.	422.222	1200.	50.	193819.444	440.249	50.	75.	850.	1200.
31616 LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	9	2.301	2.358	3.079	1.699	0.295	0.543	1.699	1.849	2.923	3.079
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			228.227								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	7	20.9	14.986	25.9	1.	116.135	10.777	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	7	392.	403.429	440.	370.	815.286	28.553	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	7	10.4	11.286	15.8	8.1	6.401	2.53	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	7	1.	1.214	2.	0.5	0.321	0.567	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	7	8.	7.571	12.	3.	13.619	3.69	**	**	**	**
00400 PH (STANDARD UNITS)	04/30/79-12/21/98	7	8.51	8.529	8.99	8.18	0.061	0.247	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	7	8.51	8.475	8.99	8.18	0.064	0.254	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	7	0.003	0.003	0.007	0.001	0.	0.002	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	7	8.4	8.371	8.6	8.1	0.026	0.16	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	7	8.4	8.345	8.6	8.1	0.027	0.163	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	7	0.004	0.005	0.008	0.003	0.	0.002	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	6	190.	184.167	204.	153.	389.367	19.732	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	7	2.5	3.929	12.	1.	13.452	3.668	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	7	2.5	2.357	5.	1.	1.81	1.345	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	7 ##	2.5	2.714	7.	0.5	4.071	2.018	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	7	0.04	0.039	0.07	0.02	0.	0.02	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	7	0.02	0.024	0.06	0.01	0.	0.019	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	7	1.05	1.086	1.6	0.79	0.075	0.274	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	7	0.4	0.386	0.5	0.3	0.008	0.09	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	7	0.1	0.121	0.2	0.05	0.003	0.057	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	7	0.09	0.094	0.14	0.04	0.002	0.04	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	5	2.	2.32	3.3	1.8	0.397	0.63	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	7	208.	200.714	214.	178.	239.571	15.478	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	1	11.	11.	11.	11.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	8 ##	75.	87.5	200.	50.	2678.571	51.755	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	8 ##	1.849	1.887	2.301	1.699	0.05	0.224	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	77.111								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	8	21.6	16.025	23.3	5.2	70.802	8.414	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	4	374.	366.	405.	311.	1942.	44.068	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	2	338.	338.	379.	297.	3362.	57.983	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	8	8.3	9.65	13.4	7.5	6.451	2.54	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	6	2.	2.333	4.	1.	1.067	1.033	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	6	6.	10.583	27.	0.5	123.442	11.11	**	**	**	**
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	8	8.32	8.403	8.83	8.15	0.067	0.258	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	8	8.32	8.346	8.83	8.15	0.07	0.265	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	8	0.005	0.005	0.007	0.001	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	6	8.2	8.2	8.4	8.	0.036	0.19	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	6	8.189	8.166	8.4	8.	0.037	0.193	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	6	0.006	0.007	0.01	0.004	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	6	161.5	157.5	189.	118.	966.7	31.092	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	6	12.5	19.583	71.	0.5	686.042	26.192	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	6	4.	3.75	8.	0.5	7.575	2.752	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	6	8.	15.917	63.	0.5	562.242	23.712	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	4 ##	0.04	0.04	0.06	0.02	0.001	0.023	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	4	0.035	0.034	0.06	0.005	0.001	0.026	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	4	1.335	1.28	1.55	0.9	0.076	0.277	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	4	0.6	0.55	0.7	0.3	0.03	0.173	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	4	0.1	0.125	0.2	0.1	0.003	0.05	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	4	0.065	0.063	0.1	0.02	0.001	0.035	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	6	2.25	2.467	4.8	1.	1.631	1.277	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	6	187.	180.667	210.	146.	885.867	29.764	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	5	11.	11.2	15.	8.	8.2	2.864	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	5	14.	16.4	23.	12.	23.3	4.827	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	5	1000.	2110.	8000.	50.	11178000.	3343.352	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	5	3.	2.75	3.903	1.699	0.804	0.897	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	561.872								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	5	8.5	10.2	23.3	2.5	64.81	8.05	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	5	384.	364.6	410.	299.	2077.3	45.577	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	5	10.3	10.08	13.	7.9	4.052	2.013	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	5	2.	2.4	5.	1.	2.8	1.673	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	4	6.	6.5	12.	2.	17.667	4.203	**	**	**	**
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	5	8.2	8.25	8.74	7.97	0.096	0.31	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	5	8.2	8.177	8.74	7.97	0.103	0.321	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	5	0.006	0.007	0.011	0.002	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	5	8.1	8.16	8.5	8.	0.043	0.207	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	5	8.1	8.126	8.5	8.	0.044	0.211	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	5	0.008	0.007	0.01	0.003	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	5	137.	124.	177.	8.	4685.5	68.451	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	5	22.	46.7	176.	0.5	5328.2	72.995	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	5	4.	6.5	18.	0.5	52.75	7.263	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	5	17.	40.3	158.	0.5	4380.2	66.183	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	6	0.055	0.068	0.16	0.02	0.002	0.05	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	6	0.02	0.022	0.04	0.01	0.	0.012	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	6	1.24	1.208	1.39	0.9	0.028	0.167	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	6	0.45	0.583	1.3	0.3	0.134	0.366	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	6	0.15	0.167	0.3	0.1	0.007	0.082	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	6	0.065	0.07	0.13	0.03	0.002	0.042	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	4	2.9	2.9	4.	1.8	0.973	0.987	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	5	194.	185.	217.	150.	787.	28.054	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	5	12.	12.2	18.	7.	15.7	3.962	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	5	13.	14.8	21.	9.	22.2	4.712	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	2 ##	2925.	2925.	5800.	50.	16531250.	4065.864	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	2 ##	2.731	2.731	3.763	1.699	2.131	1.46	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	2 ##	2.731	2.731	3.763	1.699	2.131	1.46	**	**	**	**
	GEOMETRIC MEAN =			538.516									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	12	19.	16.125	25.2	2.7	60.535	7.78	3.78	8.65	22.725	24.78
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	10	400.	398.8	445.	352.	1295.733	35.996	352.3	358.75	433.5	444.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	1	7.9	7.9	7.9	7.9	0.	**	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	11	9.3	9.9	13.5	7.	5.688	2.385	7.02	7.9	12.6	13.42
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	8	1.	1.313	2.	0.5	0.353	0.594	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	10	8.	8.25	18.	0.5	28.403	5.329	0.65	4.25	11.75	17.6
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	12	8.19	8.095	8.7	6.9	0.209	0.457	7.14	7.993	8.375	8.64
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	12	8.19	7.761	8.7	6.9	0.331	0.575	7.14	7.993	8.375	8.64
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	12	0.006	0.017	0.126	0.002	0.001	0.035	0.002	0.004	0.01	0.094
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	10	8.3	8.3	8.4	8.1	0.011	0.105	8.11	8.2	8.4	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	10	8.3	8.288	8.4	8.1	0.011	0.106	8.11	8.2	8.4	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	10	0.005	0.005	0.008	0.004	0.	0.001	0.004	0.004	0.006	0.008
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	10	193.5	190.2	210.	169.	265.956	16.308	169.4	173.75	206.75	209.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	5.5	11.7	63.	1.5	347.789	18.649	1.5	1.5	11.5	58.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	1.75	2.3	8.	1.	4.233	2.058	1.	1.375	2.125	7.45
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	4.5	10.1	55.	1.5	264.767	16.272	1.5	1.5	9.5	50.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	11 ##	0.02	0.038	0.12	0.02	0.001	0.036	0.02	0.02	0.04	0.116
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	11	0.02	0.021	0.05	0.005	0.	0.015	0.005	0.005	0.03	0.048
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	11	1.36	1.306	1.98	0.02	0.263	0.513	0.228	1.08	1.57	1.954
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	12	0.3	0.667	4.1	0.1	1.193	1.092	0.16	0.3	0.55	3.08
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	11	0.1	0.177	0.7	0.05	0.033	0.181	0.06	0.1	0.2	0.6
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	11	0.07	0.069	0.13	0.03	0.001	0.034	0.03	0.03	0.1	0.126
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	10	2.	5.15	33.1	1.3	96.821	9.84	1.31	1.55	3.025	30.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	10	207.	204.8	220.	192.	127.289	11.282	192.	192.	214.5	219.6
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	10.	10.4	13.	9.	2.267	1.506	9.	9.	12.	12.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	10.	11.6	18.	9.	8.267	2.875	9.1	10.	13.5	17.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	4	200.	1462.5	5400.	50.	6902291.667	2627.221	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	4	2.239	2.477	3.732	1.699	0.803	0.896	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			300.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	11	13.5	13.718	23.	4.5	57.888	7.608	4.72	5.8	21.5	22.82
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	1	346.	346.	346.	346.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	10	386.5	364.2	435.	214.	4952.622	70.375	218.6	342.5	405.	432.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	9	10.2	10.011	12.9	6.7	4.569	2.137	6.7	8.15	11.8	12.9
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	2	12.6	12.6	15.1	10.1	12.5	3.536	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	11	1.	1.182	2.	1.	0.164	0.405	1.	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	11	9.	10.	20.	4.	22.6	4.754	4.2	7.	14.	18.8
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	11	8.3	8.217	8.6	7.5	0.102	0.319	7.58	8.09	8.4	8.6
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	11	8.3	8.089	8.6	7.5	0.12	0.346	7.58	8.09	8.4	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	11	0.005	0.008	0.032	0.003	0.	0.008	0.003	0.004	0.008	0.028
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	11	8.3	8.336	8.8	7.8	0.067	0.258	7.88	8.2	8.5	8.76
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	11	8.3	8.263	8.8	7.8	0.072	0.269	7.88	8.2	8.5	8.76
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	11	0.005	0.005	0.016	0.002	0.	0.004	0.002	0.003	0.006	0.014
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	11	181.	175.182	212.	113.	730.564	27.029	118.4	173.	190.	208.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	11	3.	11.091	67.	1.	404.091	20.102	1.	1.	7.	59.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	11	1.	1.455	6.	0.	2.873	1.695	0.	1.	1.	5.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	11	2.	9.636	61.	0.	340.255	18.446	0.2	1.	6.	53.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	12##	0.02	0.05	0.19	0.02	0.003	0.054	0.02	0.02	0.088	0.163
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	0.025	0.022	0.04	0.005	0.	0.013	0.005	0.006	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	1.045	1.174	1.92	0.92	0.089	0.298	0.92	0.97	1.38	1.776
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	12	0.4	0.4	0.7	0.2	0.022	0.148	0.2	0.3	0.5	0.64
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.117	0.2	0.05	0.003	0.054	0.05	0.1	0.175	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	4	0.04	0.033	0.04	0.01	0.	0.015	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	11	2.9	3.573	7.2	0.5	4.46	2.112	0.74	1.9	5.1	7.04
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	11	196.	184.182	232.	106.	1385.964	37.229	111.2	160.	204.	228.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	11	10.	9.455	12.	6.	2.673	1.635	6.4	8.	10.	11.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	11	13.	13.455	20.	10.	7.673	2.77	10.2	12.	15.	19.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	12	200.	916.667	8000.	50.	5037424.242	2244.421	50.	100.	625.	5840.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	12	2.301	2.394	3.903	1.699	0.385	0.621	1.699	2.	2.784	3.603
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			247.859								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	8	0.07	0.068	0.1	0.03	0.001	0.025	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	11	13.7	13.655	25.8	3.6	62.921	7.932	3.6	6.3	21.1	25.26
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	397.5	386.	428.	294.	1552.182	39.398	307.5	364.5	416.	427.1
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	10	10.3	10.38	14.5	7.7	5.562	2.358	7.74	8.1	12.4	14.35
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	1	12.4	12.4	12.4	12.4	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	10	1.	1.25	2.	0.5	0.292	0.54	0.55	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	7.	7.	13.	2.5	12.5	3.536	2.5	4.	9.75	12.7
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	11	7.9	7.955	8.8	7.5	0.153	0.391	7.5	7.7	8.3	8.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	11	7.9	7.829	8.8	7.5	0.17	0.412	7.5	7.7	8.3	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	11	0.013	0.015	0.032	0.002	0.	0.01	0.002	0.005	0.02	0.032
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	12	8.35	8.467	9.1	8.	0.128	0.358	8.	8.225	8.7	9.07
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	12	8.347	8.35	9.1	8.	0.143	0.378	8.	8.225	8.7	9.07
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	12	0.004	0.004	0.01	0.001	0.	0.003	0.001	0.002	0.006	0.01
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	12	193.5	180.917	213.	130.	749.902	27.384	134.2	152.75	198.75	211.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	12 ##	2.25	8.583	36.	1.5	133.583	11.558	1.5	1.5	12.5	33.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	12 ##	1.5	2.083	6.	1.	2.129	1.459	1.	1.5	2.	5.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	12 ##	1.75	7.25	32.	1.5	96.614	9.829	1.5	1.5	10.5	28.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	12 ##	0.03	0.058	0.2	0.02	0.003	0.055	0.02	0.02	0.078	0.176
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	0.015	0.018	0.04	0.005	0.	0.011	0.005	0.01	0.028	0.037
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	1.18	1.267	2.18	0.44	0.209	0.457	0.575	0.948	1.528	2.075
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	12	0.3	0.308	0.5	0.2	0.008	0.09	0.2	0.225	0.375	0.47
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.079	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	12	2.25	2.317	4.8	1.1	1.038	1.019	1.16	1.45	2.775	4.29
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	12	207.	198.333	224.	152.	637.697	25.253	153.8	175.	218.	224.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	10.	9.833	13.	5.	4.152	2.038	5.9	9.	11.	12.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	11	10.	11.455	21.	8.	16.873	4.108	8.	8.	14.	20.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	11	500.	636.364	1700.	50.	354045.455	595.017	50.	100.	1200.	1640.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	11	2.699	2.539	3.23	1.699	0.325	0.57	1.699	2.	3.079	3.214
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	11	0.05	0.054	0.1	0.02	0.001	0.029	0.02	0.03	0.08	0.098

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	12	16.25	15.95	26.8	1.5	66.15	8.133	3.09	9.	24.35	26.74
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	5	1.8	1.86	2.9	1.	0.478	0.691	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	10	391.5	376.1	434.	251.	3660.1	60.499	257.7	327.75	426.75	433.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	12	10.1	10.2	13.5	7.2	2.767	1.664	7.56	9.325	10.85	13.17
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	10	1.2	1.09	2.	0.5	0.31	0.557	0.5	0.5	1.525	1.96
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	10	7.5	8.5	16.	6.	8.722	2.953	6.	6.75	9.25	15.4
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	12	8.25	8.242	8.5	7.9	0.039	0.198	7.93	8.05	8.4	8.5
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	12	8.247	8.199	8.5	7.9	0.041	0.202	7.93	8.05	8.4	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	12	0.006	0.006	0.013	0.003	0.	0.003	0.003	0.004	0.009	0.012
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	10	8.	8.12	8.5	7.9	0.062	0.249	7.9	7.9	8.4	8.49
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	10	8.	8.063	8.5	7.9	0.065	0.256	7.9	7.9	8.4	8.49
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	10	0.01	0.009	0.013	0.003	0.	0.004	0.003	0.004	0.013	0.013
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	10	181.	174.3	206.	109.	1146.456	33.859	111.8	143.75	204.5	206.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	6.5	6.8	19.	1.5	33.178	5.76	1.5	1.5	9.75	18.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	1.5	1.4	2.	1.	0.156	0.394	1.	1.	1.625	2.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	10	5.5	6.	17.	1.5	25.222	5.022	1.5	1.5	8.5	16.3
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	9 ##	0.02	0.052	0.15	0.02	0.003	0.051	0.02	0.02	0.09	0.15
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	9	0.02	0.019	0.03	0.005	0.	0.008	0.005	0.015	0.025	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	9	1.55	1.413	1.88	0.8	0.119	0.345	0.8	1.1	1.625	1.88
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	9	0.3	0.278	0.4	0.2	0.004	0.067	0.2	0.2	0.3	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	9 ##	0.05	0.072	0.2	0.05	0.003	0.051	0.05	0.05	0.075	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	10	2.7	2.78	4.2	1.7	0.728	0.853	1.71	1.95	3.475	4.18
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	10	202.	192.7	223.	126.	1050.011	32.404	129.7	164.5	219.75	222.9
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	12.5	11.1	13.	6.	6.989	2.644	6.1	9.25	13.	13.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	10.	10.3	14.	7.	4.233	2.058	7.2	9.	12.	13.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	9 ##	50.	250.	1300.	50.	166250.	407.738	50.	50.	300.	1300.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	9 ##	1.699	2.063	3.114	1.699	0.264	0.514	1.699	1.699	2.477	3.114
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
31616	GEOMETRIC MEAN =			115.494									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	9	0.03	0.039	0.1	0.005	0.001	0.035	0.005	0.013	0.07	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	12	11.35	15.017	29.7	1.3	88.631	9.414	2.14	8.35	24.15	29.07
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	5.65	15.625	72.	1.6	482.837	21.974	1.75	2.65	17.775	64.8
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	397.5	381.167	463.	242.	4418.333	66.471	259.4	324.75	426.	460.
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	11	9.4	9.855	14.8	6.9	6.299	2.51	6.98	7.6	12.1	14.3
00310 BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	11	1.1	1.327	2.8	0.5	0.478	0.692	0.5	1.	2.	2.64
00340 COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	6.5	8.042	22.	2.5	31.612	5.622	2.5	3.125	11.25	19.3
00400 PH (STANDARD UNITS)	04/30/79-12/21/98	12	8.3	8.3	8.6	7.9	0.044	0.209	7.96	8.125	8.5	8.57
00400 CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	12	8.3	8.252	8.6	7.9	0.046	0.215	7.96	8.125	8.5	8.57
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	12	0.005	0.006	0.013	0.003	0.	0.003	0.003	0.003	0.008	0.011
00403 PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	12	8.	7.958	8.4	7.6	0.055	0.235	7.6	7.75	8.075	8.34
00403 CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	12	8.	7.9	8.4	7.6	0.059	0.243	7.6	7.75	8.075	8.34
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	12	0.01	0.013	0.025	0.004	0.	0.007	0.005	0.008	0.018	0.025
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	12	164.5	157.083	194.	96.	996.265	31.564	102.3	128.75	181.5	193.1
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	12	5.	18.75	94.	1.5	807.614	28.419	1.5	3.	25.5	82.3
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	12##	1.5	3.083	10.	1.5	7.72	2.778	1.5	1.5	5.25	8.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	12	4.	15.917	84.	1.5	653.447	25.563	1.5	1.5	20.25	73.5
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	0.04	0.051	0.16	0.02	0.002	0.042	0.02	0.02	0.06	0.142
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	0.03	0.033	0.08	0.005	0.001	0.025	0.007	0.01	0.04	0.08
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	1.145	1.191	1.47	0.86	0.035	0.188	0.911	1.043	1.348	1.455
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	12	0.25	0.325	0.8	0.1	0.042	0.205	0.13	0.2	0.45	0.74
00665 PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12##	0.075	0.092	0.2	0.05	0.003	0.056	0.05	0.05	0.1	0.2
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	12	4.35	3.867	6.3	1.3	2.684	1.638	1.39	1.975	4.9	6.09
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	12	198.5	193.083	250.	118.	1369.356	37.005	126.1	172.	213.	247.3
00940 CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	12.5	12.75	24.	6.	22.568	4.751	6.3	9.5	14.75	21.9
00945 SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	13.5	13.667	19.	10.	8.061	2.839	10.	11.25	15.	18.7
31616 FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	12	400.	1100.	5000.	50.	2710454.545	1646.346	50.	125.	1175.	4700.
31616 LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	12	2.588	2.608	3.699	1.699	0.439	0.663	1.699	2.075	3.07	3.67
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	12	400.	1100.	5000.	50.	2710454.545	1646.346	50.	125.	1175.	4700.
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	12	0.075	0.073	0.15	0.02	0.002	0.04	0.023	0.033	0.108	0.138

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	13	13.5	14.638	28.1	0.2	97.804	9.89	1.6	5.3	25.15	27.26
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	8.65	15.633	61.	2.9	330.744	18.186	3.02	3.8	21.425	55.3
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	391.	384.917	446.	183.	4892.447	69.946	234.6	375.75	432.75	445.7
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	13	9.8	9.869	13.8	6.8	4.656	2.158	6.84	8.05	11.7	13.12
00310 BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	11	1.	1.318	4.	0.5	1.414	1.189	0.5	2.	3.	3.8
00340 COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	5.	6.417	14.	2.5	15.629	3.953	2.5	2.5	10.	13.1
00400 PH (STANDARD UNITS)	04/30/79-12/21/98	13	8.1	8.085	8.5	7.6	0.053	0.23	7.68	7.95	8.2	8.42
00400 CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	13	8.1	8.025	8.5	7.6	0.057	0.239	7.68	7.95	8.2	8.42
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	13	0.008	0.009	0.025	0.003	0.	0.006	0.004	0.006	0.011	0.021
00403 PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	12	8.1	8.125	8.4	7.8	0.024	0.154	7.86	8.025	8.2	8.37
00403 CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	12	8.1	8.099	8.4	7.8	0.025	0.157	7.86	8.025	8.2	8.37
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	12	0.008	0.008	0.016	0.004	0.	0.003	0.004	0.006	0.009	0.014
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	12	178.	171.75	203.	127.	505.659	22.487	129.7	162.5	190.	199.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	12	9.	16.5	60.	3.	336.273	18.338	3.	4.25	26.25	54.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	12 ##	1.5	2.292	6.	1.5	2.475	1.573	1.5	1.5	2.625	5.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	12	7.5	14.333	55.	1.5	282.379	16.804	1.5	3.25	23.5	49.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	11 ##	0.02	0.026	0.05	0.02	0.	0.011	0.02	0.02	0.04	0.048
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	11	0.01	0.013	0.04	0.005	0.	0.01	0.005	0.005	0.02	0.036
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	11	1.4	1.545	2.7	1.22	0.173	0.415	1.234	1.3	1.71	2.506
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	11	0.3	0.245	0.3	0.1	0.007	0.082	0.1	0.2	0.3	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	11 ##	0.05	0.068	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	8	2.2	2.475	6.3	0.5	2.976	1.725	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	12	192.5	191.583	226.	135.	948.447	30.797	136.5	171.75	219.	224.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	11.	11.417	20.	6.	11.174	3.343	6.9	9.5	12.	18.2
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	13.	13.417	21.	10.	9.538	3.088	10.3	11.	15.	19.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	10	300.	465.	1300.	50.	232805.556	482.499	50.	50.	825.	1290.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	10	2.349	2.361	3.114	1.699	0.353	0.594	1.699	1.699	2.904	3.11
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			229.734								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	11	0.05	0.048	0.08	0.02	0.	0.019	0.022	0.03	0.06	0.08

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	12	17.05	14.483	24.6	2.5	68.147	8.255	2.56	4.85	22.	24.24
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	8.45	8.017	12.1	2.3	8.829	2.971	2.96	5.725	10.325	11.83
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	412.	413.5	457.	382.	663.727	25.763	382.3	386.75	436.	451.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	12	9.8	10.775	14.9	8.	6.415	2.533	8.12	8.625	13.675	14.63
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	12 ##	1.	1.208	5.	0.5	1.475	1.215	0.5	0.625	1.	3.8
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	7.5	7.5	14.	2.5	11.682	3.418	2.5	5.25	9.5	13.4
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	12	8.1	8.133	8.4	8.	0.017	0.13	8.	8.	8.2	8.37
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	12	8.1	8.117	8.4	8.	0.017	0.131	8.	8.	8.2	8.37
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	12	0.008	0.008	0.01	0.004	0.	0.002	0.004	0.006	0.01	0.01
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	12	8.3	8.275	8.5	8.	0.024	0.154	8.	8.2	8.4	8.47
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	12	8.3	8.248	8.5	8.	0.025	0.157	8.	8.2	8.4	8.47
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	12	0.005	0.006	0.01	0.003	0.	0.002	0.003	0.004	0.006	0.01
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	12	197.	194.917	218.	164.	207.538	14.406	166.7	192.	202.	215.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	12	7.	10.125	34.	1.5	80.506	8.972	1.5	2.875	14.	28.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	12 ##	1.5	2.208	10.	1.5	6.021	2.454	1.5	1.5	1.5	7.45
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	12	6.5	8.542	24.	1.5	42.475	6.517	1.5	2.625	12.75	20.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	12 ##	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.034
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	0.01	0.011	0.02	0.005	0.	0.007	0.005	0.005	0.02	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	1.31	1.329	1.8	0.97	0.066	0.256	0.979	1.138	1.53	1.764
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	12	0.3	0.3	0.5	0.1	0.015	0.121	0.13	0.2	0.375	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.104	0.2	0.05	0.002	0.05	0.05	0.063	0.1	0.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	12	214.	209.083	224.	168.	221.72	14.89	177.6	204.5	217.5	223.7
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	12.	11.833	15.	8.	3.424	1.85	8.6	11.	13.	14.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	12.5	14.833	41.	9.	74.333	8.622	9.3	10.25	15.25	34.1
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	12	300.	333.333	900.	50.	85151.515	291.807	50.	50.	575.	840.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	12	2.477	2.302	2.954	1.699	0.255	0.505	1.699	1.699	2.758	2.921
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			200.626								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	12	0.055	0.057	0.11	0.02	0.001	0.028	0.02	0.033	0.08	0.101

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	12	18.5	15.517	24.7	3.5	62.532	7.908	3.77	7.8	22.05	24.46
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	8.9	24.317	178.	1.6	2425.947	49.254	1.69	2.775	18.85	134.56
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	390.5	381.167	453.	205.	5350.333	73.146	234.7	343.75	445.25	450.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	12	8.75	9.7	12.8	7.1	5.364	2.316	7.19	7.6	12.4	12.71
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	12 ##	1.	1.167	3.	1.	0.333	0.577	1.	1.	1.	2.4
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	12	6.	7.875	22.	2.5	31.597	5.621	2.5	3.125	11.	19.
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	12	7.85	7.908	8.6	7.3	0.159	0.399	7.33	7.575	8.25	8.54
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	12	7.847	7.755	8.6	7.3	0.185	0.43	7.33	7.575	8.25	8.54
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	12	0.014	0.018	0.05	0.003	0.	0.015	0.003	0.006	0.028	0.047
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	12	8.	7.95	8.4	7.1	0.163	0.403	7.19	7.675	8.3	8.37
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	12	8.	7.747	8.4	7.1	0.208	0.456	7.19	7.675	8.3	8.37
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	12	0.01	0.018	0.079	0.004	0.	0.022	0.004	0.005	0.022	0.068
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	12	179.5	172.417	216.	81.	1607.72	40.096	91.5	157.25	204.25	215.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	12	11.5	26.5	169.	1.5	2182.227	46.714	1.5	4.	28.25	131.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	12 ##	1.5	4.333	25.	1.5	45.333	6.733	1.5	1.5	5.25	19.3
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	12	10.	22.375	144.	1.5	1590.824	39.885	1.5	2.625	23.	112.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	12 ##	0.02	0.026	0.09	0.02	0.	0.02	0.02	0.02	0.02	0.069
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12 ##	0.005	0.012	0.04	0.005	0.	0.012	0.005	0.005	0.018	0.037
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	12	1.175	1.288	2.04	0.85	0.156	0.395	0.862	0.938	1.635	1.983
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	12	0.3	0.371	1.	0.05	0.068	0.262	0.095	0.2	0.475	0.91
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	12	0.1	0.113	0.4	0.05	0.01	0.1	0.05	0.05	0.1	0.34
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	12	184.	177.667	243.	106.	2058.061	45.366	111.7	132.25	221.5	237.9
00940	CHLORIDE,TOTAL IN WATER MG/L	11/02/88-12/21/98	12	10.	10.083	13.	6.	3.72	1.929	6.6	9.	11.75	12.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	10.5	10.917	19.	8.	8.992	2.999	8.	8.5	11.75	17.2
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/30/79-12/21/98	12	150.	841.667	8000.	50.	5109015.152	2260.313	50.	50.	450.	5750.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/30/79-12/21/98	12	2.151	2.265	3.903	1.699	0.412	0.642	1.699	1.699	2.644	3.542
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			183.939								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	12	0.065	0.077	0.2	0.02	0.003	0.054	0.02	0.033	0.115	0.179

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	64	22.8	21.991	30.5	2.5	19.484	4.414	16.9	20.	25.	26.4
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	33	403.	399.485	515.	260.	3140.32	56.039	311.	379.5	427.	472.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	28	402.	392.714	446.	183.	3033.619	55.078	303.3	388.25	424.5	443.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	25	8.1	8.368	11.7	6.7	1.194	1.093	7.02	7.6	9.15	9.68
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	39	8.6	8.895	11.4	7.1	1.394	1.181	7.4	8.	9.8	10.9
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	59	1.	1.239	5.	0.5	0.563	0.75	0.5	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	60	7.	7.617	22.	0.5	17.774	4.216	2.5	5.	10.	13.
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	63	8.2	8.181	9.	7.3	0.14	0.374	7.64	8.	8.4	8.584
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	63	8.2	8.018	9.	7.3	0.167	0.408	7.64	8.	8.4	8.584
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	63	0.006	0.01	0.05	0.001	0.	0.01	0.003	0.004	0.01	0.023
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	43	8.2	8.253	9.1	7.6	0.053	0.229	8.	8.1	8.4	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	43	8.2	8.196	9.1	7.6	0.056	0.236	8.	8.1	8.4	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	43	0.006	0.006	0.025	0.001	0.	0.004	0.003	0.004	0.008	0.01
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	42	189.	176.857	209.	8.	1308.369	36.171	126.3	172.	197.	205.1
00500	RESIDUE, TOTAL (MG/L)	04/30/79-08/10/92	12	264.	301.25	569.	226.	11730.75	108.309	227.8	240.	284.25	543.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/30/79-08/10/92	12	66.	98.417	353.	49.	7147.174	84.541	49.3	58.5	98.75	290.3
00510	RESIDUE, TOTAL FIXED (MG/L)	04/30/79-08/10/92	12	195.5	202.833	340.	146.	2437.788	49.374	151.1	171.75	215.5	306.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	61	12.	17.754	83.	1.	336.58	18.346	2.5	5.	22.5	44.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	61	2.5	3.893	17.	0.	10.351	3.217	1.	1.5	6.	8.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	61	8.	14.148	76.	0.5	272.436	16.506	1.5	3.5	20.	39.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	57 ##	0.05	0.045	0.15	0.02	0.001	0.026	0.02	0.02	0.05	0.084
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	57	0.01	0.015	0.05	0.005	0.	0.012	0.005	0.005	0.02	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	57	1.2	1.157	2.04	0.09	0.117	0.342	0.7	0.98	1.385	1.56
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	58	0.3	0.351	1.5	0.1	0.041	0.203	0.2	0.2	0.4	0.51
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	57	0.13	0.165	0.3	0.05	0.006	0.075	0.1	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	36	0.14	0.148	0.24	0.005	0.003	0.056	0.087	0.105	0.2	0.22
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	49	4.	4.769	13.	1.	10.444	3.232	1.9	2.55	5.55	11.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	42	204.	197.714	224.	125.	613.185	24.763	153.2	192.75	214.	218.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	28	11.	10.929	14.	6.	3.254	1.804	8.	10.	12.75	13.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	28	11.	11.393	18.	8.	7.136	2.671	8.	10.	13.	15.3
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	53	300.	874.528	8000.	50.	3037367.562	1742.805	50.	100.	800.	1520.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	53	2.477	2.494	3.903	1.699	0.341	0.584	1.699	2.	2.903	3.181
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			311.761								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	21	0.08	0.086	0.12	0.05	0.	0.018	0.062	0.07	0.1	0.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	81	5.8	6.709	19.	0.2	15.804	3.975	1.84	3.65	8.9	11.92
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	40	384.	383.95	505.	165.	4002.613	63.266	310.1	348.25	430.	453.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	40	400.	390.25	463.	205.	3844.603	62.005	312.1	369.25	434.75	452.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	31	12.3	12.265	14.9	9.7	2.064	1.437	9.96	11.4	13.5	14.4
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	50	12.5	12.438	15.8	7.6	2.7	1.643	10.42	11.5	13.55	14.38
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	75	1.	1.569	6.	0.5	1.188	1.09	0.5	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	80	7.	7.6	33.	0.5	42.414	6.513	2.	2.5	9.	14.
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	80	8.4	8.368	9.5	6.9	0.222	0.471	7.8	8.	8.7	9.
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	80	8.4	8.097	9.5	6.9	0.296	0.544	7.8	8.	8.7	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	80	0.004	0.008	0.126	0.	0.	0.015	0.001	0.002	0.01	0.016
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	60	8.2	8.148	9.	5.8	0.187	0.432	7.81	8.	8.4	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	60	8.2	7.456	9.	5.8	0.674	0.821	7.81	8.	8.4	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	60	0.006	0.035	1.585	0.001	0.042	0.204	0.003	0.004	0.01	0.016
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	60	176.5	170.667	216.	3.	1445.785	38.023	124.1	148.	199.	209.9
00500	RESIDUE, TOTAL (MG/L)	04/30/79-08/10/92	14	240.	253.571	391.	207.	2035.187	45.113	217.	229.5	255.5	345.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/30/79-08/10/92	14	55.5	58.143	93.	40.	216.593	14.717	40.	48.	64.	86.5
00510	RESIDUE, TOTAL FIXED (MG/L)	04/30/79-08/10/92	14	189.	195.429	329.	139.	1983.187	44.533	139.5	179.	203.25	274.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	80	2.5	21.55	538.	0.5	4890.004	69.929	1.5	2.	9.75	35.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	80 ##	2.5	3.931	54.	0.	52.201	7.225	1.	1.5	2.875	5.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	80 ##	2.5	18.563	484.	0.	3914.654	62.567	1.	1.5	7.	31.3
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	79 ##	0.05	0.067	0.4	0.02	0.006	0.078	0.02	0.02	0.05	0.16
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	79	0.02	0.018	0.06	0.005	0.	0.011	0.005	0.01	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	79	1.3	1.415	10.	0.16	1.115	1.056	0.88	1.05	1.58	1.85
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	79	0.3	0.332	1.3	0.05	0.046	0.213	0.1	0.2	0.4	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	79	0.1	0.122	0.8	0.05	0.013	0.115	0.05	0.05	0.12	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	50	0.07	0.113	0.8	0.01	0.015	0.124	0.03	0.05	0.143	0.21
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	67	3.	4.784	34.	0.5	23.656	4.864	1.38	2.	6.3	9.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	59	202.	192.814	294.	86.	1427.499	37.782	144.	167.	218.	224.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	43	12.	11.884	24.	5.	13.819	3.717	9.	10.	13.	17.6
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	42	13.5	14.548	41.	7.	33.473	5.786	8.3	11.	16.5	21.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	73 ##	50.	604.11	8000.	50.	1858246.766	1363.175	50.	50.	500.	1780.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	73 ##	1.699	2.184	3.903	1.699	0.416	0.645	1.699	1.699	2.699	3.239
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			152.806								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	29	0.04	0.045	0.2	0.005	0.001	0.036	0.02	0.025	0.05	0.08

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0204

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/30/79-12/21/98	62	17.15	17.24	28.1	5.6	29.147	5.399	10.	12.75	22.	24.14
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/30/79-03/09/92	31	373.	443.194	2690.	256.	176510.161	420.131	286.6	340.	408.	448.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	29	378.	367.069	446.	251.	2363.852	48.619	294.	346.	403.5	417.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	24	8.8	9.05	11.2	6.8	1.859	1.363	7.05	8.1	10.225	10.95
00300	OXYGEN, DISSOLVED MG/L	04/30/79-12/14/93	37	10.3	10.116	13.	6.8	2.875	1.696	7.48	9.	11.4	12.44
00310	BOD, 5 DAY, 20 DEG C MG/L	04/30/79-12/21/98	59	1.	1.631	9.	0.5	1.584	1.259	1.	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	04/30/79-12/21/98	60	7.	8.617	52.	0.5	50.122	7.08	3.	5.	10.75	15.8
00400	PH (STANDARD UNITS)	04/30/79-12/21/98	60	8.2	8.302	9.01	7.4	0.191	0.437	7.71	8.1	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	04/30/79-12/21/98	60	8.2	8.101	9.01	7.4	0.232	0.481	7.71	8.1	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/30/79-12/21/98	60	0.006	0.008	0.04	0.001	0.	0.009	0.001	0.003	0.008	0.02
00403	PH, LAB, STANDARD UNITS SU	08/20/84-12/21/98	41	8.1	8.129	8.7	7.4	0.072	0.269	7.82	8.	8.3	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/84-12/21/98	41	8.1	8.036	8.7	7.4	0.081	0.285	7.82	8.	8.3	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/84-12/21/98	41	0.008	0.009	0.04	0.002	0.	0.008	0.004	0.005	0.01	0.015
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/20/84-12/21/98	41	172.	167.805	218.	109.	604.861	24.594	126.8	151.5	185.	197.4
00500	RESIDUE, TOTAL (MG/L)	04/30/79-08/10/92	11	225.	221.727	251.	180.	553.818	23.533	181.8	203.	241.	249.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/30/79-08/10/92	10	49.	51.	73.	26.	239.556	15.478	27.	37.5	65.5	72.4
00510	RESIDUE, TOTAL FIXED (MG/L)	04/30/79-08/10/92	11	175.	171.909	205.	117.	578.291	24.048	124.4	154.	189.	202.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/30/79-12/21/98	60	14.	19.875	96.	0.5	408.531	20.212	3.1	7.	26.75	44.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/30/79-12/21/98	59	2.5	3.542	10.	0.5	6.373	2.525	1.	1.5	6.	8.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/30/79-12/21/98	60	11.	16.4	89.	0.5	336.049	18.332	2.05	5.	20.75	39.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/30/79-12/21/98	63 ##	0.05	0.054	0.16	0.02	0.001	0.033	0.02	0.02	0.07	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	63	0.02	0.027	0.09	0.	0.	0.021	0.005	0.01	0.03	0.06
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/30/79-12/21/98	63	1.2	1.227	3.3	0.02	0.174	0.417	0.9	1.	1.38	1.642
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/30/79-12/21/98	60	0.3	0.46	4.1	0.1	0.278	0.527	0.2	0.3	0.5	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/30/79-12/21/98	60	0.1	0.117	0.7	0.05	0.009	0.096	0.05	0.05	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/30/79-12/14/93	38	0.065	0.075	0.19	0.005	0.002	0.048	0.03	0.04	0.103	0.161
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/30/79-08/20/96	52	3.65	4.96	33.1	0.5	30.061	5.483	1.23	2.	5.	10.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/11/85-12/21/98	40	191.	183.825	241.	126.	717.43	26.785	150.1	165.	203.5	217.1
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	31	10.	10.032	15.	6.	6.032	2.456	7.	8.	11.	13.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	31	11.	11.742	20.	9.	5.398	2.323	9.	10.	13.	15.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	58	250.	895.862	8000.	10.	3537694.858	1880.876	50.	50.	725.	1930.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/30/79-12/21/98	58	2.389	2.397	3.903	1.	0.449	0.67	1.699	1.699	2.86	3.268
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			249.269								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	25	0.04	0.055	0.15	0.02	0.001	0.037	0.02	0.03	0.08	0.118

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0205

NPS Station ID: SHEN0205
 Location: Eppert Hollow
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.265448/ -78.698754

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F098
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0205

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/05/94-07/05/94	1	19.	19.	19.	19.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0206

NPS Station ID: SHEN0206
 Location: IVY CREEK NEAR BOONESVILLE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080103004210.10
 Description:

LAT/LON: 38.268616/ -78.612504

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 10.19

Agency: 112WRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): 02032545
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.30
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0206

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/25/82	6	16.75	13.917	20.	2.5	43.942	6.629	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/25/82	6	2.5	4.617	18.	0.2	45.082	6.714	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/25/82	6	6.8	6.733	7.1	6.3	0.119	0.344	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/25/82	6	6.755	6.623	7.1	6.3	0.133	0.365	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/25/82	6	0.176	0.238	0.501	0.079	0.032	0.178	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/25/82	6	6.85	6.817	7.2	6.4	0.082	0.286	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/25/82	6	6.847	6.738	7.2	6.4	0.089	0.298	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/25/82	6	0.142	0.183	0.398	0.063	0.015	0.123	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/25/82	6##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/25/82	6	0.15	0.227	0.5	0.06	0.033	0.182	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/25/82	6	13.	12.5	14.	11.	1.5	1.225	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/25/82	6	2.65	2.583	2.7	2.4	0.022	0.147	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/25/82	6	1.4	1.433	1.7	1.3	0.023	0.151	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/25/82	6	2.	1.95	2.4	1.6	0.095	0.308	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/25/82	6	0.2	0.233	0.3	0.2	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/25/82	6	25.	24.833	27.	23.	2.567	1.602	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/25/82	6	0.4	0.367	0.4	0.3	0.003	0.052	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/25/82	6	1.	0.983	1.	0.9	0.002	0.041	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/25/82	6	5.	5.167	6.	5.	0.167	0.408	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/25/82	6	10.75	10.7	12.	9.	1.48	1.217	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0206

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	2	0.33	2	1	0.50	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	1	0.50	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0206

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0		2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0207

NPS Station ID: SHEN0207
 Location: Big Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.271671/ -78.699559

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F023
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0207

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/94-07/07/94	4	19.35	19.35	19.5	19.2	0.017	0.129	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/07/94-07/07/94	3	9.	9.	9.	9.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/07/94-07/07/94	3	8.01	8.003	8.09	7.91	0.008	0.09	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/07/94-07/07/94	3	8.01	7.997	8.09	7.91	0.008	0.091	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/94-07/07/94	3	0.01	0.01	0.012	0.008	0.	0.002	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0207

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00					
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0208

NPS Station ID: SHEN0208
 Location: Ivy Creek
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.277087/ -78.654865

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_FISH_3F020
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0208

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/95-07/12/95	1	16.2	16.2	16.2	16.2	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/12/95-07/12/95	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/12/95-07/12/95	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/12/95-07/12/95	1	6.69	6.69	6.69	6.69	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/12/95-07/12/95	1	6.69	6.69	6.69	6.69	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/95-07/12/95	1	0.204	0.204	0.204	0.204	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/12/95-07/12/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0208

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00												
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00												
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0209

NPS Station ID: SHEN0209
 Location: IVY CREEK
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.278310/ -78.631892

Depth of Water: 0
 Elevation: 1300

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_VTSSS_GR08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION GR08 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT IVY CREEK INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.02 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0209

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.22	1.22	1.22	1.22	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.47	0.47	0.47	0.47	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	5.3	5.3	5.3	5.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0209

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0210

NPS Station ID: SHEN0210
 Location: DEEP RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005022700.00

LAT/LON: 38.278892/ -78.763615

Depth of Water: 0
 Elevation: 415

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.000

Agency: 12NSS
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 2B047917L /SI02B047917L
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND
 AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS,
 AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS
 IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS.
 EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988)
 WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO
 SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN;
 (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0210

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/28/86-04/17/86	2	8.85	8.85	9.7	8.	1.445	1.202	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/28/86-04/17/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/28/86-04/17/86	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/28/86-04/17/86	2	18.	18.	19.	17.	2.	1.414	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/28/86-04/17/86	2	10.4	10.4	11.	9.8	0.72	0.849	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/28/86-04/17/86	2	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/28/86-04/17/86	2	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/28/86-04/17/86	2	2.512	2.512	2.512	2.512	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/28/86-04/17/86	2	3.	3.	4.3	1.7	3.38	1.838	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/28/86-04/17/86	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/28/86-04/17/86	2	0.001	0.001	0.001	0.	0.	0.001	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/28/86-04/17/86	2	0.85	0.85	1.	0.7	0.045	0.212	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/28/86-04/17/86	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/28/86-04/17/86	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/28/86-04/17/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/28/86-04/17/86	2	0.585	0.585	0.62	0.55	0.002	0.049	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/28/86-04/17/86	2	1.6	1.6	1.74	1.46	0.039	0.198	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/28/86-04/17/86	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/28/86-04/17/86	2	4.8	4.8	4.9	4.7	0.02	0.141	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0210

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/28/86-04/17/86	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/28/86-04/17/86	2	5.5	5.5	5.8	5.2	0.18	0.424	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/28/86-04/17/86	2	9.	9.	14.	4.	50.	7.071	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/28/86-04/17/86	2	39.	39.	45.	33.	72.	8.485	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/28/86-04/17/86	2	0.005	0.005	0.01	0.	0.	0.007	**	**	**	**
71885	IRON (UG/L AS FE)	03/28/86-04/17/86	2	4.	4.	5.	3.	2.	1.414	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/28/86-04/17/86	2	1360.	1360.	1360.	1360.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/28/86-04/17/86	2	0.2	0.2	0.3	0.1	0.02	0.141	**	**	**	**
83509	STREAM, WIDTH METER	03/28/86-04/17/86	2	2.	2.	2.	2.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0210

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	2	1.00						2	2	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0211

NPS Station ID: SHEN0211
 Location: DEEP RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.278892/ -78.763948

Depth of Water: 0
 Elevation: 1360
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_DR01
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION DR01 IS LOCATED ON THE GROTTOS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT DEEP RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.12 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	616	11.	11.327	23.	0.	34.314	5.858	3.5	6.5	17.	19.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	823	19.	19.324	51.	3.	4.935	2.221	17.	18.	20.	21.
00400	PH (STANDARD UNITS)	11/02/79-07/29/97	842	5.5	5.517	6.65	4.84	0.034	0.184	5.32	5.41	5.59	5.75
00400	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	842	5.5	5.481	6.65	4.84	0.035	0.188	5.32	5.41	5.59	5.75
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	842	3.162	3.305	14.454	0.224	1.795	1.34	1.778	2.57	3.89	4.786
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	823	19.	18.75	49.	3.	4.599	2.145	17.	18.	19.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	857	5.	6.026	487.5	-41.5	391.789	19.794	0.98	2.1	-2.2	15.4
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/29/97	9	1.2	1.222	2.2	0.7	0.199	0.447	0.7	0.85	1.4	2.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	842	0.4	0.455	7.2	0.1	0.061	0.246	0.4	0.4	0.5	0.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	842	0.5	0.54	2.3	0.3	0.008	0.092	0.5	0.5	0.6	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	842	0.6	0.609	1.09	0.4	0.004	0.065	0.55	0.57	0.64	0.69
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	842	1.62	1.62	2.58	0.91	0.028	0.167	1.43	1.51	1.72	1.82
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	842	0.9	0.908	2.	0.5	0.01	0.1	0.8	0.8	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	842	4.8	4.737	6.5	2.9	0.317	0.563	4.	4.3	5.1	5.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	842	5.6	5.637	7.2	0.	0.534	0.731	4.8	5.2	6.1	6.5
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	04/30/96-07/29/97	6	26.594	26.68	30.066	22.531	11.016	3.319	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	627	0.002	0.005	0.06	0.	0.008	0.	0.	0.	0.007	0.01
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	842	0.02	0.151	1.2	0.	0.053	0.23	0.	0.001	0.2	0.5
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	842	3.19	3.331	14.57	0.23	1.823	1.35	1.79	2.59	3.92	4.82

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0211

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	842	0	0.00	229	0	0.00	372	0	0.00	241	0	0.00			
	Other-Lo Lim.	6.5	842	841	1.00	229	229	1.00	372	371	1.00	241	241	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	857	856	1.00	241	241	1.00	374	373	1.00	242	242	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	842	0	0.00	229	0	0.00	372	0	0.00	241	0	0.00			
	Drinking Water	250.	842	0	0.00	229	0	0.00	372	0	0.00	241	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	842	0	0.00	229	0	0.00	372	0	0.00	241	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	842	0	0.00	229	0	0.00	372	0	0.00	241	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1979 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	6	6.7	7.65	13.	4.5	11.735	3.426	**	**	**	**
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	6	19.	19.	21.	18.	1.2	1.095	**	**	**	**
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	8	5.725	5.684	5.79	5.45	0.012	0.109	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	8	5.724	5.671	5.79	5.45	0.012	0.11	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	8	1.887	2.135	3.548	1.622	0.388	0.623	**	**	**	**
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	6	18.	18.	20.	17.	1.2	1.095	**	**	**	**
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	8	3.	2.188	14.	-8.5	38.71	6.222	**	**	**	**
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	8	0.4	0.388	0.4	0.3	0.001	0.035	**	**	**	**
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	8	0.5	0.513	0.6	0.5	0.001	0.035	**	**	**	**
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	8	0.6	0.606	0.67	0.53	0.002	0.045	**	**	**	**
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	8	1.555	1.623	2.24	1.4	0.07	0.265	**	**	**	**
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	8	0.9	0.913	1.	0.9	0.001	0.035	**	**	**	**
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	8	4.7	4.825	5.7	4.6	0.136	0.369	**	**	**	**
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	8	5.6	5.563	5.8	4.9	0.083	0.288	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	8 ##	0.	0.004	0.02	0.	0.	0.007	**	**	**	**
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	8	0.02	0.028	0.05	0.02	0.	0.012	**	**	**	**
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	8	1.9	2.153	3.58	1.64	0.396	0.629	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	37	14.	12.	21.	1.5	43.681	6.609	2.5	5.	18.5	19.6
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	36	17.	17.306	19.	15.	0.847	0.92	16.	17.	18.	18.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	50	5.83	5.81	6.1	5.49	0.02	0.141	5.6	5.705	5.91	5.999
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	50	5.83	5.788	6.1	5.49	0.021	0.143	5.6	5.705	5.91	5.999
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	50	1.479	1.631	3.236	0.794	0.298	0.546	1.002	1.23	1.973	2.512
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	36	17.	16.722	18.	15.	0.663	0.815	15.7	16.	17.	18.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	50	6.	7.786	19.5	1.	27.969	5.289	2.53	3.5	11.25	17.
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	50	0.4	0.392	0.5	0.3	0.001	0.034	0.31	0.4	0.4	0.4
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	50	0.5	0.454	0.5	0.3	0.003	0.054	0.4	0.4	0.5	0.5
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	50	0.59	0.595	0.9	0.42	0.004	0.066	0.54	0.56	0.613	0.66
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	50	1.475	1.47	1.7	0.93	0.023	0.151	1.272	1.395	1.593	1.639
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	50	0.9	0.856	1.	0.5	0.011	0.107	0.7	0.8	0.9	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	50	4.	3.968	4.9	2.9	0.397	0.63	3.	3.475	4.5	4.8
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	50	6.2	5.902	7.	0.1	1.473	1.214	5.3	5.4	6.6	6.8
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	50	0.01	0.017	0.06	0.	0.	0.018	0.	0.	0.04	0.04
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	50	0.08	0.257	0.8	0.02	0.08	0.283	0.021	0.04	0.6	0.7
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	50	1.49	1.644	3.26	0.8	0.303	0.551	1.012	1.24	1.993	2.53

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	18	10.25	9.75	21.	0.5	59.39	7.706	0.5	2.375	18.5	21.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	42	20.	20.048	26.	17.	4.046	2.012	18.	19.	21.	23.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	42	5.64	5.645	5.95	5.3	0.025	0.159	5.429	5.52	5.79	5.84
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	42	5.64	5.616	5.95	5.3	0.026	0.162	5.429	5.52	5.79	5.84
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	42	2.291	2.423	5.012	1.122	0.859	0.927	1.445	1.622	3.02	3.726
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	42	19.	19.31	25.	16.	3.731	1.932	17.	18.	20.	22.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	42	9.25	13.283	54.	2.	121.116	11.005	4.1	6.075	18.625	31.05
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	42	0.5	0.474	0.8	0.4	0.008	0.089	0.4	0.4	0.5	0.6
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	42	0.5	0.526	0.7	0.4	0.006	0.077	0.43	0.5	0.6	0.67

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	42	0.63	0.64	0.94	0.54	0.005	0.069	0.562	0.61	0.66	0.697
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	42	1.775	1.697	2.21	1.19	0.061	0.247	1.289	1.495	1.88	1.934
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	42	0.9	0.912	1.	0.7	0.007	0.086	0.8	0.8	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	42	4.5	4.5	5.6	3.6	0.208	0.456	3.8	4.2	4.8	5.
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	42	5.8	5.724	6.8	4.6	0.215	0.464	5.13	5.4	6.	6.3
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	42 ##	0.	0.006	0.04	0.	0.	0.011	0.	0.	0.006	0.03
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	42	0.02	0.097	0.5	0.	0.022	0.149	0.	0.01	0.1	0.4
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	42	2.31	2.443	5.05	1.13	0.872	0.934	1.46	1.64	3.04	3.755

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	38	18.	18.316	21.	16.	2.222	1.491	16.	17.	19.	20.1
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	38	5.74	5.716	6.03	5.36	0.042	0.205	5.448	5.538	5.915	6.001
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	38	5.74	5.67	6.03	5.36	0.044	0.211	5.448	5.538	5.915	6.001
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	38	1.82	2.139	4.365	0.933	0.983	0.992	0.998	1.216	2.901	3.565
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	38	18.	17.684	20.	15.	2.006	1.416	15.	17.	19.	19.1
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	38	9.	6.842	21.5	-3.	40.474	6.362	0.95	3.	12.125	15.
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	38	0.4	0.411	0.5	0.3	0.002	0.039	0.4	0.4	0.4	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	38	0.5	0.529	0.6	0.4	0.003	0.052	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	38	0.605	0.62	0.73	0.54	0.003	0.055	0.559	0.57	0.67	0.69
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	38	1.59	1.598	1.79	1.45	0.008	0.089	1.49	1.528	1.655	1.733
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	38	0.9	0.921	1.	0.7	0.005	0.07	0.8	0.9	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	38	4.7	4.666	5.6	3.8	0.244	0.494	3.99	4.175	5.1	5.2
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	38	5.6	5.437	6.5	4.3	0.314	0.561	4.7	4.875	5.9	6.02
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	38 ##	0.	0.003	0.02	0.	0.	0.004	0.	0.	0.005	0.01
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	38 ##	0.	0.025	0.2	0.	0.002	0.048	0.	0.	0.04	0.064
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	38	1.83	2.157	4.4	0.94	0.998	0.999	1.008	1.225	2.925	3.596

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	39	20.	20.154	29.	3.	16.765	4.095	17.	18.	22.	26.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	39	5.54	5.544	5.82	5.32	0.014	0.117	5.4	5.48	5.62	5.72
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	39	5.54	5.529	5.82	5.32	0.014	0.118	5.4	5.48	5.62	5.72
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	39	2.884	2.958	4.786	1.514	0.633	0.796	1.905	2.399	3.311	3.981
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/02/79-07/29/97	39	19.	19.538	28.	3.	14.939	3.865	17.	18.	21.	25.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	39	5.	5.392	24.5	-15.	81.689	9.038	1.	2.5	12.5	24.5
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	39	0.5	0.449	0.5	0.2	0.004	0.064	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	39	0.6	0.592	0.7	0.4	0.005	0.07	0.5	0.6	0.6	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	39	0.64	0.634	0.82	0.5	0.007	0.084	0.52	0.56	0.69	0.75
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	39	1.62	1.617	2.04	1.35	0.021	0.146	1.43	1.52	1.67	1.79
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	39	0.9	0.928	1.	0.8	0.004	0.06	0.9	0.9	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	39	4.9	4.879	5.8	3.8	0.291	0.54	4.1	4.5	5.3	5.6
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	39	5.1	5.003	6.5	0.	1.961	1.4	4.7	4.9	5.8	6.3
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	39 ##	0.	0.001	0.01	0.	0.	0.003	0.	0.	0.	0.006
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	39	0.002	0.091	0.6	0.	0.029	0.171	0.	0.	0.1	0.4
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	39	2.91	2.982	4.82	1.53	0.641	0.801	1.92	2.42	3.34	4.01

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	51	20.	20.843	28.	18.	5.855	2.42	19.	19.	22.	25.8
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	51	5.35	5.338	5.71	5.04	0.021	0.145	5.12	5.25	5.44	5.512
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	51	5.35	5.314	5.71	5.04	0.022	0.147	5.12	5.25	5.44	5.512
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	51	4.467	4.848	9.12	1.95	2.802	1.674	3.078	3.631	5.623	7.586
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	51	19.	20.118	27.	18.	5.506	2.346	18.	18.	21.	24.8
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	51	6.	5.643	31.5	-17.5	66.005	8.124	0.	2.5	10.5	18.7
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	51	0.4	0.416	0.5	0.1	0.005	0.073	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	51	0.5	0.531	0.7	0.3	0.01	0.099	0.4	0.5	0.6	0.7
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	51	0.57	0.593	0.82	0.42	0.008	0.089	0.492	0.52	0.67	0.708
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	51	1.48	1.495	1.84	0.91	0.022	0.149	1.332	1.42	1.61	1.678
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	51	0.9	0.91	1.	0.6	0.01	0.098	0.8	0.8	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	51	4.6	4.645	6.1	2.9	0.409	0.639	3.9	4.2	5.2	5.4
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	51	5.5	5.471	6.5	4.5	0.351	0.592	4.7	5.	6.	6.3
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	51 ###	0.	0.005	0.02	0.	0.	0.007	0.	0.	0.01	0.02
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	51	0.01	0.111	0.6	0.	0.04	0.2	0.	0.	0.08	0.5
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	51	4.5	4.886	9.19	1.97	2.849	1.688	3.1	3.66	5.67	7.65

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	46	20.	19.891	24.	15.	4.543	2.132	16.7	19.	21.	23.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	46	5.425	5.425	5.76	4.84	0.037	0.192	5.154	5.295	5.59	5.623
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	46	5.425	5.38	5.76	4.84	0.039	0.197	5.154	5.295	5.59	5.623
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	46	3.759	4.167	14.454	1.738	4.962	2.228	2.382	2.57	5.071	7.016
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	46	19.	19.304	23.	15.	3.994	1.999	16.7	18.	21.	22.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	46	6.	3.646	28.	-41.5	116.813	10.808	0.07	2.25	-3.875	18.8
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	46	0.4	0.437	0.6	0.4	0.003	0.053	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	46	0.5	0.537	0.7	0.4	0.005	0.071	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	46	0.64	0.658	1.09	0.49	0.01	0.101	0.57	0.6	0.702	0.759
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	46	1.62	1.628	2.2	1.35	0.022	0.15	1.461	1.55	1.69	1.797
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	46	0.85	0.874	1.	0.7	0.009	0.093	0.8	0.8	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	46	4.85	4.809	6.2	3.6	0.345	0.588	4.07	4.45	5.125	5.7
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	46	5.35	5.411	6.6	4.	0.609	0.781	4.1	4.95	6.2	6.4
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	46	0.005	0.006	0.02	0.	0.	0.005	0.	0.001	0.009	0.01
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	46	0.015	0.087	0.4	0.	0.012	0.111	0.	0.	0.2	0.3
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	46	3.785	4.2	14.57	1.75	5.044	2.246	2.402	2.59	5.11	7.069

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	35	14.5	12.514	21.	2.5	37.389	6.115	3.5	6.5	18.	20.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	44	19.	19.136	51.	13.	28.725	5.36	15.	17.	20.	21.5
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	44	5.475	5.501	6.65	5.18	0.044	0.21	5.355	5.413	5.538	5.61
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	44	5.475	5.469	6.65	5.18	0.045	0.213	5.355	5.413	5.538	5.61
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	44	3.35	3.396	6.607	0.224	1.055	1.027	2.455	2.901	3.868	4.416
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	44	18.	18.5	49.	13.	26.349	5.133	14.5	17.	19.75	20.5
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	44	4.	21.25	487.5	-38.	5470.599	73.963	1.	3.5	20.	59.5
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	44	0.5	0.659	7.2	0.4	1.042	1.021	0.4	0.4	0.5	0.85
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	44	0.6	0.591	2.3	0.4	0.074	0.272	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	44	0.71	0.704	0.87	0.55	0.006	0.076	0.58	0.65	0.76	0.795
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	44	1.72	1.705	2.58	1.11	0.055	0.235	1.46	1.54	1.798	2.005

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	44	1.	0.973	2.	0.8	0.029	0.17	0.9	0.9	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	44	4.55	4.602	5.5	4.	0.171	0.413	4.1	4.225	5.
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	44	5.	5.375	7.2	3.4	0.823	0.907	4.5	4.725	6.225
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	22 ##	0.	0.002	0.01	0.	0.	0.004	0.	0.	0.004
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	44	0.01	0.124	1.1	0.	0.042	0.206	0.	0.	0.3
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	44	3.38	3.423	6.66	0.23	1.072	1.035	2.475	2.925	3.898

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	44	9.75	10.007	22.	2.	36.788	6.065	3.	4.625	14.375
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	44	19.	19.591	23.	15.	2.34	1.53	18.	19.	20.75
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	45	5.42	5.396	5.57	5.13	0.011	0.104	5.236	5.34	5.465
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	45	5.42	5.383	5.57	5.13	0.011	0.105	5.236	5.34	5.465
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	45	3.802	4.138	7.413	2.692	1.197	1.094	2.992	3.428	4.572
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	44	19.	19.045	23.	14.	2.649	1.628	17.	18.	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	45	7.	2.089	23.7	-9.5	33.411	5.78	0.36	1.9	-1.9
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	45	0.5	0.476	0.6	0.4	0.003	0.053	0.4	0.4	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	45	0.6	0.571	0.7	0.5	0.003	0.055	0.5	0.5	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	45	0.59	0.602	0.69	0.46	0.003	0.051	0.542	0.57	0.64
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	45	1.55	1.542	1.8	1.11	0.015	0.124	1.396	1.46	1.62
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	45	0.9	0.9	1.	0.8	0.007	0.085	0.8	0.8	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	45	5.2	5.149	6.3	4.2	0.237	0.487	4.4	4.8	5.45
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	45	5.6	5.647	6.6	4.6	0.278	0.528	5.06	5.2	6.
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	45 ##	0.	0.01	0.2	0.	0.002	0.042	0.	0.	0.
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	45	3.83	4.17	7.47	2.71	1.218	1.103	3.012	3.455	4.605

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	33	9.	9.803	20.	0.5	38.687	6.22	1.4	4.5	15.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	39	19.	19.231	32.	16.	6.709	2.59	17.	18.	20.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	39	5.5	5.514	6.18	5.34	0.016	0.127	5.39	5.46	5.54
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	39	5.5	5.501	6.18	5.34	0.016	0.128	5.39	5.46	5.54
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	39	3.162	3.158	4.571	0.661	0.411	0.641	2.57	2.884	3.467
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	39	18.	18.615	31.	15.	5.874	2.424	17.	18.	19.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	39	3.6	3.71	18.7	-3.7	22.359	4.729	1.1	1.9	9.2
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	39	0.4	0.436	0.5	0.4	0.002	0.049	0.4	0.4	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	39	0.6	0.554	0.7	0.5	0.003	0.055	0.5	0.5	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	39	0.63	0.629	0.69	0.53	0.001	0.034	0.6	0.61	0.66
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	39	1.54	1.536	1.91	1.3	0.016	0.127	1.38	1.42	1.63
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	39	0.9	0.877	1.	0.8	0.007	0.081	0.8	0.8	0.9
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	39	5.1	5.054	6.	4.3	0.176	0.42	4.4	4.8	5.3
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	39	5.5	5.705	6.9	5.1	0.228	0.478	5.2	5.3	5.9
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	39 ##	0.	0.005	0.1	0.	0.	0.019	0.	0.	0.
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	39	3.19	3.182	4.61	0.67	0.417	0.646	2.59	2.91	3.49

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	48	11.25	11.49	20.	1.	32.814	5.728	3.	7.25	17.75	19.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	47	19.	18.809	24.	17.	1.854	1.362	17.	18.	20.	20.2
00400p	PH (STANDARD UNITS)	48	5.48	5.508	6.43	5.15	0.043	0.207	5.329	5.413	5.557	5.65
00400p	CONVERTED PH (STANDARD UNITS)	48	5.48	5.473	6.43	5.15	0.044	0.21	5.329	5.413	5.557	5.65
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	48	3.311	3.363	7.079	0.372	1.238	1.113	2.239	2.77	3.868	4.688
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	47	18.	18.213	24.	16.	1.823	1.35	17.	17.	19.	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	48	3.8	0.848	32.	-9.5	40.633	6.374	0.3	1.025	-2.35	-7.33
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	48	0.4	0.471	1.2	0.4	0.023	0.152	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	48	0.6	0.567	0.8	0.5	0.004	0.063	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	48	0.605	0.607	0.82	0.52	0.002	0.046	0.55	0.58	0.63	0.641
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	48	1.63	1.66	2.18	1.33	0.02	0.142	1.529	1.58	1.745	1.851
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	48	0.9	0.883	2.	0.7	0.032	0.179	0.8	0.8	0.9	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	48	5.3	5.233	6.5	4.4	0.195	0.442	4.5	5.	5.5	5.7
00955p	SILICA, DISSOLVED (MG/L AS SI02)	48	5.8	5.867	6.6	5.1	0.215	0.464	5.3	5.5	6.3	6.5
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	48	0.006	0.011	0.09	0.	0.	0.019	0.	0.	0.01	0.02
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	48	3.34	3.39	7.14	0.38	1.257	1.121	2.26	2.795	3.898	4.721

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	47	10.5	11.574	21.5	3.	33.804	5.814	5.	6.	17.	20.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	51	19.	18.667	22.	14.	1.867	1.366	17.	18.	19.	20.
00400p	PH (STANDARD UNITS)	52	5.59	5.569	6.13	5.23	0.028	0.166	5.323	5.46	5.655	5.756
00400p	CONVERTED PH (STANDARD UNITS)	52	5.59	5.539	6.13	5.23	0.028	0.169	5.323	5.46	5.655	5.756
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	52	2.57	2.889	5.888	0.741	1.147	1.071	1.76	2.214	3.467	4.754
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	51	18.	18.176	21.	14.	1.668	1.292	16.2	18.	19.	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	53	4.4	6.245	27.1	-3.7	36.831	6.069	1.38	2.75	8.75	16.64
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	52	0.4	0.435	0.9	0.3	0.009	0.093	0.4	0.4	0.4	0.6
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	52	0.5	0.531	0.7	0.4	0.003	0.054	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	52	0.585	0.592	0.75	0.48	0.002	0.046	0.55	0.56	0.617	0.657
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	52	1.67	1.664	1.94	1.41	0.015	0.123	1.48	1.58	1.76	1.811
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	52	0.8	0.858	1.	0.6	0.008	0.089	0.8	0.8	0.9	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	52	4.8	4.679	5.5	3.9	0.217	0.466	4.	4.1	5.075	5.2
00955p	SILICA, DISSOLVED (MG/L AS SI02)	52	5.8	5.888	7.	4.6	0.285	0.533	5.3	5.5	6.275	6.7
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	30 ##	0.	0.002	0.02	0.	0.	0.004	0.	0.	0.003	0.005
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	52	0.02	0.031	0.2	0.006	0.002	0.046	0.01	0.01	0.02	0.074
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	52	2.59	2.911	5.94	0.75	1.165	1.079	1.772	2.235	3.49	4.787

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	52	11.	11.337	22.	2.	33.331	5.773	4.	6.5	16.875	19.35
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	52	19.	19.25	23.	17.	1.289	1.135	18.	18.	20.	20.7
00400p	PH (STANDARD UNITS)	52	5.585	5.599	5.92	5.33	0.015	0.124	5.453	5.512	5.7	5.757
00400p	CONVERTED PH (STANDARD UNITS)	52	5.585	5.582	5.92	5.33	0.016	0.125	5.453	5.512	5.7	5.757
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	52	2.6	2.618	4.677	1.202	0.526	0.725	1.75	1.995	3.073	3.524
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	52	19.	18.827	23.	17.	1.283	1.133	17.3	18.	19.	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	53	5.	4.472	18.7	-4.5	21.191	4.603	0.68	1.9	9.05	10.18
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	52	0.4	0.431	0.5	0.4	0.002	0.047	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	52	0.5	0.531	0.7	0.4	0.004	0.061	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	52	0.59	0.598	0.72	0.51	0.002	0.045	0.543	0.563	0.63	0.65

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	52	1.705	1.737	2.27	1.43	0.031	0.175	1.513	1.6	1.863	1.997
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	52	0.9	0.898	1.	0.7	0.008	0.087	0.8	0.8	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	52	4.8	4.748	5.6	4.	0.196	0.443	4.13	4.3	5.1	5.3
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	52	5.7	5.758	6.8	5.	0.158	0.398	5.3	5.425	6.	6.27
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	50 ##	0.	0.002	0.04	0.	0.	0.006	0.	0.	0.003	0.004
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	52	0.006	0.113	1.2	0.	0.049	0.222	0.	0.001	0.095	0.47
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	52	2.62	2.638	4.71	1.21	0.533	0.73	1.762	2.01	3.093	3.553

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	49	10.5	10.918	22.5	2.	28.691	5.356	5.	7.	13.5	19.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	52	19.	19.577	25.	18.	2.367	1.538	18.	18.	20.	21.7
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	52	5.525	5.509	5.7	5.14	0.012	0.112	5.332	5.44	5.59	5.644
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	52	5.525	5.494	5.7	5.14	0.013	0.113	5.332	5.44	5.59	5.644
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	52	2.986	3.208	7.244	1.995	0.872	0.934	2.27	2.57	3.631	4.66
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	52	19.	19.115	24.	17.	2.339	1.529	18.	18.	20.	21.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	53	3.3	2.453	7.8	-4.7	5.768	2.402	1.2	1.9	5.3	-0.6
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	52	0.5	0.456	0.6	0.4	0.003	0.054	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	52	0.6	0.563	0.7	0.5	0.004	0.063	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	52	0.58	0.587	0.65	0.52	0.001	0.03	0.55	0.57	0.607	0.64
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	52	1.64	1.659	2.01	1.39	0.016	0.128	1.476	1.58	1.74	1.817
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	52	1.	0.958	1.	0.9	0.002	0.05	0.9	0.9	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	52	4.85	4.754	5.6	4.	0.19	0.435	4.1	4.425	5.1	5.3
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	52	5.5	5.463	6.4	4.	0.427	0.653	4.5	4.95	6.	6.27
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	47	0.002	0.003	0.01	0.	0.	0.003	0.	0.001	0.005	0.008
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	52	0.4	0.403	1.	0.01	0.059	0.244	0.042	0.2	0.6	0.7
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	52	3.005	3.233	7.3	2.01	0.884	0.94	2.29	2.59	3.66	4.694

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	51	12.	11.99	23.	0.	35.555	5.963	4.	8.	17.	20.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	51	19.	19.51	24.	17.	1.495	1.223	18.	19.	20.	21.
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	51	5.43	5.427	5.61	5.22	0.01	0.099	5.29	5.35	5.5	5.556
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	51	5.43	5.416	5.61	5.22	0.01	0.1	5.29	5.35	5.5	5.556
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	51	3.715	3.841	6.026	2.455	0.807	0.898	2.78	3.162	4.467	5.129
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	51	19.	18.863	23.	16.	1.641	1.281	17.	18.	19.	21.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	51	3.7	3.135	15.3	-3.1	18.268	4.274	0.3	1.9	-1.3	7.62
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	51	0.4	0.453	0.9	0.4	0.007	0.081	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	51	0.5	0.547	0.8	0.4	0.005	0.07	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	51	0.6	0.599	0.68	0.4	0.002	0.048	0.542	0.57	0.63	0.65
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	51	1.59	1.596	2.08	1.35	0.023	0.151	1.402	1.48	1.71	1.78
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	51	1.	0.943	1.	0.7	0.005	0.07	0.9	0.9	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	51	4.6	4.608	6.	3.8	0.375	0.612	3.9	4.	5.2	5.3
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	51	5.8	5.814	6.9	3.8	0.43	0.655	5.02	5.4	6.4	6.7
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	51	0.004	0.006	0.02	0.	0.	0.005	0.	0.002	0.01	0.01
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	51	0.4	0.409	1.1	0.003	0.081	0.284	0.007	0.2	0.6	0.88
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	51	3.74	3.87	6.07	2.47	0.82	0.905	2.806	3.19	4.5	5.17

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	50	11.5	11.74	21.5	0.5	33.013	5.746	3.55	7.375	16.5	20.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	51	19.	19.333	22.	18.	1.307	1.143	18.	18.	20.	21.
00400p	PH (STANDARD UNITS)	51	5.42	5.415	5.64	5.15	0.011	0.105	5.276	5.35	5.49	5.556
00400p	CONVERTED PH (STANDARD UNITS)	51	5.42	5.402	5.64	5.15	0.011	0.106	5.276	5.35	5.49	5.556
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	51	3.802	3.96	7.079	2.291	1.012	1.006	2.78	3.236	4.467	5.299
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	51	19.	18.863	22.	17.	1.241	1.114	18.	18.	19.	20.8
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	51	3.7	11.2	11.2	-4.2	8.366	2.892	0.3	1.9	-0.6	-2.18
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	51	0.4	0.445	0.5	0.4	0.003	0.05	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	51	0.5	0.524	0.7	0.4	0.003	0.059	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	51	0.59	0.582	0.64	0.47	0.002	0.039	0.53	0.56	0.61	0.63
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	51	1.58	1.603	1.9	1.4	0.014	0.116	1.44	1.54	1.7	1.75
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	51	0.9	0.906	1.	0.7	0.007	0.083	0.8	0.9	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	51	4.8	4.727	5.9	3.8	0.329	0.574	3.92	4.2	5.1	5.5
00955p	SILICA, DISSOLVED (MG/L AS SI02)	51	6.	5.698	6.9	4.1	0.596	0.772	4.62	4.9	6.3	6.5
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	45	0.008	0.006	0.02	0.	0.	0.005	0.	0.001	0.01	0.01
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	51	0.2	0.23	0.8	0.004	0.057	0.24	0.006	0.008	0.4	0.6
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	51	3.83	3.99	7.14	2.31	1.03	1.015	2.806	3.26	4.5	5.338

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	52	9.75	11.029	21.	0.5	26.651	5.162	2.75	8.5	15.875	18.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	52	19.	19.231	24.	18.	1.279	1.131	18.	19.	20.	20.
00400p	PH (STANDARD UNITS)	52	5.52	5.512	5.74	5.12	0.013	0.116	5.359	5.443	5.58	5.644
00400p	CONVERTED PH (STANDARD UNITS)	52	5.52	5.496	5.74	5.12	0.014	0.117	5.359	5.443	5.58	5.644
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	52	3.02	3.194	7.586	1.82	0.958	0.979	2.27	2.63	3.61	4.377
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	52	18.	18.692	24.	17.	1.629	1.276	18.	18.	19.	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	52	2.8	1.548	7.8	-5.6	6.62	2.573	1.2	1.9	-0.6	-1.3
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	52	0.4	0.448	0.6	0.4	0.003	0.058	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	52	0.5	0.533	0.7	0.4	0.004	0.062	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	52	0.58	0.581	0.65	0.52	0.001	0.031	0.533	0.56	0.6	0.62
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	52	1.685	1.682	1.95	1.32	0.021	0.146	1.486	1.58	1.8	1.837
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	52	0.9	0.938	1.	0.8	0.004	0.066	0.83	0.9	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	52	4.8	4.79	5.9	4.	0.155	0.394	4.3	4.5	5.075	5.3
00955p	SILICA, DISSOLVED (MG/L AS SI02)	52	5.7	5.752	6.5	5.	0.237	0.487	5.1	5.325	6.275	6.4
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	45	0.003	0.004	0.01	0.	0.	0.002	0.001	0.002	0.005	0.007
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	52	0.07	0.125	0.6	0.	0.023	0.152	0.	0.02	0.2	0.4
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	52	3.04	3.219	7.65	1.83	0.974	0.987	2.29	2.65	3.64	4.41

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	52	12.	11.606	20.	2.	31.886	5.647	3.65	6.625	16.75	19.35
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	52	19.	19.442	22.	17.	0.84	0.916	18.3	19.	20.	20.
00400p	PH (STANDARD UNITS)	52	5.415	5.408	5.61	5.07	0.011	0.104	5.275	5.36	5.483	5.54
00400p	CONVERTED PH (STANDARD UNITS)	52	5.415	5.395	5.61	5.07	0.011	0.105	5.275	5.36	5.483	5.54
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	52	3.846	4.024	8.511	2.455	1.213	1.101	2.884	3.294	4.365	5.316
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	52	19.	18.846	22.	17.	0.995	0.998	18.	18.	19.	20.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	52	3.7	0.783	6.9	-5.6	7.555	2.749	1.13	1.9	-1.3	-3.1
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	52	0.5	0.463	0.6	0.4	0.003	0.053	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	52	0.5	0.535	0.6	0.5	0.002	0.048	0.5	0.5	0.6	0.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	52	0.585	0.593	0.67	0.53	0.001	0.035	0.553	0.56	0.62	0.647
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	52	1.625	1.629	1.91	1.33	0.013	0.114	1.473	1.56	1.7	1.787
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	52	0.9	0.929	1.	0.8	0.003	0.057	0.9	0.9	1.	1.
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	52	4.95	4.798	5.6	3.9	0.239	0.489	4.	4.4	5.2	5.37
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	52	5.7	5.715	6.7	4.5	0.392	0.626	4.9	5.125	6.25	6.67
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	41	0.001	0.003	0.02	0.	0.	0.004	0.	0.001	0.003	0.008
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	52	0.2	0.253	1.	0.	0.065	0.256	0.	0.05	0.4	0.6
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	52	3.875	4.054	8.58	2.47	1.234	1.111	2.91	3.318	4.4	5.36

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

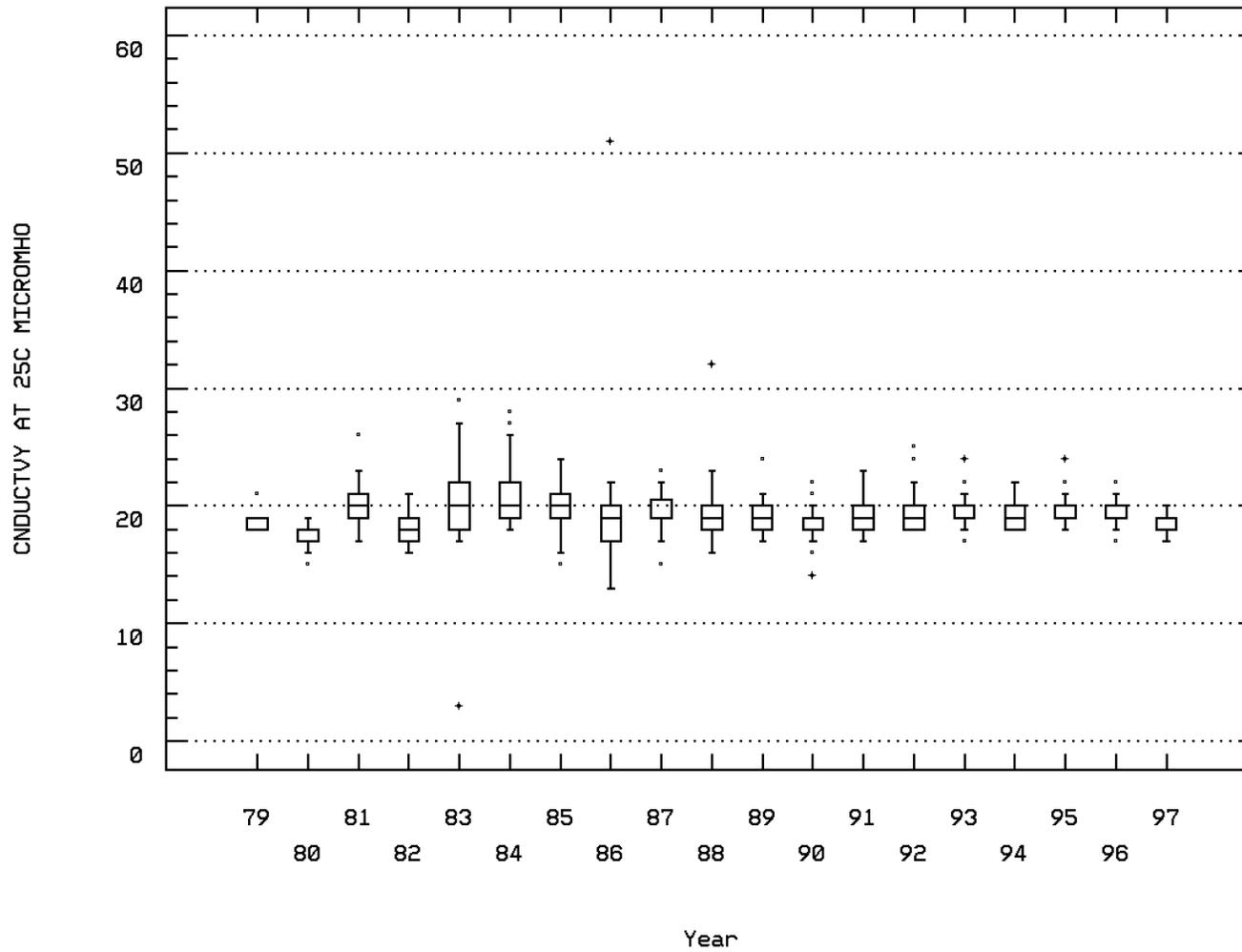
Annual Analysis for 1997 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	42	13.75	12.25	20.	0.	33.735	5.808	4.15	7.375	18.	18.85
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	30	19.	18.8	20.	17.	0.441	0.664	18.	18.	19.	19.9
00400p	PH (STANDARD UNITS)	11/02/79-07/29/97	30	5.485	5.478	5.55	5.37	0.002	0.043	5.42	5.45	5.503	5.539
00400p	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	30	5.485	5.476	5.55	5.37	0.002	0.043	5.42	5.45	5.503	5.539
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	30	3.274	3.34	4.266	2.818	0.113	0.336	2.891	3.144	3.548	3.802
00402p	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	30	18.	18.4	19.	17.	0.317	0.563	18.	18.	19.	19.
00409p	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	42	5.4	23.593	73.7	-3.1	926.55	30.439	0.3	1.2	56.825	71.69
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	30	0.5	0.473	0.5	0.4	0.002	0.045	0.4	0.4	0.5	0.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	30	0.5	0.533	0.6	0.5	0.002	0.048	0.5	0.5	0.6	0.6
00930p	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	30	0.57	0.577	0.65	0.5	0.001	0.029	0.55	0.56	0.59	0.618
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	30	1.625	1.632	1.96	1.37	0.017	0.129	1.471	1.538	1.723	1.779
00941p	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	30	0.9	0.863	1.	0.8	0.004	0.067	0.8	0.8	0.9	0.99
00946p	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	30	4.8	4.747	5.1	4.	0.103	0.321	4.11	4.575	5.	5.1
00955p	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	30	5.5	5.64	6.5	5.2	0.114	0.338	5.4	5.4	5.8	6.29
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	22	0.007	0.009	0.02	0.	0.	0.008	0.	0.001	0.02	0.02
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	30	0.2	0.279	1.2	0.01	0.115	0.339	0.021	0.06	0.225	0.98
82042p	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	30	3.3	3.366	4.3	2.84	0.115	0.339	2.916	3.17	3.58	3.83

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0211 Parameter Code: 00095

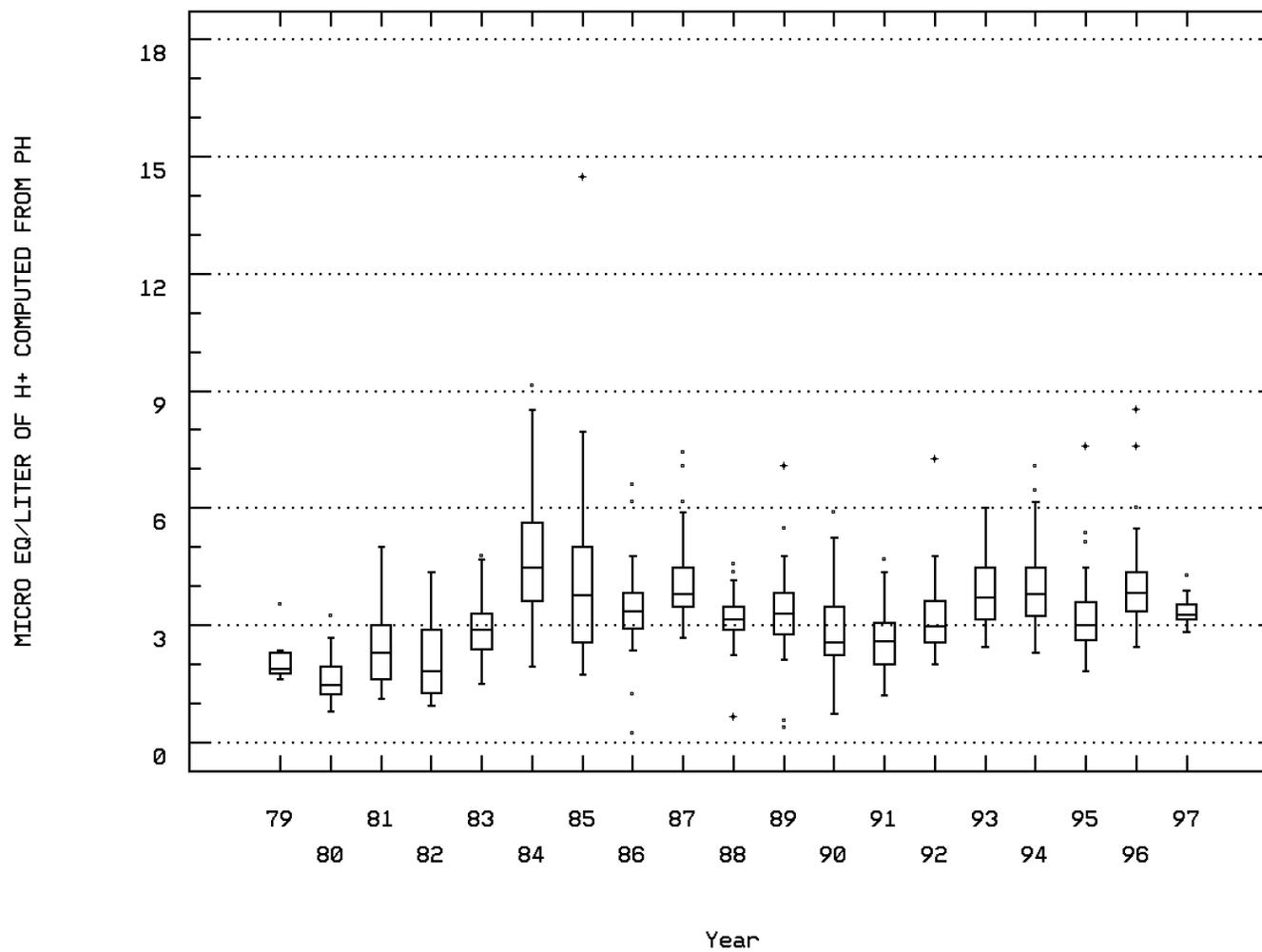
SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



DEEP RUN

Station: SHEN0211 Parameter Code: 00400

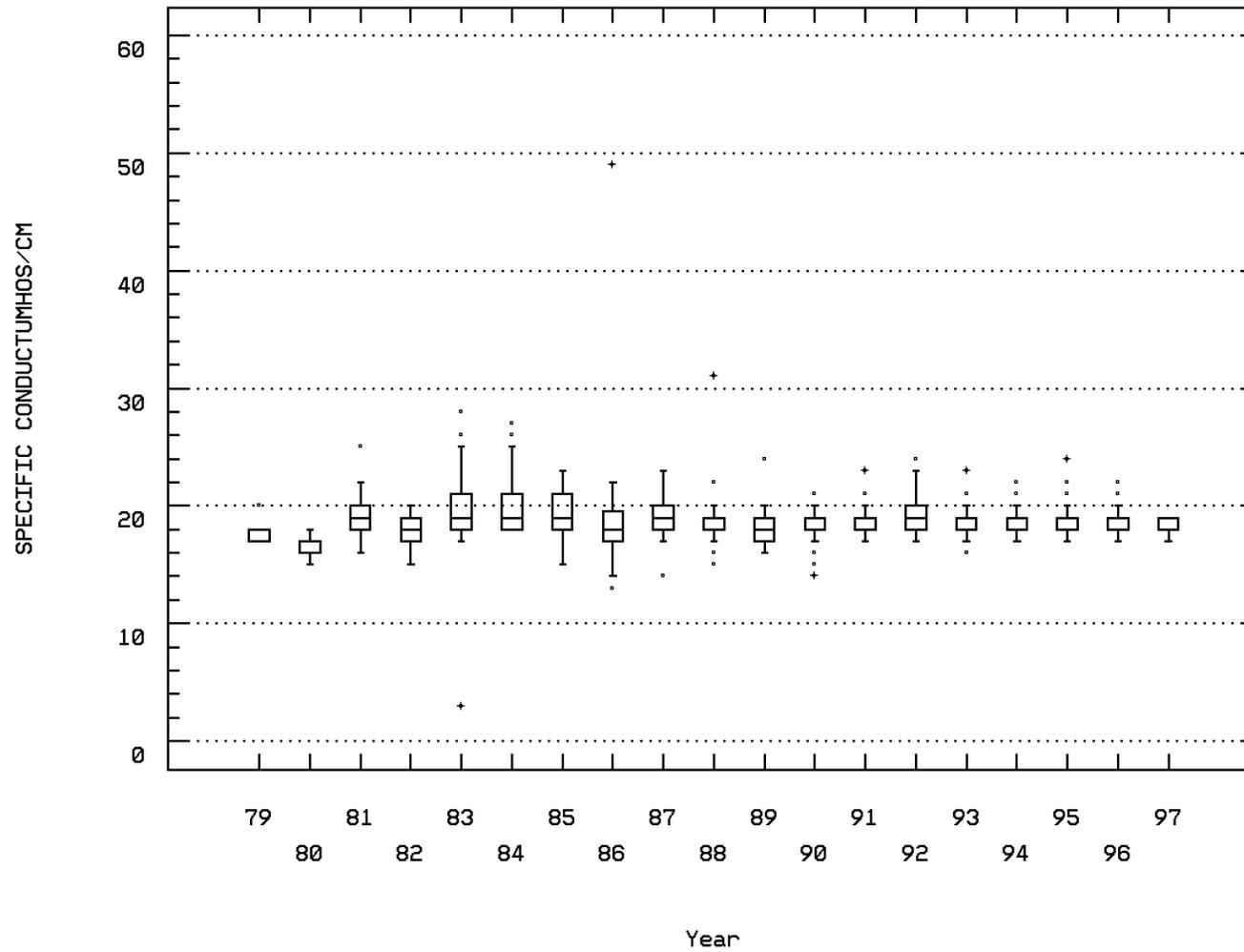
MICRO EQ/LITER OF H+ COMPUTED FROM PH



DEEP RUN

Station: SHEN0211 Parameter Code: 00402

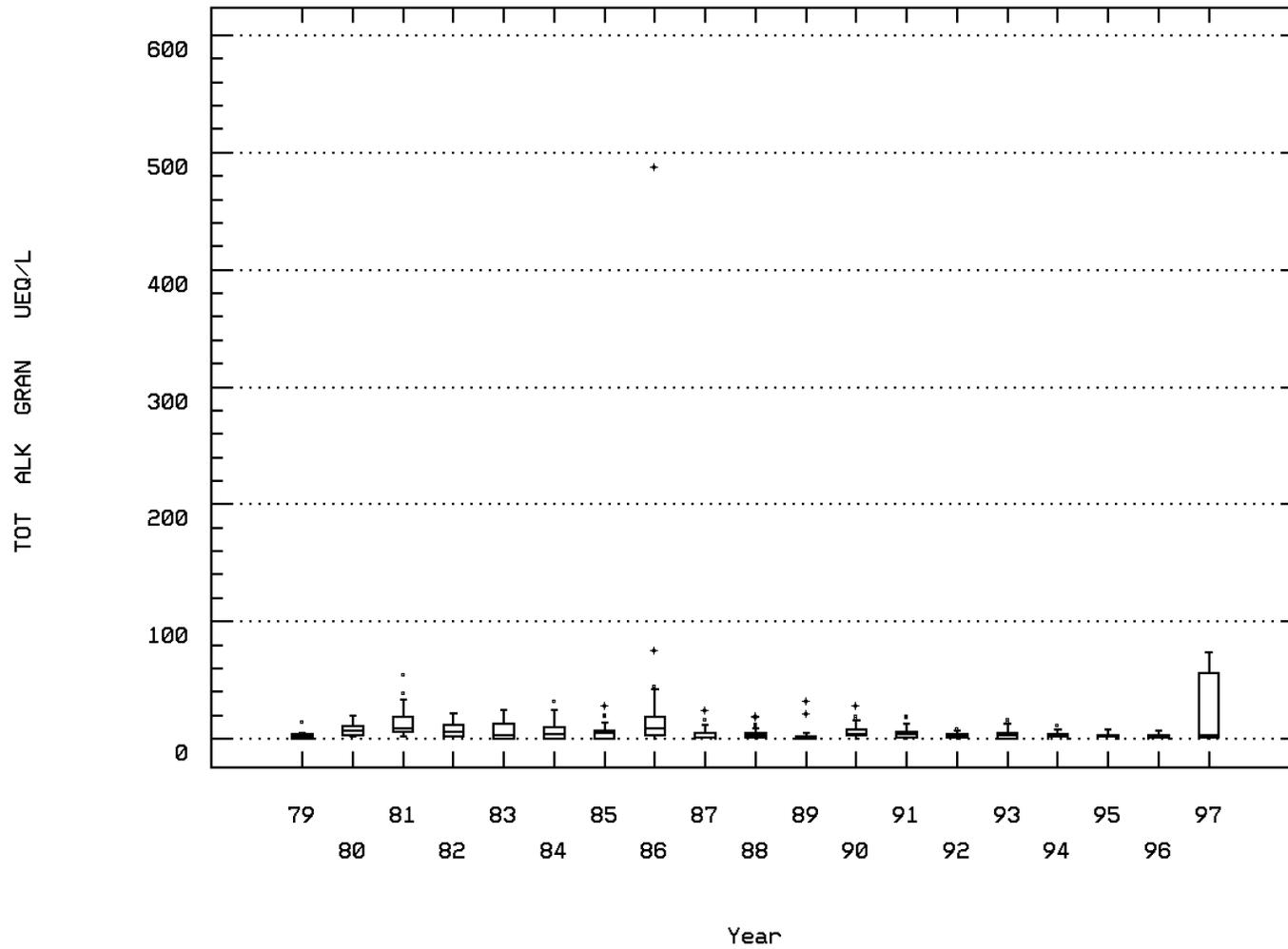
SPECIFIC CONDUCTANCE, NON-TEMPERATURE CO



DEEP RUN

Station: SHEN0211 Parameter Code: 00409

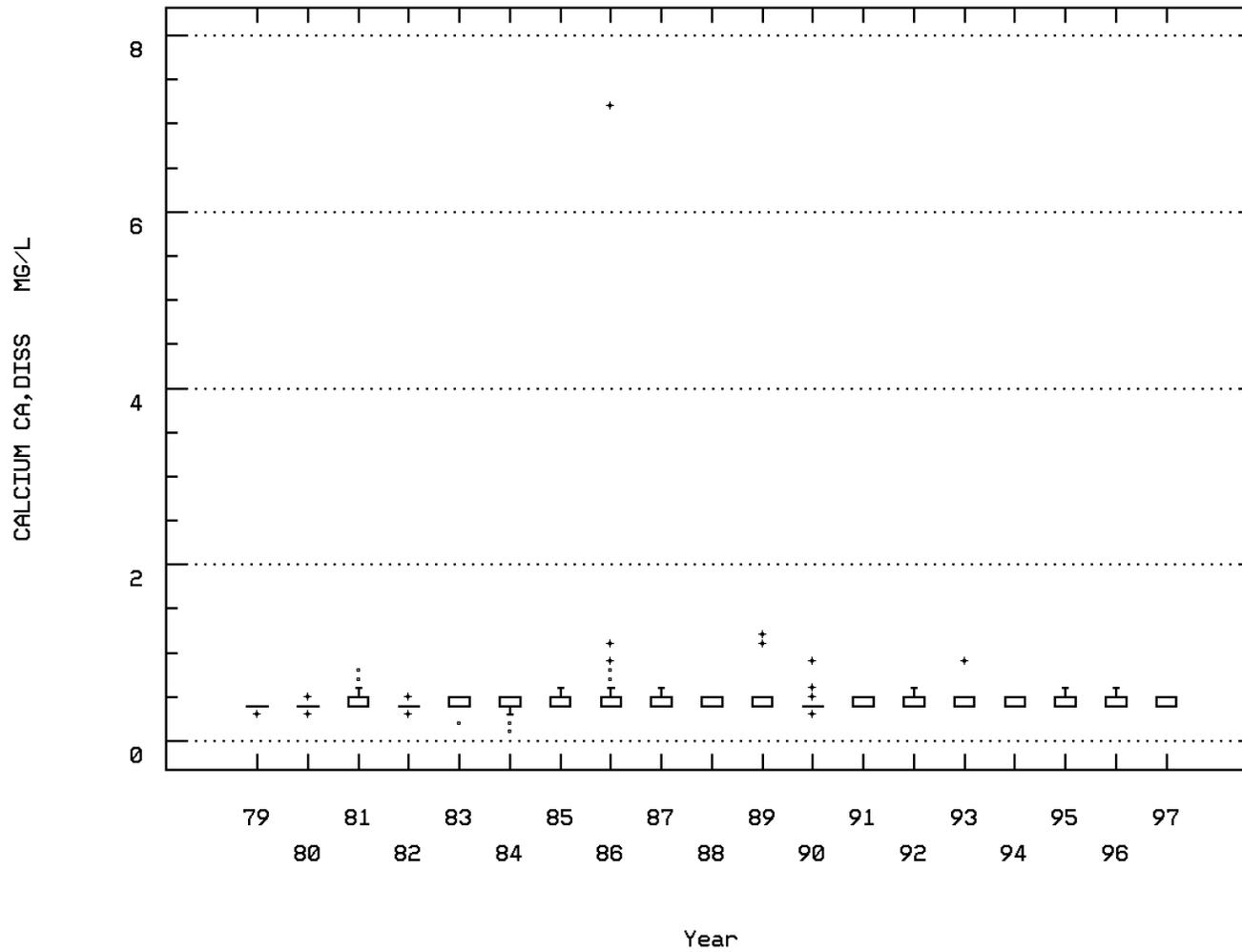
ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSI



DEEP RUN

Station: SHEN0211 Parameter Code: 00915

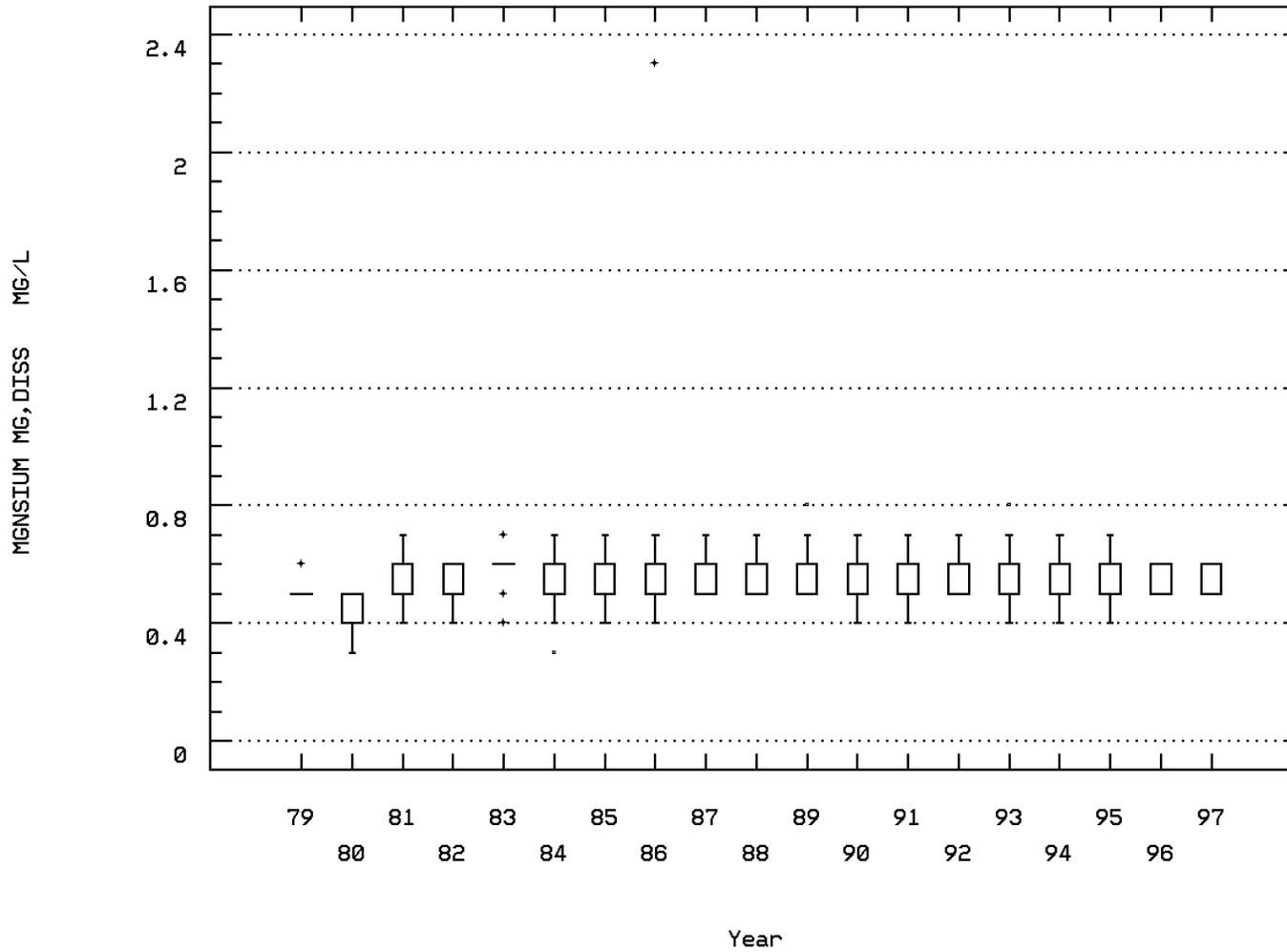
CALCIUM, DISSOLVED (MG/L AS CA)



DEEP RUN

Station: SHEN0211 Parameter Code: 00925

MAGNESIUM, DISSOLVED (MG/L AS MG)

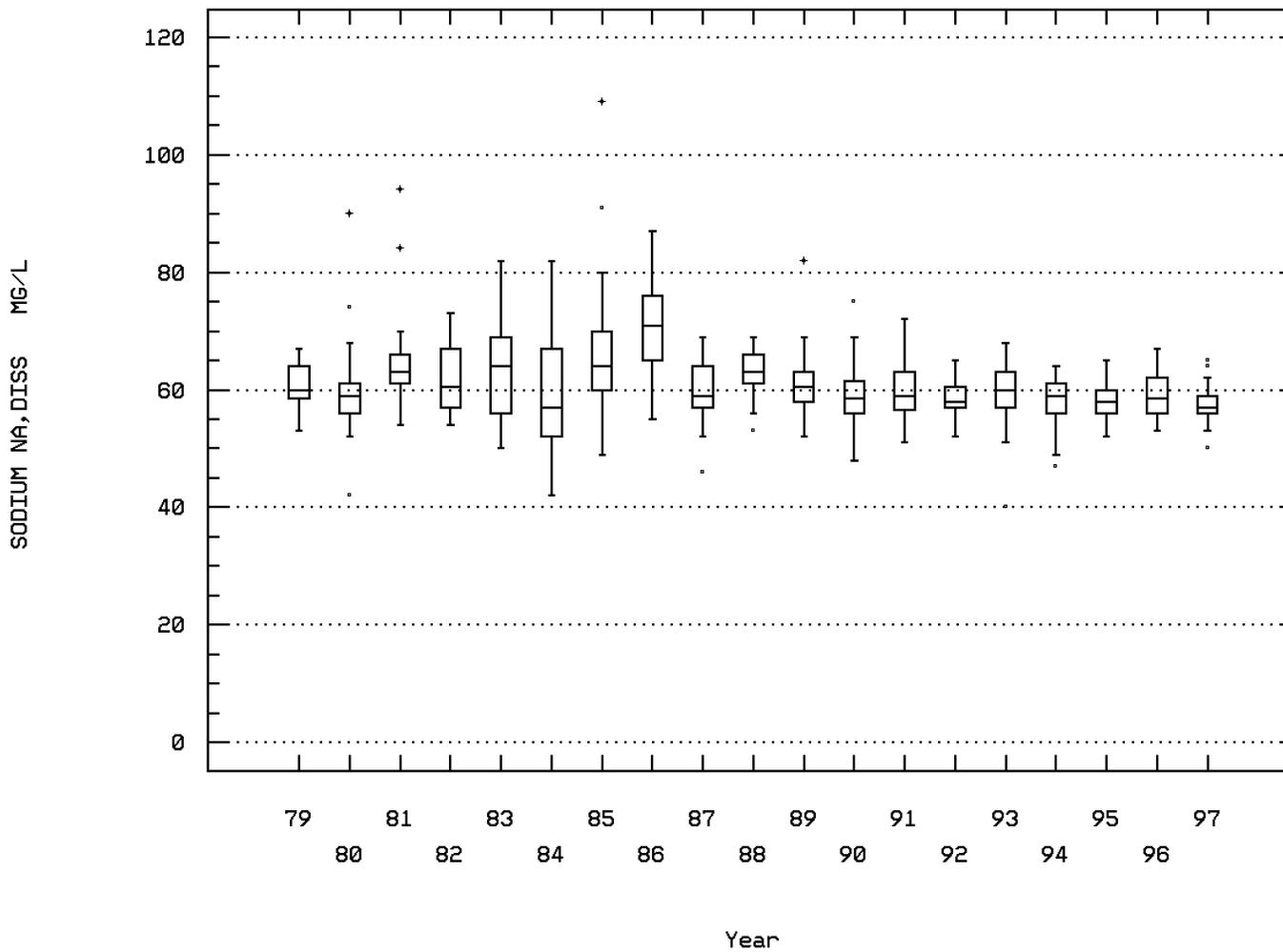


DEEP RUN

Station: SHEN0211 Parameter Code: 00930

SODIUM, DISSOLVED (MG/L AS NA)

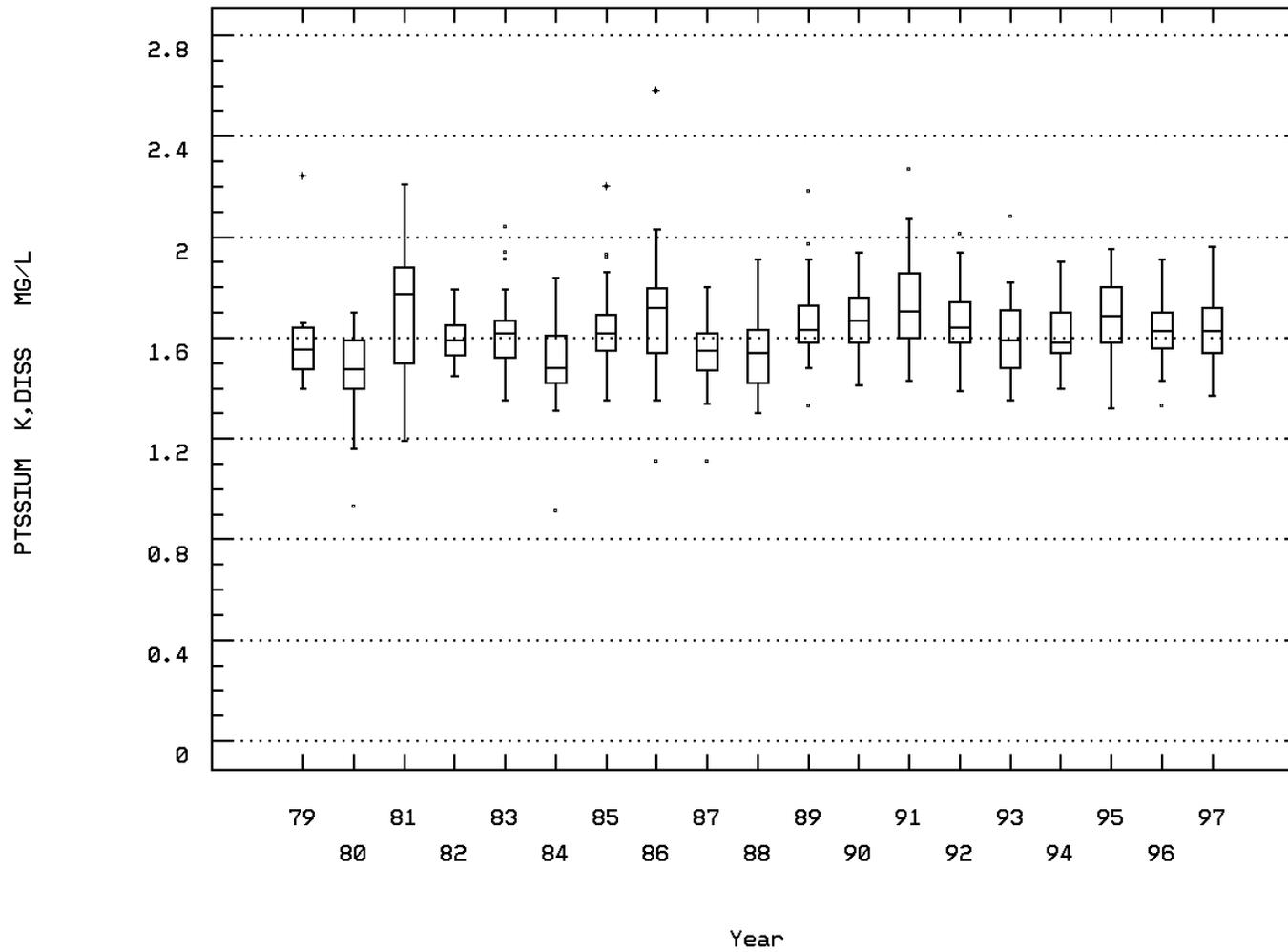
(X 0.01)



DEEP RUN

Station: SHEN0211 Parameter Code: 00935

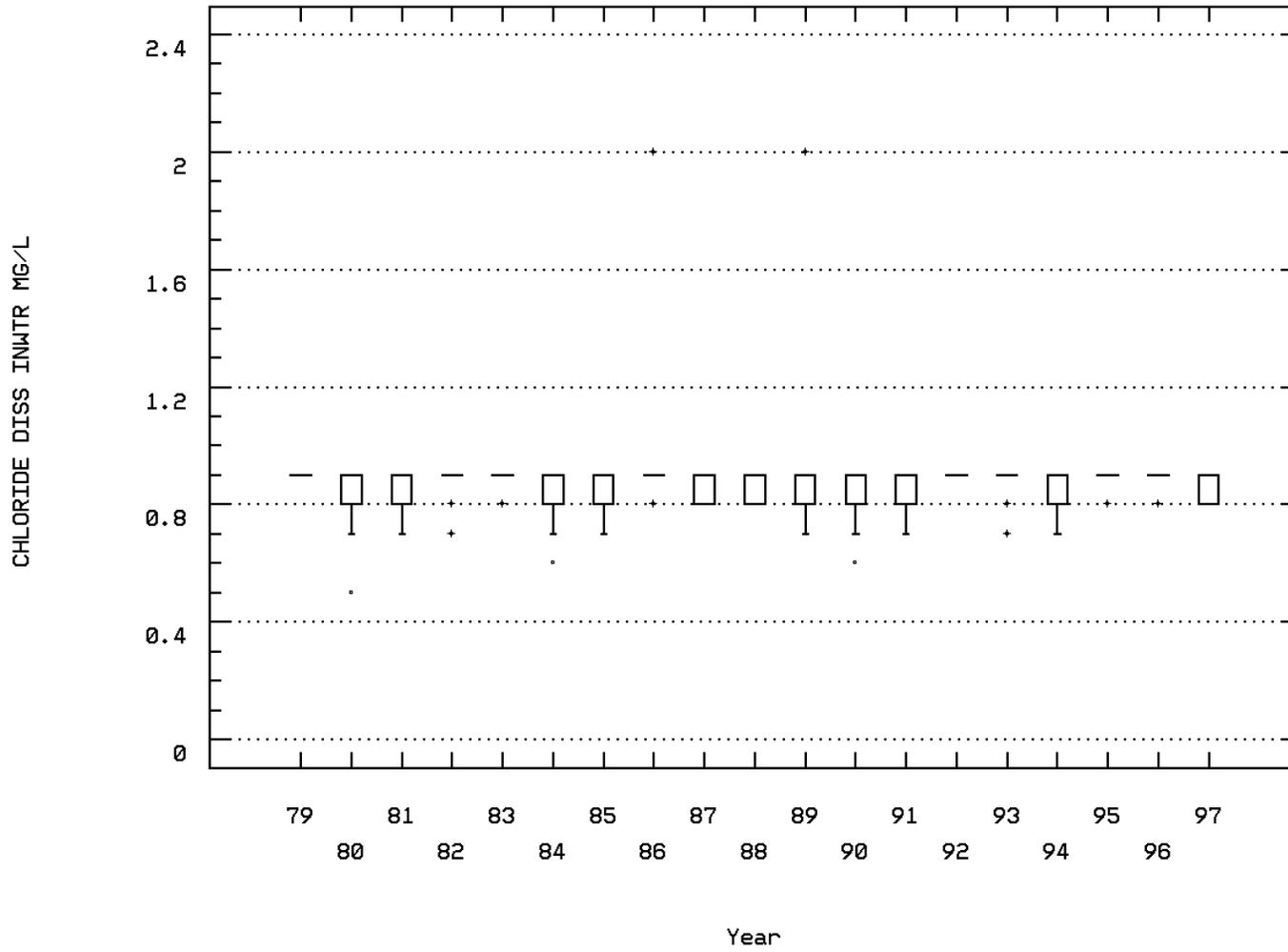
POTASSIUM, DISSOLVED (MG/L AS K)



DEEP RUN

Station: SHEN0211 Parameter Code: 00941

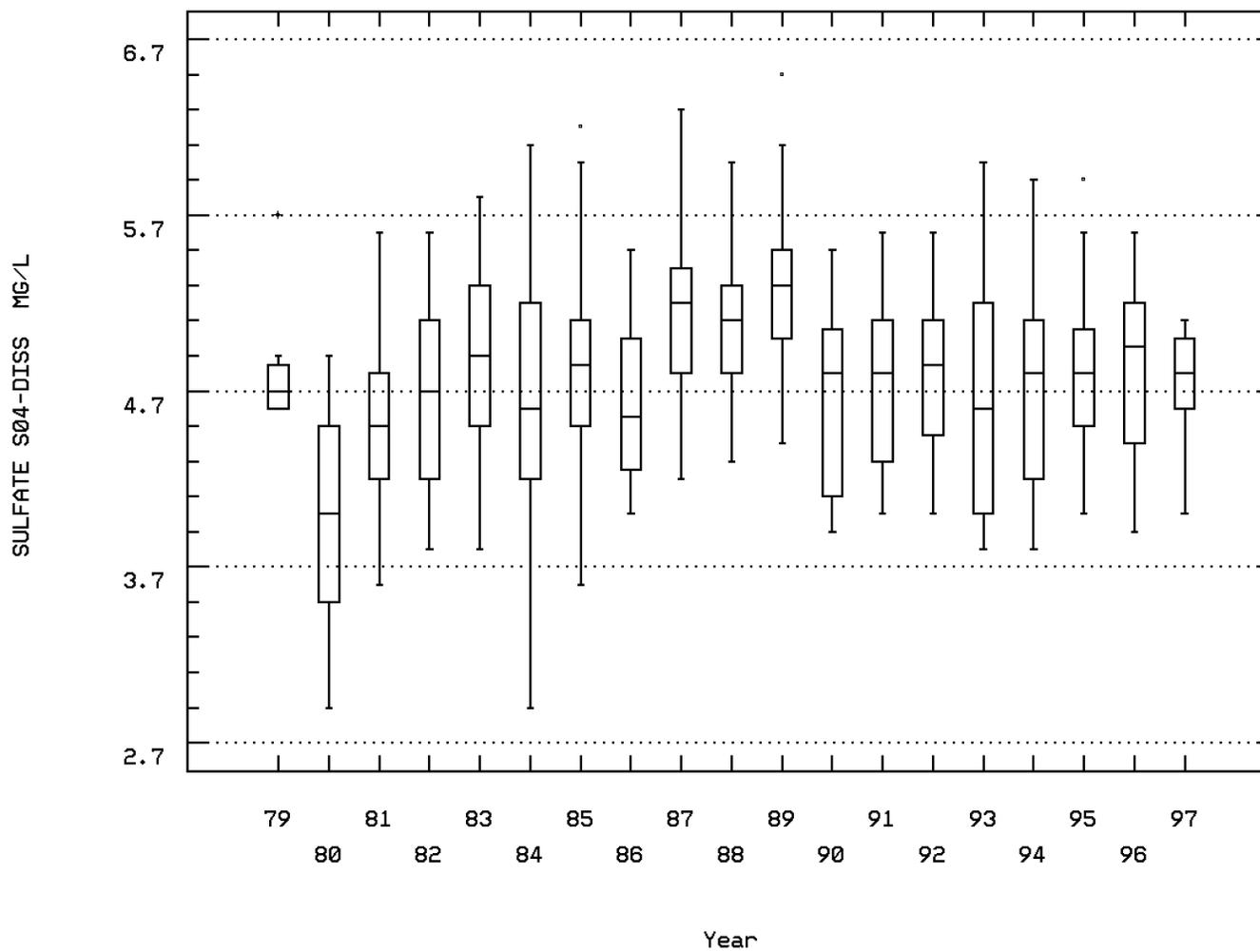
CHLORIDE, DISSOLVED IN WATER



DEEP RUN

Station: SHEN0211 Parameter Code: 00946

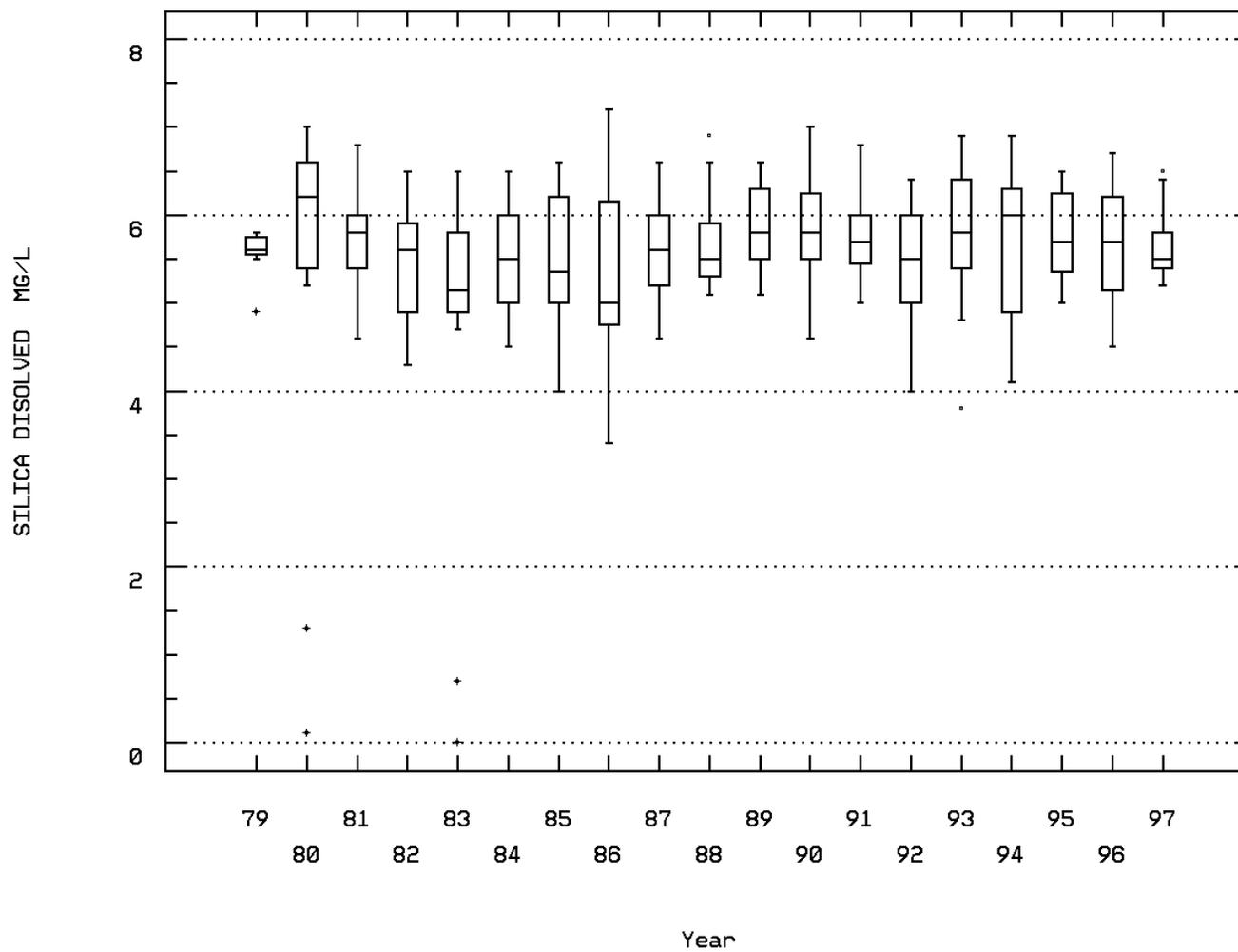
SULFATE, DISSOLVED (MG/L AS S04)



DEEP RUN

Station: SHEN0211 Parameter Code: 00955

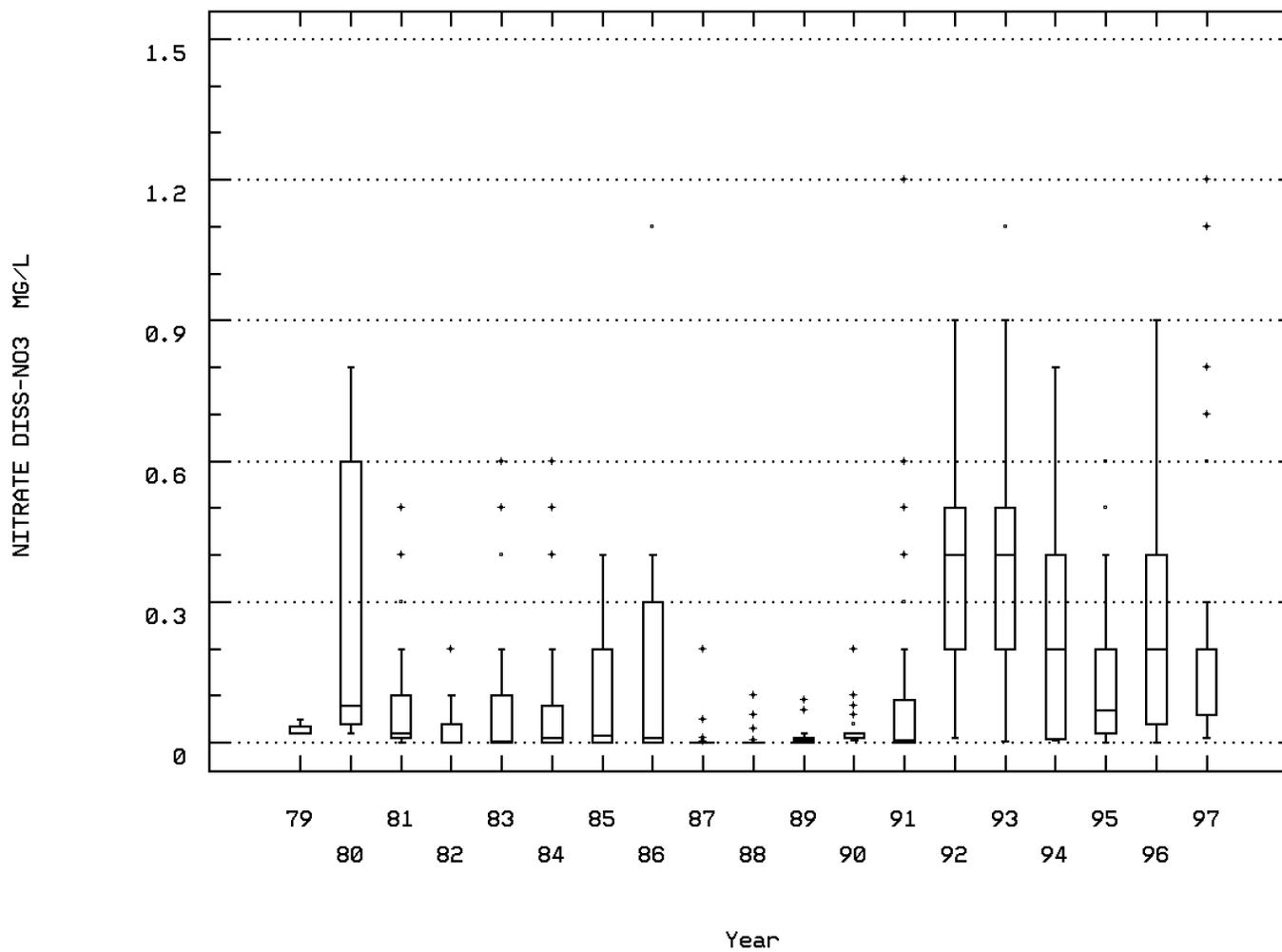
SILICA, DISSOLVED (MG/L AS SI02)



DEEP RUN

Station: SHEN0211 Parameter Code: 71851

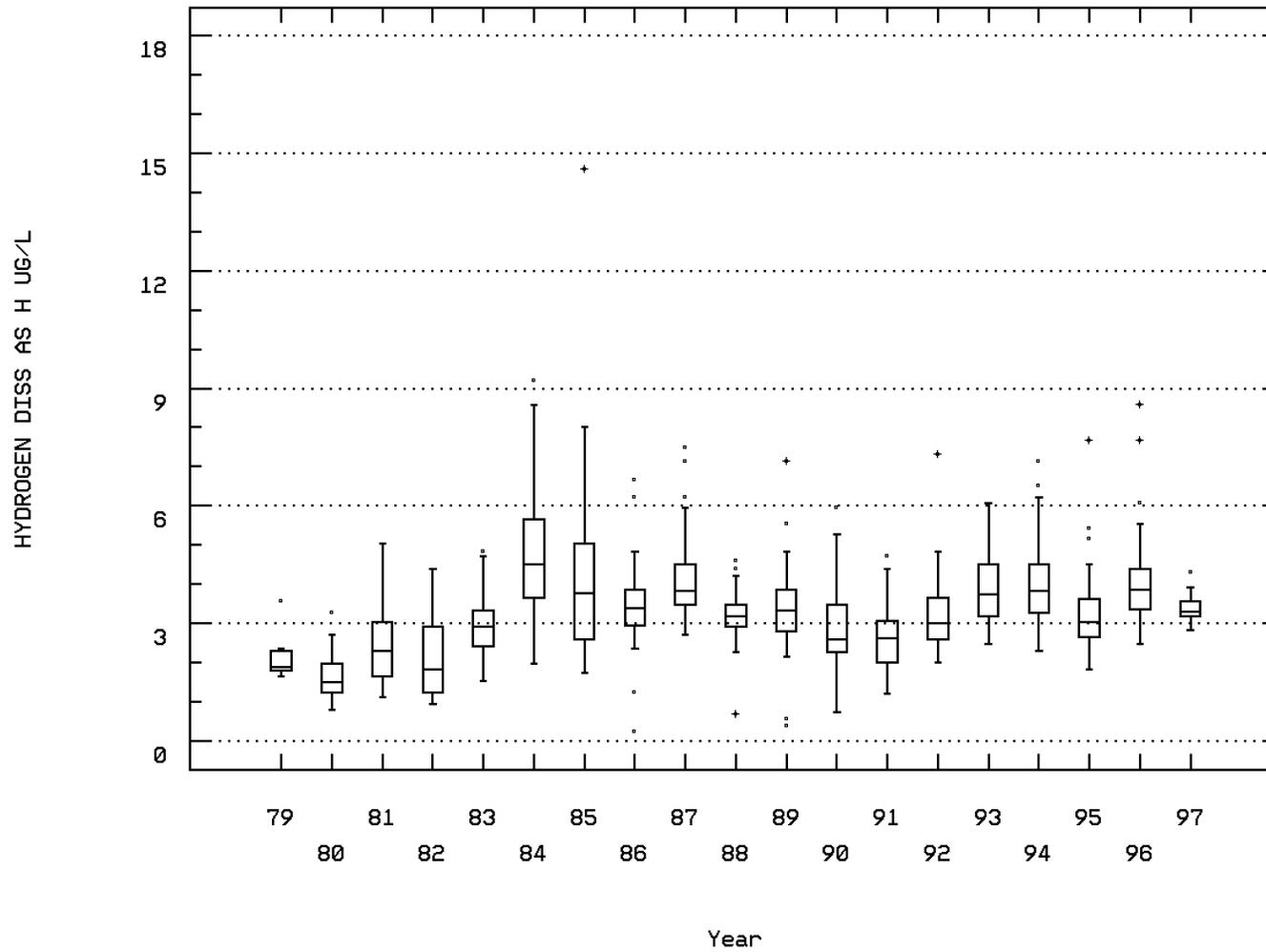
NITRATE NITROGEN, DISSOLVED (MG/L AS NO



DEEP RUN

Station: SHEN0211 Parameter Code: 82042

HYDROGEN, DISSOLVED IN WATER (UG/L AS H



DEEP RUN

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	182	18.5	17.929	23.	9.5	6.108	2.471	15.	16.5	20.	20.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	228	19.	19.298	32.	3.	5.752	2.398	17.	18.	20.	21.1
00400	PH (STANDARD UNITS)	11/02/79-07/29/97	229	5.46	5.504	6.26	4.84	0.055	0.235	5.25	5.35	5.63	5.91
00400	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	229	5.46	5.448	6.26	4.84	0.058	0.242	5.25	5.35	5.63	5.91
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	229	3.467	3.567	14.454	0.55	3.053	1.747	1.23	2.344	4.467	5.623
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	228	18.	18.776	31.	3.	5.426	2.329	17.	18.	19.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	241	7.8	11.246	75.	-41.5	263.179	16.223	1.9	3.7	13.5	29.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	229	0.4	0.436	1.1	0.2	0.01	0.098	0.4	0.4	0.45	0.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	229	0.5	0.502	0.8	0.3	0.004	0.062	0.4	0.5	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	229	0.63	0.639	1.09	0.45	0.005	0.067	0.57	0.6	0.66	0.7
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	229	1.68	1.681	2.18	0.91	0.026	0.162	1.48	1.59	1.78	1.88
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	229	1.	0.96	2.	0.6	0.009	0.094	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	229	4.2	4.235	6.3	2.9	0.227	0.476	3.8	4.	4.45	4.9
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	229	6.3	6.245	7.2	4.1	0.214	0.463	5.8	6.	6.5	6.7
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	189	0.003	0.006	0.06	0.	0.	0.009	0.	0.	0.006	0.02
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	229	0.2	0.294	1.2	0.	0.09	0.3	0.	0.02	0.5	0.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	229	3.49	3.595	14.57	0.55	3.102	1.761	1.24	2.36	4.5	5.67

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	260	6.	6.073	15.	0.	10.039	3.168	2.	4.	8.	10.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	365	19.	19.359	51.	13.	6.011	2.452	17.	18.	20.	22.
00400	PH (STANDARD UNITS)	11/02/79-07/29/97	372	5.51	5.526	6.65	5.04	0.032	0.178	5.333	5.43	5.59	5.75
00400	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	372	5.51	5.494	6.65	5.04	0.033	0.181	5.333	5.43	5.59	5.75
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	372	3.09	3.209	9.12	0.224	1.481	1.217	1.778	2.57	3.715	4.645
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	365	19.	18.759	49.	13.	5.574	2.361	17.	18.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	374	4.5	4.879	487.5	-33.	684.439	26.162	0.35	1.9	-2.1	12.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	372	0.5	0.48	7.2	0.3	0.128	0.358	0.4	0.4	0.5	0.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	372	0.6	0.575	2.3	0.3	0.013	0.112	0.5	0.5	0.6	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	372	0.59	0.6	0.9	0.4	0.004	0.064	0.54	0.56	0.63	0.69
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	372	1.54	1.557	2.58	0.93	0.029	0.171	1.38	1.45	1.64	1.75
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	372	0.9	0.899	2.	0.5	0.01	0.1	0.8	0.8	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	372	5.	4.955	6.5	3.	0.263	0.513	4.2	4.725	5.3	5.5
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	372	5.4	5.379	6.8	0.	0.564	0.751	4.7	5.2	5.8	6.07
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	257	0.003	0.006	0.04	0.	0.	0.009	0.	0.	0.009	0.02
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	372	0.02	0.087	1.2	0.	0.023	0.151	0.	0.	0.1	0.3
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	372	3.11	3.233	9.19	0.23	1.504	1.226	1.79	2.59	3.74	4.68

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/02/79-10/21/97	174	12.	12.272	20.	3.	12.326	3.511	8.	9.875	14.5	17.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/02/79-07/29/97	230	19.	19.296	28.	14.	2.454	1.566	18.	19.	20.	21.
00400	PH (STANDARD UNITS)	11/02/79-07/29/97	241	5.51	5.514	5.89	5.12	0.017	0.132	5.36	5.435	5.59	5.68
00400	CONVERTED PH (STANDARD UNITS)	11/02/79-07/29/97	241	5.51	5.494	5.89	5.12	0.018	0.133	5.36	5.435	5.59	5.68
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/02/79-07/29/97	241	3.09	3.204	7.586	1.288	1.009	1.005	2.089	2.57	3.673	4.365
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/02/79-07/29/97	230	19.	18.709	27.	13.	2.268	1.506	17.	18.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/02/79-10/21/97	242	3.7	2.603	24.5	-38.	29.122	5.396	0.4	1.9	7.025	-3.64
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/02/79-07/29/97	241	0.4	0.434	0.6	0.1	0.003	0.058	0.4	0.4	0.5	0.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/02/79-07/29/97	241	0.5	0.523	0.7	0.4	0.003	0.055	0.5	0.5	0.6	0.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0211

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/02/79-07/29/97	241	0.59	0.595	0.87	0.48	0.003	0.055	0.54	0.56	0.62	0.648
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/02/79-07/29/97	241	1.65	1.661	2.27	1.35	0.017	0.129	1.51	1.58	1.735	1.828
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/02/79-07/29/97	241	0.9	0.872	1.	0.6	0.007	0.083	0.8	0.8	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/02/79-07/29/97	241	4.9	4.878	6.2	3.8	0.156	0.395	4.4	4.6	5.1	5.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/02/79-07/29/97	241	5.4	5.459	6.8	4.	0.309	0.556	4.8	5.05	5.9	6.28
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	11/02/79-10/21/97	181	0.001	0.003	0.02	0.	0.	0.004	0.	0.	0.005	0.01
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/02/79-07/29/97	241	0.02	0.113	1.	0.	0.037	0.193	0.	0.	0.1	0.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/02/79-07/29/97	241	3.11	3.23	7.65	1.3	1.025	1.012	2.11	2.59	3.7	4.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0212

NPS Station ID: SHEN0212
 Location: Ivy Creek
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.279698/ -78.641781

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_FISH_3F018
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0212

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/95-07/12/95	1	15.6	15.6	15.6	15.6	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/12/95-07/12/95	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/12/95-07/12/95	1	9.1	9.1	9.1	9.1	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/12/95-07/12/95	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/12/95-07/12/95	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/95-07/12/95	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/12/95-07/12/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0212

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00										
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0213

NPS Station ID: SHEN0213
 Location: NORTH R. RTE 668 BR NW OF GROTTO
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005005
 RF3 Index: 02070005001200.02
 Description:

LAT/LON: 38.281948/ -78.851670

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 0.290
 RF3 Mile Point: 1.72

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 013 /013 /NORTH S-6A
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0213

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/22/67	4	24.25	24.	25.	22.5	1.167	1.08	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	06/21/67-06/23/67	3	103.	112.333	132.	102.	290.333	17.039	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	5	6.8	6.96	7.8	6.3	0.443	0.666	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	5	3.8	4.44	7.9	3.1	3.823	1.955	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	3	490.	590.	790.	490.	30000.	173.205	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	06/21/67-06/22/67	3	2.69	2.759	2.898	2.69	0.014	0.12	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			574.566							
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	3	230.	243.333	330.	170.	6533.333	80.829	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	3	2.362	2.37	2.519	2.23	0.021	0.144	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			234.547							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0213

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00						5	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	3	0	0.00						3	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	3	2	0.67						3	2	0.67			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0214

NPS Station ID: SHEN0214
 Location: 668 BR.
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: SHENANDOAH RIVER
 Minor Basin: NORTH RIVER NORTH R AT RT
 RF1 Index: 02070005005
 RF3 Index: 02070005000501.59

LAT/LON: 38.281948/ -78.853338

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.290
 RF3 Mile Point: 6.14

Agency: 1113VABD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): NOR 9 /NORTH RIVER9
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.05

On/Off RF1: OFF
 On/Off RF3:

Description:
 REQUESTED BY AIR AND WATER DIVISION IN CONNECTION WITH A LAWSUIT. NEEDED TO AID IN MODEL VERIFICATION AND IN THE EVALUATION OF WASTE TREATMENT NEEDS FOR HARRISONBURG AREA.

Parameter Inventory for Station: SHEN0214

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0215

NPS Station ID: SHEN0215
 Location: LOWER LEWIS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005007001.22

LAT/LON: 38.284726/ -78.718893

Depth of Water: 0
 Elevation: 543

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.24

Agency: 12NSS
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 2B047076U /2BN2B047076U
 Within Park Boundary: Yes

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 10.20
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS, AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS. EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988) WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN; (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0215

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/86-04/15/86	2	10.2	10.2	10.5	9.9	0.18	0.424	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/31/86-04/15/86	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/31/86-04/15/86	2	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/86-04/15/86	2	19.	19.	19.	19.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/31/86-04/15/86	2	9.95	9.95	10.	9.9	0.005	0.071	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/31/86-04/15/86	2	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/31/86-04/15/86	2	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/86-04/15/86	2	1.259	1.259	1.259	1.259	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/86-04/15/86	2	12.4	12.4	13.1	11.7	0.98	0.99	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/31/86-04/15/86	2	0.65	0.65	0.7	0.6	0.005	0.071	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/31/86-04/15/86	2	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/31/86-04/15/86	2	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/31/86-04/15/86	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/86-04/15/86	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/86-04/15/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/86-04/15/86	2	0.61	0.61	0.61	0.61	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/86-04/15/86	2	2.05	2.05	2.07	2.03	0.001	0.028	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/86-04/15/86	2	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/86-04/15/86	2	5.35	5.35	5.4	5.3	0.005	0.071	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0215

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/31/86-04/15/86	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/86-04/15/86	2	5.8	5.8	5.9	5.7	0.02	0.141	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/31/86-04/15/86	2	1.5	1.5	3.	0.	4.5	2.121	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/31/86-04/15/86	2	13.	13.	20.	6.	98.	9.899	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/86-04/15/86	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
71885	IRON (UG/L AS FE)	03/31/86-04/15/86	2	99.925	99.925	188.86	10.99	15818.868	125.773	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/31/86-04/15/86	2	1780.	1780.	1780.	1780.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/31/86-04/15/86	2	0.35	0.35	0.5	0.2	0.045	0.212	**	**	**	**
83509	STREAM, WIDTH METER	03/31/86-04/15/86	2	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0215

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	2	1.00						2	2	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0216

NPS Station ID: SHEN0216
 Location: Rocky Mountain Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.286253/ -78.695226

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F100
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0216

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/94-07/07/94	4	25.15	25.2	25.5	25	0.06	0.245	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/07/94-07/07/94	3	10.	10.	10.	10.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/07/94-07/07/94	3	7.26	7.247	7.28	7.2	0.002	0.042	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/07/94-07/07/94	3	7.26	7.245	7.28	7.2	0.002	0.042	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/94-07/07/94	3	0.055	0.057	0.063	0.052	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0216

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00					
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0217

NPS Station ID: SHEN0217
 Location: ROCKY MOUNTAIN RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.287199/ -78.696393

Depth of Water: 0
 Elevation: 1340
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH50
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RH50 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT ROCKY MOUNTAIN RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.34 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0217

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.05	6.05	6.05	6.05	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.05	6.05	6.05	6.05	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.891	0.891	0.891	0.891	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.51	0.51	0.51	0.51	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	1.41	1.41	1.41	1.41	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0217

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0218

NPS Station ID: SHEN0218
 Location: BIG RUN (UPPER REACH)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.287199/ -78.697199

Depth of Water: 0
 Elevation: 1340
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH49
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RH49 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BIG RUN (UPPER REACH) INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 14.92 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0218

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.186	0.186	0.186	0.186	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	0.81	0.81	0.81	0.81	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	1.06	1.06	1.06	1.06	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0218

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0219

NPS Station ID: SHEN0219
 Location: Big Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.288448/ -78.698032

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F022
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0219

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/94-07/06/94	1	21.	21.	21.	21.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0220

NPS Station ID: SHEN0220
 Location: UPPER LEWIS RUN NEAR LYNNWOOD, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005007001.22
 Description:

LAT/LON: 38.293059/ -78.748615

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 1.39

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628350
 Within Park Boundary: No

Date Created: 04/09/83

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 12.30
 Distance from RF3: 0.19

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0220

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/29/82-06/24/82	3	15.5	10.833	16.	1.	72.583	8.52	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	01/29/82-06/24/82	3	0.4	0.4	0.5	0.3	0.01	0.1	**	**	**
00400	PH (STANDARD UNITS)	05/20/82-06/24/82	2	5.3	5.3	5.7	4.9	0.32	0.566	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/20/82-06/24/82	2	5.137	5.137	5.7	4.9	0.373	0.611	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/20/82-06/24/82	2	7.292	7.292	12.589	1.995	56.116	7.491	**	**	**
00403	PH, LAB, STANDARD UNITS SU	01/29/82-06/24/82	3	5.6	5.567	5.6	5.5	0.003	0.058	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	01/29/82-06/24/82	3	5.6	5.564	5.6	5.5	0.003	0.058	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/29/82-06/24/82	3	2.512	2.729	3.162	2.512	0.141	0.376	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	01/29/82-06/24/82	3 ##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	01/29/82-06/24/82	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	01/29/82-06/24/82	3	4.	4.	4.	4.	0.	0.	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	01/29/82-06/24/82	3	0.5	0.5	0.5	0.5	0.	0.	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/29/82-06/24/82	3	0.6	0.633	0.7	0.6	0.003	0.058	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/29/82-06/24/82	3	0.6	0.6	0.6	0.6	0.	0.	**	**	**
00931	SODIUM ADSORPTION RATIO	01/29/82-06/24/82	3	0.1	0.1	0.1	0.1	0.	0.	**	**	**
00932	SODIUM, PERCENT	01/29/82-06/24/82	3	17.	17.	17.	17.	0.	0.	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/29/82-06/24/82	3	2.	1.933	2.1	1.7	0.043	0.208	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	01/29/82-06/24/82	3	0.9	0.9	0.9	0.9	0.	0.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	01/29/82-06/24/82	3	5.	5.333	6.	5.	0.333	0.577	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	01/29/82-06/24/82	3	5.1	5.067	5.6	4.5	0.303	0.551	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0220

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00							2	2	1.00			
00403	Fresh Chronic	9.	3	0	0.00							1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	3	3	1.00							1	1	1.00	2	2	1.00
00631	Drinking Water	10.	3	0	0.00							1	0	0.00	2	0	0.00
	Fresh Acute	860.	3	0	0.00							1	0	0.00	2	0	0.00
00940	Drinking Water	250.	3	0	0.00							1	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0220

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	1	0	0.00	2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0221

NPS Station ID: SHEN0221
 Location: Lower Lewis Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.293309/ -78.725865

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F106
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0221

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/94-06/21/94	4	19.65	19.75	20.6	19.1	0.43	0.656	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/21/94-06/21/94	3	8.	7.667	8.	7.	0.333	0.577	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/21/94-06/21/94	4	7.985	8.2	8.88	7.95	0.206	0.454	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/21/94-06/21/94	4	7.985	8.08	8.88	7.95	0.225	0.474	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/21/94-06/21/94	4	0.01	0.008	0.011	0.001	0.	0.005	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0221

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00							3	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	4	0	0.00							4	0	0.00			
	Other-Lo Lim.	6.5	4	0	0.00							4	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0222

NPS Station ID: SHEN0222
 Location: SOUTH R. RTE 629 BR PORT REPUBLIC
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070005002704.73
 Description:

LAT/LON: 38.293615/ -78.810559

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 0.300
 RF3 Mile Point: 7.61

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 010 /010 /SOUTH S-4
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0222

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	23.5	23.889	26.	21.	2.799	1.673	21.	23.	25.75	26.
00300	OXYGEN, DISSOLVED MG/L	10	7.25	7.69	9.6	6.4	1.594	1.263	6.41	6.575	9.275	9.59
00310	BOD, 5 DAY, 20 DEG C MG/L	10	4.7	5.03	9.3	3.1	3.038	1.743	3.15	3.9	5.6	8.96
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	5	1720.	1560.	2400.	790.	552150.	743.068	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	5	3.236	3.147	3.38	2.898	0.054	0.233	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)			1401.66								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	5	460.	382.	790.	50.	90770.	301.281	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	5	2.663	2.406	2.898	1.699	0.249	0.499	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)			254.534								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0222

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	4.	10	0	0.00							10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	1000.	5	3	0.60							5	3	0.60			
31615	FECAL COLIFORM, MPN	200.	5	3	0.60							5	3	0.60			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0223

NPS Station ID: SHEN0223
 Location: SOUTH R. RTE 629 BR PORT REPUBLC
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070005002704.73
 Description:

LAT/LON: 38.293615/ -78.810559

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 0.300
 RF3 Mile Point: 7.61

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 063 /063 /SOUTH-S4
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0223

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	24.	24.	25.	23.	2.	1.414	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	16.75	16.75	30.	3.5	351.125	18.738	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	7.1	7.1	7.7	6.5	0.72	0.849	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	3.05	3.05	4.	2.1	1.805	1.344	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.033	0.033	0.052	0.013	0.001	0.028	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	0.785	0.785	0.876	0.694	0.017	0.129	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.69	1.69	1.83	1.55	0.039	0.198	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	19800.	19800.	22100.	17500.	10580000.	3252.691	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	4.294	4.294	4.344	4.243	0.005	0.072	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			19665.96								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	1595.	1595.	2100.	1090.	510050.	714.178	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	3.18	3.18	3.322	3.037	0.041	0.201	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			1512.944								
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	12.375	12.375	15.	9.75	13.781	3.712	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.645	0.645	0.69	0.6	0.004	0.064	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0223

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0224

NPS Station ID: SHEN0224
 Location: SOUTH RIV AT PORT REPUBLIC 064
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005027
 RF3 Index: 02070005000303.50
 Description:

LAT/LON: 38.294448/ -78.810559

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.300
 RF3 Mile Point: 3.77

Agency: 1112A9WQ
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): UP-POT-064 /SHEN-064 /064 /S RIV 064
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.10
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0224

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	3	15.	14.	23.	91.	9.539	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/19/72-04/16/73	3	12.5	11.6	13.3	5.23	2.287	**	**	**	**
00400	PH (STANDARD UNITS)	02/13/73-02/13/73	1	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/13/73-02/13/73	1	7.9	7.9	7.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/13/73-02/13/73	1	0.013	0.013	0.013	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/72-04/16/73	3	0.185	0.283	0.6	0.079	0.281	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/19/72-04/16/73	3	1.077	1.066	1.24	0.881	0.18	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/19/72-04/16/73	3	1.02	1.497	2.6	0.87	0.958	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/19/72-04/16/73	3	0.15	0.253	0.58	0.03	0.084	0.289	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-02/13/73	2	2.85	2.85	3.1	2.6	0.125	0.354	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	09/19/72-02/13/73	2	21.8	21.8	28.	15.6	76.88	8.768	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-02/13/73	2	1.	1.	1.	1.	0.	0.	**	**	**
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	09/19/72-02/13/73	2##	0.5	0.5	0.5	0.	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/72-04/16/73	3	0.22	0.407	0.79	0.21	0.11	0.332	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0224

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39370	DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	2	0	0.00	1	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0225

NPS Station ID: SHEN0225
 Location: RT. 629 BRIDGE AT PORT REPUBLIC
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005027
 RF3 Index: 02070005005100.00

LAT/LON: 38.294670/ -78.810170

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.300
 RF3 Mile Point: 0.32

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSTH000.19 /VA1B03-X0075/VA1B6X0075
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.50

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 0055 TOPO MAP NAME: GROTTOS, VIRGINIA

Parameter Inventory for Station: SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	94	16.7	15.363	27.8	1.5	54.002	7.349	4.4	8.9	21.7	24.45
00300 OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	92	10.	10.247	16.	6.2	3.836	1.959	8.06	8.85	11.3	13.28
00310 BOD, 5 DAY, 20 DEG C MG/L	03/02/70-02/24/76	7	2.	1.971	2.6	1.5	0.229	0.479	**	**	**	**
00400 PH (STANDARD UNITS)	03/02/70-03/01/79	94	8.3	8.22	9.5	7.	0.375	0.612	7.4	7.775	8.7	9.
00400 CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	94	8.3	7.82	9.5	7.	0.537	0.733	7.4	7.775	8.7	9.
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	94	0.005	0.015	0.1	0.	0.001	0.023	0.001	0.002	0.017	0.04
00403 PH, LAB, STANDARD UNITS SU	03/02/70-05/29/70	3	7.2	7.4	7.8	7.2	0.12	0.346	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	03/02/70-05/29/70	3	7.2	7.325	7.8	7.2	0.129	0.358	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-05/29/70	3	0.063	0.047	0.063	0.016	0.001	0.027	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	03/02/70-05/29/70	3	68.	66.	82.	48.	292.	17.088	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	03/02/70-11/02/77	5	218.	208.2	274.	143.	3383.2	58.165	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	03/02/70-11/02/77	5	50.	53.8	68.	48.	66.2	8.136	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	03/02/70-11/02/77	5	168.	154.4	224.	90.	3098.8	55.667	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/02/70-11/02/77	5	6.	7.9	17.	0.5	43.3	6.58	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/02/70-11/02/77	5	3.	3.3	7.	0.	9.95	3.154	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/02/70-11/02/77	5	5.	4.7	11.	0.5	18.2	4.266	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	61 ##	0.05	0.121	1.	0.05	0.023	0.153	0.05	0.05	0.1	0.3
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	60	0.01	0.026	0.28	0.005	0.002	0.04	0.005	0.006	0.03	0.04
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	52	1.884	1.908	4.	0.44	0.569	0.754	0.993	1.372	2.297	3.102
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	61	0.6	0.71	2.199	0.2	0.15	0.387	0.3	0.45	0.9	1.179
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	8	2.205	2.189	3.5	1.2	0.516	0.718	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/26/77-11/02/77	2	10.	10.	11.	9.	2.	1.414	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	8 ##	1.25	1.563	2.5	0.5	0.674	0.821	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	12 ##	5.	4.625	5.	0.5	1.688	1.299	1.85	5.	5.	5.
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	21 ##	5.	11.667	60.	5.	165.833	12.878	5.	5.	10.	28.
01042 COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	21 ##	5.	6.905	20.	5.	13.69	3.7	5.	5.	10.	10.
01045 IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	3	300.	233.333	300.	100.	13333.333	115.47	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	18 ##	5.	5.5	10.	2.	3.206	1.79	3.8	5.	5.5	9.1
01055 MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	2	60.	60.	60.	60.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	12 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092 ZINC, TOTAL (UG/L AS ZN)	04/08/70-08/29/78	21	10.	17.143	90.	5.	428.929	20.711	5.	5.	30.	40.
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/08/70-09/08/70	6	1900.	2155.	4300.	930.	1408150.	1186.655	**	**	**	**
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	04/08/70-09/08/70	6	3.269	3.283	3.633	2.968	0.052	0.228	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =		1917.25									
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	83	100.	689.157	8000.	50.	2543661.475	1594.886	50.	50.	500.	1880.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	83	2.	2.257	3.903	1.699	0.392	0.626	1.699	1.699	2.699	3.273
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		180.811									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	61	0.1	0.16	0.4	0.05	0.011	0.103	0.05	0.1	0.2	0.3
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	61	0.1	0.139	0.35	0.03	0.007	0.085	0.05	0.075	0.2	0.296
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	21 ##	0.25	0.288	0.8	0.15	0.02	0.142	0.25	0.25	0.25	0.53

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0225

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	92	0	0.00	26	0	0.00	42	0	0.00	24	0	0.00			
00400	PH	Fresh Chronic	9.	94	15	0.16	27	8	0.30	43	4	0.09	24	3	0.13			
		Other-Lo Lim.	6.5	94	0	0.00	27	0	0.00	43	0	0.00	24	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	60	0	0.00	17	0	0.00	28	0	0.00	15	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	52	0	0.00	14	0	0.00	24	0	0.00	14	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	8	0	0.00	3	0	0.00	4	0	0.00	1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	8	0	0.00	4	0	0.00	2	0	0.00	2	0	0.00			
		Drinking Water	50.	8	0	0.00	4	0	0.00	2	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00									
		Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	21	0	0.00	6	0	0.00	8	0	0.00	7	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	21	1	0.05	6	0	0.00	8	0	0.00	7	1	0.14			
		Drinking Water	1300.	21	0	0.00	6	0	0.00	8	0	0.00	7	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	18	0	0.00	6	0	0.00	8	0	0.00	4	0	0.00			
		Drinking Water	15.	18	0	0.00	6	0	0.00	8	0	0.00	4	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	12	0	0.00	4	0	0.00	4	0	0.00	4	0	0.00			
		Drinking Water	100.	12	0	0.00	4	0	0.00	4	0	0.00	4	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	21	0	0.00	6	0	0.00	8	0	0.00	7	0	0.00			
		Drinking Water	5000.	21	0	0.00	6	0	0.00	8	0	0.00	7	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	6	5	0.83	3	2	0.67				3	3	1.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	83	38	0.46	23	12	0.52	40	16	0.40	20	10	0.50			
71900	MERCURY, TOTAL	Fresh Acute	2.4	21	0	0.00	7	0	0.00	8	0	0.00	6	0	0.00			
		Drinking Water	2.	21	0	0.00	7	0	0.00	8	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1970 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	9	19.4	16.789	26.7	6.7	60.271	7.763	6.7	9.45	23.3	26.7
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	9	10.	10.489	15.1	8.	4.044	2.011	8.	9.2	11.15	15.1
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	9	8.7	8.544	9.3	7.5	0.348	0.59	7.5	8.05	9.	9.3
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	9	8.7	8.164	9.3	7.5	0.511	0.715	7.5	8.05	9.	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	9	0.002	0.007	0.032	0.001	0.	0.01	0.001	0.001	0.01	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	3	0.34	0.277	0.43	0.06	0.037	0.193	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	2	0.025	0.025	0.04	0.01	0.	0.021	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	2	0.7	0.7	0.96	0.44	0.135	0.368	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	3	0.7	0.767	1.	0.6	0.043	0.208	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	2100.	2100.	4000.	200.	7220000.	2687.006	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	2.952	2.952	3.602	2.301	0.846	0.92	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				894.427								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	3	0.1	0.117	0.15	0.1	0.001	0.029	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	3	0.1	0.097	0.14	0.05	0.002	0.045	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	12	15.85	14.433	25.	4.4	51.353	7.166	4.4	6.1	20.55	24.01
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	12	9.95	10.583	14.2	7.	5.234	2.288	7.48	8.85	12.3	14.14
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	12	8.1	8.042	8.8	7.	0.348	0.59	7.09	7.425	8.5	8.77
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	12	8.089	7.67	8.8	7.	0.498	0.706	7.09	7.425	8.5	8.77
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	12	0.008	0.021	0.1	0.002	0.001	0.03	0.002	0.003	0.042	0.085
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	550.	2183.333	8000.	50.	9851515.152	3138.712	50.	50.	4750.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.739	2.706	3.903	1.699	0.776	0.881	1.699	1.699	3.655	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				508.233								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	12	16.15	14.175	20.6	3.9	34.713	5.892	4.05	10.275	19.575	20.42
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	12	9.5	9.7	12.2	7.8	2.455	1.567	7.8	8.4	11.15	12.14
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	12	7.65	7.758	8.5	7.	0.272	0.521	7.06	7.4	8.375	8.5
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	12	7.625	7.526	8.5	7.	0.33	0.575	7.06	7.4	8.375	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	12	0.024	0.03	0.1	0.003	0.001	0.029	0.003	0.005	0.04	0.089
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	1	1.169	1.169	1.169	1.169	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	150.	875.	6000.	50.	2919772.727	1708.734	50.	100.	775.	4800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.151	2.417	3.778	1.699	0.436	0.66	1.699	2.	2.889	3.635
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				261.189								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	12	16.95	15.042	24.4	4.4	49.626	7.045	4.91	7.25	20.825	24.25
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	12	9.85	10.275	13.6	8.	2.791	1.671	8.12	9.1	11.75	13.18
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	12	8.35	8.2	9.	7.	0.264	0.513	7.21	8.	8.5	8.85
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	12	8.325	7.841	9.	7.	0.404	0.636	7.21	8.	8.5	8.85
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	12	0.005	0.014	0.1	0.001	0.001	0.027	0.002	0.003	0.01	0.076
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	11 ##	0.05	0.226	1.	0.05	0.093	0.304	0.05	0.05	0.3	0.908
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.01	0.028	0.1	0.005	0.001	0.034	0.005	0.005	0.03	0.098
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.869	1.904	3.189	1.079	0.423	0.65	1.099	1.389	2.299	3.079
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	11	1.	1.136	2.199	0.6	0.236	0.486	0.62	0.7	1.599	2.079
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10 ##	50.	125.	500.	50.	23472.222	153.206	50.	50.	150.	480.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10 ##	1.699	1.907	2.699	1.699	0.14	0.375	1.699	1.699	2.119	2.677
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.145	0.3	0.05	0.01	0.099	0.05	0.05	0.2	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.127	0.2	0.05	0.004	0.06	0.054	0.08	0.2	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	11	17.8	15.973	24.4	5.	41.572	6.448	5.66	11.1	22.2	24.12
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	11	10.2	10.191	14.8	7.	4.399	2.097	7.28	8.7	11.4	14.22
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	11	8.	8.127	8.9	7.3	0.286	0.535	7.34	7.5	8.5	8.86
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	11	8.	7.848	8.9	7.3	0.372	0.61	7.34	7.5	8.5	8.86
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	11	0.01	0.014	0.05	0.001	0.	0.016	0.001	0.003	0.032	0.046
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	11 ##	0.05	0.086	0.2	0.05	0.004	0.06	0.05	0.05	0.1	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	11 ##	0.005	0.014	0.04	0.005	0.	0.015	0.005	0.005	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.699	1.743	3.399	0.77	0.622	0.789	0.808	0.99	2.199	3.179
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	11	0.5	0.636	1.5	0.3	0.111	0.332	0.32	0.4	0.7	1.38
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	100.	140.909	400.	50.	12909.091	113.618	50.	50.	200.	380.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.	2.043	2.602	1.699	0.093	0.305	1.699	1.699	2.301	2.577
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.15	0.3	0.05	0.009	0.095	0.05	0.05	0.2	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.136	0.3	0.05	0.01	0.098	0.05	0.05	0.2	0.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	12	14.7	14.792	25.6	2.2	67.164	8.195	3.37	7.325	23.35	25.24
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	12	9.9	9.992	12.6	6.2	2.817	1.678	6.83	9.425	11.175	12.36
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	12	8.	8.108	9.	7.	0.434	0.658	7.15	7.55	8.7	9.
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	12	8.	7.713	9.	7.	0.604	0.777	7.15	7.55	8.7	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	12	0.01	0.019	0.1	0.001	0.001	0.028	0.001	0.002	0.029	0.079
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.1	0.1	0.3	0.05	0.005	0.071	0.05	0.05	0.1	0.26
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.02	0.023	0.08	0.005	0.001	0.023	0.005	0.005	0.04	0.072
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.599	1.705	2.289	1.	0.242	0.492	1.	1.259	2.179	2.287
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	11	0.4	0.436	0.8	0.2	0.025	0.157	0.22	0.3	0.5	0.74
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	200.	608.333	4200.	50.	1487196.97	1219.507	50.	50.	275.	3450.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.301	2.278	3.623	1.699	0.38	0.616	1.699	1.699	2.433	3.505
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.132	0.4	0.05	0.011	0.103	0.05	0.05	0.2	0.36
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.098	0.17	0.05	0.002	0.045	0.05	0.05	0.15	0.168

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	11	16.7	15.273	27.8	2.2	70.22	8.38	2.32	10.	22.8	26.8
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	10	10.35	10.84	13.4	8.5	3.438	1.854	8.55	9.15	13.1	13.4
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	11	8.7	8.545	9.5	7.7	0.329	0.573	7.76	8.	9.	9.4
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	11	8.7	8.25	9.5	7.7	0.425	0.652	7.76	8.	9.	9.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	11	0.002	0.006	0.02	0.	0.	0.006	0.	0.001	0.01	0.018
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	11 ##	0.05	0.068	0.2	0.05	0.002	0.046	0.05	0.05	0.05	0.18
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	11	0.02	0.046	0.28	0.005	0.006	0.078	0.006	0.02	0.03	0.232
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	2.069	2.079	2.899	1.369	0.264	0.513	1.371	1.679	2.659	2.857
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	11	0.6	0.609	1.299	0.2	0.111	0.333	0.2	0.3	0.8	1.219
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	254.545	800.	50.	87227.273	295.343	50.	50.	600.	780.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	2.12	2.903	1.699	0.27	0.52	1.699	1.699	2.778	2.891
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			131.887								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.2	0.168	0.4	0.05	0.009	0.096	0.06	0.1	0.2	0.36
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.11	0.139	0.3	0.05	0.006	0.076	0.052	0.08	0.2	0.282

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	6	12.1	13.15	25.2	1.5	102.779	10.138	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	6	10.1	11.5	16.	8.8	8.332	2.887	**	**	**	**
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	6	8.25	8.417	9.2	7.8	0.338	0.581	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	6	8.182	8.169	9.2	7.8	0.411	0.641	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	6	0.007	0.007	0.016	0.001	0.	0.006	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	5 ##	0.05	0.07	0.1	0.05	0.001	0.027	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	5	0.02	0.028	0.08	0.01	0.001	0.029	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	5	3.199	2.979	4.	1.799	0.773	0.879	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	5	1.	0.94	1.099	0.8	0.018	0.134	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5	200.	380.	900.	50.	155750.	394.652	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5	2.301	2.3	2.954	1.699	0.362	0.602	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			199.371								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	5	0.2	0.22	0.4	0.1	0.017	0.13	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	5	0.23	0.2	0.35	0.05	0.013	0.114	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	7	24.	22.3	26.	16.	15.663	3.958	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	7	8.6	8.771	11.2	6.8	3.182	1.784	**	**	**	**
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	7	8.9	8.814	9.1	8.3	0.088	0.297	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	7	8.9	8.715	9.1	8.3	0.1	0.316	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	7	0.001	0.002	0.005	0.001	0.	0.002	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	6	0.1	0.083	0.1	0.05	0.001	0.026	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	6	0.01	0.013	0.03	0.01	0.	0.008	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	6	0.65	0.633	1.1	0.2	0.087	0.294	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6 ##	75.	141.667	500.	50.	31416.667	177.247	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6 ##	1.849	1.966	2.699	1.699	0.151	0.388	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			92.466								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	6	0.3	0.25	0.4	0.1	0.015	0.122	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	6	0.265	0.243	0.34	0.12	0.008	0.09	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	2	6.5	6.5	8.	5.	4.5	2.121	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	1	10.8	10.8	10.8	10.8	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	2	7.45	7.45	7.5	7.4	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	2	7.447	7.447	7.5	7.4	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	2	0.036	0.036	0.04	0.032	0.	0.006	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	2 ##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	2	0.45	0.45	0.7	0.2	0.125	0.354	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2 ##	325.	325.	600.	50.	151250.	388.909	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2 ##	2.239	2.239	2.778	1.699	0.582	0.763	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			173.205								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	2	0.07	0.07	0.11	0.03	0.003	0.057	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	27	23.3	22.796	27.8	13.3	9.405	3.067	18.98	20.6	25.	26.14
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	26	9.	9.235	14.8	6.9	2.386	1.545	7.56	8.475	9.65	11.16
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	27	8.5	8.57	9.5	7.	0.343	0.586	7.44	8.5	9.	9.14
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	27	8.5	8.028	9.5	7.	0.649	0.806	7.44	8.5	9.	9.14
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	27	0.003	0.009	0.1	0.	0.	0.022	0.001	0.001	0.003	0.038
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	17 ##	0.05	0.068	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	17	0.01	0.011	0.04	0.005	0.	0.009	0.005	0.005	0.01	0.024
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	14	2.294	2.484	4.	1.389	0.443	0.666	1.695	2.067	2.814	3.7
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	17	0.7	0.759	1.599	0.2	0.14	0.374	0.28	0.5	1.	1.359
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	23	200.	850.	8000.	50.	4029772.727	2007.429	50.	50.	300.	4400.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	23	2.301	2.276	3.903	1.699	0.444	0.666	1.699	1.699	2.477	3.587
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			188.944								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	17	0.2	0.218	0.4	0.1	0.01	0.101	0.1	0.1	0.3	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	17	0.2	0.183	0.3	0.05	0.006	0.075	0.09	0.105	0.24	0.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	43	8.9	9.058	21.1	1.5	24.199	4.919	3.08	5.	12.8	15.84
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	42	11.2	11.333	16.	6.8	3.732	1.932	8.92	10.	12.45	14.14
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	43	8.	8.007	9.2	7.	0.331	0.575	7.3	7.5	8.5	8.92
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	43	8.	7.689	9.2	7.	0.435	0.659	7.3	7.5	8.5	8.92
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	43	0.01	0.02	0.1	0.001	0.001	0.026	0.001	0.003	0.032	0.05
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	28	0.1	0.172	1.	0.05	0.043	0.207	0.05	0.05	0.238	0.441
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	28	0.02	0.031	0.28	0.005	0.003	0.053	0.005	0.006	0.03	0.08
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	24	1.629	1.714	3.5	0.96	0.48	0.693	0.995	1.102	2.057	2.919
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	28	0.65	0.707	2.199	0.2	0.21	0.458	0.2	0.325	1.	1.15
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	40	100.	481.25	4200.	50.	941370.192	970.242	50.	50.	450.	1620.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	40	2.	2.18	3.623	1.699	0.358	0.598	1.699	1.699	2.644	3.203
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			151.288								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	28	0.1	0.15	0.4	0.05	0.012	0.108	0.05	0.1	0.2	0.31
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	28	0.1	0.137	0.35	0.03	0.009	0.094	0.05	0.073	0.2	0.322

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0225

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-03/01/79	24	18.05	18.296	25.1	10.	15.379	3.922	11.4	16.7	21.275	23.9
00300	OXYGEN, DISSOLVED MG/L	03/02/70-03/01/79	24	9.4	9.442	12.	6.2	1.943	1.394	7.4	8.475	10.5	11.15
00400	PH (STANDARD UNITS)	03/02/70-03/01/79	24	8.2	8.208	9.	7.3	0.294	0.542	7.5	7.725	8.7	9.
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-03/01/79	24	8.2	7.918	9.	7.3	0.382	0.618	7.5	7.725	8.7	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-03/01/79	24	0.006	0.012	0.05	0.001	0.	0.014	0.001	0.002	0.019	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-03/01/79	16 ##	0.05	0.087	0.34	0.05	0.006	0.078	0.05	0.05	0.1	0.242
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-03/01/79	15	0.03	0.033	0.1	0.005	0.001	0.028	0.005	0.01	0.04	0.094
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	14	1.629	1.664	2.899	0.44	0.448	0.669	0.605	1.184	2.184	2.649
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-03/01/79	16	0.6	0.663	1.5	0.4	0.067	0.258	0.4	0.5	0.775	1.01
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	20	150.	920.	8000.	50.	4201157.895	2049.673	50.	100.	575.	5030.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	20	2.151	2.39	3.903	1.699	0.414	0.643	1.699	2.	2.758	3.657
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			245.522								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	16	0.1	0.116	0.2	0.05	0.004	0.065	0.05	0.05	0.2	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	16	0.1	0.096	0.2	0.05	0.002	0.049	0.05	0.05	0.135	0.172

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0226

NPS Station ID: SHEN0226
 Location: DGIF BOAT BASIN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.295559/ -78.807504

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Description:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH
 RIVER: SOUTH RIVER SECTION: 03 TOPO MAP #: 188D TOPO MAP NAME: GROTTUES, VA

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSTH000.02
 Within Park Boundary: No

Date Created: 05/18/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0226

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/24/98-06/24/98	1	26.4	26.4	26.4	26.4	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/24/98-06/24/98	1	224.	224.	224.	224.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	06/24/98-06/24/98	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	06/24/98-06/24/98	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/24/98-06/24/98	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/24/98-06/24/98	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	06/24/98-06/24/98	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/24/98-06/24/98	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	06/24/98-06/24/98	1##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	06/24/98-06/24/98	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/98-06/24/98	1	9.6	9.6	9.6	9.6	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	06/24/98-06/24/98	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/24/98-06/24/98	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	06/24/98-06/24/98	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	06/24/98-06/24/98	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	06/24/98-06/24/98	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	06/24/98-06/24/98	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	06/24/98-06/24/98	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	06/24/98-06/24/98	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	06/24/98-06/24/98	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
01057	THALLIUM, DISSOLVED (UG/L AS TL)	06/24/98-06/24/98	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	06/24/98-06/24/98	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	06/24/98-06/24/98	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	06/24/98-06/24/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	06/24/98-06/24/98	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	06/24/98-06/24/98	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	06/24/98-06/24/98	1##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	06/24/98-06/24/98	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0226

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE																	
00400	PH																	
	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00				
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
01000	ARSENIC, DISSOLVED																	
	Fresh Acute	360.	1	0	0.00							1	0	0.00				
	Drinking Water	50.	1	0	0.00							1	0	0.00				
01025	CADMIUM, DISSOLVED																	
	Fresh Acute	3.9	1	0	0.00							1	0	0.00				
	Drinking Water	5.	1	0	0.00							1	0	0.00				
01030	CHROMIUM, DISSOLVED																	
	Drinking Water	100.	1	0	0.00							1	0	0.00				
01040	COPPER, DISSOLVED																	
	Fresh Acute	18.	1	0	0.00							1	0	0.00				
	Drinking Water	1300.	1	0	0.00							1	0	0.00				
01049	LEAD, DISSOLVED																	
	Fresh Acute	82.	1	0	0.00							1	0	0.00				
	Drinking Water	15.	1	0	0.00							1	0	0.00				
01057	THALLIUM, DISSOLVED																	
	Fresh Acute	1400.	1	0	0.00							1	0	0.00				
	Drinking Water	2.	1	0	0.00							1	0	0.00				
01065	NICKEL, DISSOLVED																	
	Fresh Acute	1400.	1	0	0.00							1	0	0.00				
	Drinking Water	100.	1	0	0.00							1	0	0.00				
01075	SILVER, DISSOLVED																	
	Fresh Acute	4.1	1	0	0.00							1	0	0.00				
	Drinking Water	100.	1	0	0.00							1	0	0.00				
01090	ZINC, DISSOLVED																	
	Fresh Acute	120.	1	0	0.00							1	0	0.00				
	Drinking Water	5000.	1	0	0.00							1	0	0.00				
01095	ANTIMONY, DISSOLVED																	
	Fresh Acute	88.	1	0	0.00							1	0	0.00				
	Drinking Water	6.	1	0	0.00							1	0	0.00				
01145	SELENIUM, DISSOLVED																	
	Fresh Acute	20.	1	0	0.00							1	0	0.00				
	Drinking Water	50.	1	0	0.00							1	0	0.00				
71890	MERCURY, DISSOLVED																	
	Fresh Acute	2.4	1	0	0.00							1	0	0.00				
	Drinking Water	2.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0227

NPS Station ID: SHEN0227
 Location: Lower Lewis Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.296254/ -78.727616

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F105
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0227

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/17/97-06/17/97	1	15.6	15.6	15.6	15.6	0.	0.	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/17/97-06/17/97	1	18.	18.	18.	18.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/17/97-06/17/97	1	9.1	9.1	9.1	9.1	0.	0.	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/17/97-06/17/97	1	5.48	5.48	5.48	5.48	0.	0.	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/17/97-06/17/97	1	5.48	5.48	5.48	5.48	0.	0.	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/17/97-06/17/97	1	3.311	3.311	3.311	3.311	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/17/97-06/17/97	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**
83509	STREAM, WIDTH METER	06/17/97-06/17/97	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/17/97-06/17/97	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0227

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00				1	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	1	0	0.00				1	0	0.00			
		Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0228

NPS Station ID: SHEN0228
 Location: MIDDLE R. RTE 629 BR PORT REPBLC
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070005002700.00
 Description:

LAT/LON: 38.296392/ -78.810837

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 0.300
 RF3 Mile Point: 0.00

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 011 /011 /MID S-4A
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.09

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0228

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	9	24.	24.056	26.	22.	1.715	1.31	22.	23.	25.25	26.
00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	10	7.1	7.25	8.7	6.2	0.872	0.934	6.2	6.425	8.25	8.67
00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	10	3.05	3.73	8.5	2.	3.485	1.867	2.05	2.65	4.45	8.11
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	490.	550.	790.	490.	18000.	134.164	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	2.69	2.732	2.898	2.69	0.009	0.093	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			539.116								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	80.	174.	490.	20.	37730.	194.242	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	1.903	1.991	2.69	1.301	0.299	0.547	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			97.95								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0228

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	10	0	0.00						10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	0	0.00						5	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	2	0.40						5	2	0.40			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0229

NPS Station ID: SHEN0229
 Location: MIDDLE R. RTE 629 BR PORT REPBLC
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005027
 RF3 Index: 02070005002700.00
 Description:

LAT/LON: 38.296392/ -78.810837

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 0.300
 RF3 Mile Point: 0.00

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 064 /064 /MID-S4A
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.09

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0229

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	22.75	22.75	23.	22.5	0.125	0.354	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	50.	50.	70.	30.	800.	28.284	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	7.05	7.05	7.5	6.6	0.405	0.636	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	3.05	3.05	4.4	1.7	3.645	1.909	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.094	0.094	0.115	0.073	0.001	0.03	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	1.23	1.23	1.9	0.559	0.899	0.948	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.84	1.84	2.31	1.37	0.442	0.665	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	32550.	32550.	54200.	10900.	937445000.	30617.724	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	4.386	4.386	4.734	4.037	0.243	0.493	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =		24305.966									
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	19140.	19140.	34800.	3480.	490471200.	22146.584	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	4.042	4.042	4.542	3.542	0.5	0.707	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =		11004.726									
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	11.625	11.625	15.75	7.5	34.031	5.834	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	2.81	2.81	5.16	0.46	11.045	3.323	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0229

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	1	0.50	2	1	0.50							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0230

NPS Station ID: SHEN0230
 Location: Big Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.296559/ -78.700199

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F097
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0230

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/94-07/06/94	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/06/94-07/06/94	3	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0230

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0231

NPS Station ID: SHEN0231
 Location: NORTH RIVER AT PORT REPUBLIC, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005000510.94

LAT/LON: 38.297226/ -78.810282

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 10.95

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01625500
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.40
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Description:
 SAMPLED BY USGS. FIELD ANALYSIS BY USGS. STATION LOCATION: ON HWY 865 BRIDGE AT PORT REPUBLIC, ROCKINGHAM CO, AND 4.5 MI DOWNSTREAM FROM CON-
 FLUENCE OF NORTH AND MIDDLE R. NEAREST GAGING STATION: ON LEFT BANK, 1.2 MI NE OF LYNNWOOD, ROCKINGHAM CO, AND 3.3 MI DOWNSTREAM FROM CON-
 FLUENCE OF NORTH AND SOUTH RIVERS. DRAINAGE AREA ABOVE GAGING STATION, 1076 SQ MI. AVERAGE DAILY FLOW: 37 YRS, 952 CFS. PERIOD OF RECORD: SEPT
 1930 TO PRESENT.

Parameter Inventory for Station: SHEN0231

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-02/19/74	48	11.25	12.229	25.5	0.	58.617	7.656	1.95	5.125	20.5	22.55
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/18/70-12/27/73	8	12.5	17.5	65.	0.	407.143	20.178	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/18/70-12/27/73	8	18.	14.5	27.	0.	137.429	11.723	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/18/70-12/27/73	5	326.	270.4	390.	79.	14866.3	121.927	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	12/11/69-02/19/74	47	10.4	10.115	14.	7.	3.887	1.972	7.54	8.3	11.4	12.96
00310	BOD, 5 DAY, 20 DEG C MG/L	05/20/70-02/19/74	8	1.85	2.363	4.5	0.9	1.98	1.407	**	**	**	**
00400	PH (STANDARD UNITS)	11/19/69-02/19/74	49	7.8	7.733	8.5	6.5	0.15	0.388	7.3	7.55	7.95	8.2
00400	CONVERTED PH (STANDARD UNITS)	11/19/69-02/19/74	49	7.8	7.514	8.5	6.5	0.199	0.446	7.3	7.55	7.95	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/69-02/19/74	49	0.016	0.031	0.316	0.003	0.002	0.05	0.006	0.011	0.028	0.05
00405	CARBON DIOXIDE (MG/L AS CO2)	12/13/72-12/13/72	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/18/70-12/27/73	8	116.	122.625	197.	22.	2906.839	53.915	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	05/18/70-12/27/73	5	134.	144.	240.	27.	6501.5	80.632	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	09/27/72-12/27/73	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/18/70-05/15/72	3	190.	174.333	198.	135.	1176.333	34.298	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/18/70-12/27/73	8	18.5	29.375	114.	0.	1318.268	36.308	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/73-12/27/73	2 ##	0.063	0.063	0.12	0.005	0.007	0.081	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/10/73-12/27/73	2 ##	0.013	0.013	0.02	0.005	0.	0.011	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/18/70-12/27/73	8	1.25	1.188	1.7	0.7	0.133	0.364	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/11/69-06/19/72	31	0.04	0.074	0.53	0.	0.01	0.1	0.	0.02	0.08	0.174
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	02/09/70-06/15/70	5	0.28	0.436	0.71	0.25	0.058	0.241	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/69-12/27/73	8	0.165	0.146	0.28	0.02	0.009	0.094	**	**	**	**
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	09/27/72-12/27/73	5	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	05/18/70-12/27/73	8	135.	135.5	210.	30.	3127.714	55.926	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	05/18/70-12/27/73	5	10.	10.6	14.	8.	7.8	2.793	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	05/18/70-12/27/73	8	35.	36.2	54.	7.6	214.034	14.63	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	05/18/70-12/27/73	8	10.25	10.65	18.	2.6	22.709	4.765	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	05/18/70-12/27/73	5	5.4	6.32	11.	3.	11.592	3.405	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/18/70-12/27/73	5	0.2	0.24	0.4	0.1	0.013	0.114	**	**	**	**
00932	SODIUM, PERCENT	05/18/70-12/27/73	5	12.	10.4	16.	6.	18.8	4.336	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0231

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/18/70-12/27/73	5	2.4	2.36	3.4	1.6	0.553	0.744	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/18/70-03/14/73	6	7.	8.333	16.	4.	18.267	4.274	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/18/70-12/27/73	8	12.	13.875	27.	11.	29.268	5.41	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/18/70-12/27/73	8	0.1	0.113	0.2	0.1	0.001	0.035	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/18/70-12/27/73	8	0.5	8.688	30.	0.	168.71	12.989	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/18/70-03/14/73	6	15.	41.667	160.	0.	3856.667	62.102	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/18/70-12/27/73	8 ##	0.	5.	40.	0.	200.	14.142	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	02/10/71-02/10/71	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/18/70-12/27/73	7 ##	0.	2.857	10.	0.	23.81	4.88	**	**	**	**
01035	COBALT, DISSOLVED (UG/L AS CO)	09/10/73-12/27/73	2 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/18/70-12/27/73	8	0.	9.	60.	0.	436.571	20.894	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/18/70-12/27/73	8	18.	23.875	80.	0.	660.125	25.693	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/18/70-12/27/73	8 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/27/72-12/27/73	5	5.	6.4	20.	0.	62.3	7.893	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/18/70-05/15/72	3	40.	30.	50.	0.	700.	26.458	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/18/70-03/14/73	6	0.	13.333	60.	0.	586.667	24.221	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	05/18/70-12/27/73	8 ##	50.	45.	100.	0.	1057.143	32.514	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	45	230.	656.6	4300.	2.	1044160.473	1021.842	20.6	57.5	650.	2444.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	45	2.362	2.308	3.633	0.301	0.569	0.754	1.314	1.76	2.812	3.387
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			203.042								
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/27/72-12/27/73	5	2.	3.2	10.	0.	15.2	3.899	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/27/72-12/27/73	5	142.	162.4	242.	59.	5595.3	74.802	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	09/27/72-12/27/73	5	0.19	0.22	0.33	0.08	0.01	0.102	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	02/09/70-12/27/73	34	0.105	0.148	0.52	0.	0.014	0.119	0.035	0.07	0.205	0.29
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/10/73-12/27/73	2	0.075	0.075	0.15	0.	0.011	0.106	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/13/72-12/27/73	4	5.1	5.2	7.5	3.1	3.567	1.889	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	09/10/73-12/27/73	2	0.035	0.035	0.07	0.	0.002	0.049	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0231

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	8	1	0.13	2	0	0.00	4	1	0.25	2	0	0.00			
00300	OXYGEN, DISSOLVED	4.	47	0	0.00	13	0	0.00	23	0	0.00	11	0	0.00			
00400	PH	9.	49	0	0.00	13	0	0.00	25	0	0.00	11	0	0.00			
		6.5	49	1	0.02	13	0	0.00	25	1	0.04	11	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	1.	2	0	0.00	1	0	0.00	1	0	0.00						
00618	NITRATE NITROGEN, DISSOLVED AS N	10.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
00720	CYANIDE, TOTAL	0.022	5	0	0.00	2	0	0.00	3	0	0.00						
		0.2	5	0	0.00	2	0	0.00	3	0	0.00						
00940	CHLORIDE, TOTAL IN WATER	860.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
		250.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	4.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
01000	ARSENIC, DISSOLVED	360.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
		50.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
01025	CADMIUM, DISSOLVED	3.9	8	1	0.13	2	0	0.00	4	0	0.00	2	1	0.50			
		5.	8	1	0.13	2	0	0.00	4	0	0.00	2	1	0.50			
01030	CHROMIUM, DISSOLVED	100.	1	0	0.00				1	0	0.00						
01034	CHROMIUM, TOTAL	100.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
01040	COPPER, DISSOLVED	18.	8	1	0.13	2	0	0.00	4	0	0.00	2	1	0.50			
		1300.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
01049	LEAD, DISSOLVED	82.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
		15.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
01090	ZINC, DISSOLVED	120.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
		5000.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	45	25	0.56	12	10	0.83	23	8	0.35	10	7	0.70			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00	1	0	0.00	3	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0231

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
71856 NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	2	0		1	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1969 - Station SHEN0231

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-02/19/74	2	6.5	6.5	8.5	4.5	8.	2.828	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	12/11/69-02/19/74	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/19/69-02/19/74	2	7.95	7.95	8.	7.9	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/19/69-02/19/74	2	7.947	7.947	8.	7.9	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/69-02/19/74	2	0.011	0.011	0.013	0.01	0.	0.002	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	1	42.	42.	42.	42.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	1	1.623	1.623	1.623	1.623	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			42.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0231

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-02/19/74	12	11.5	12.583	25.5	0.	74.629	8.639	0.75	4.25	20.75	24.75
00300	OXYGEN, DISSOLVED MG/L	12/11/69-02/19/74	12	9.55	9.892	13.8	7.7	4.052	2.013	7.7	8.125	11.1	13.53
00400	PH (STANDARD UNITS)	11/19/69-02/19/74	12	8.	8.017	8.5	7.5	0.089	0.298	7.56	7.825	8.2	8.5
00400	CONVERTED PH (STANDARD UNITS)	11/19/69-02/19/74	12	8.	7.928	8.5	7.5	0.097	0.312	7.56	7.825	8.2	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/69-02/19/74	12	0.01	0.012	0.032	0.003	0.	0.008	0.003	0.006	0.015	0.028
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	12	230.	326.083	1470.	6.	166527.356	408.078	10.2	21.75	477.5	1194.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	12	2.362	2.115	3.167	0.778	0.54	0.735	0.935	1.334	2.676	3.039
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			130.204								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0231

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-02/19/74	12	12.25	12.875	22.5	0.	59.506	7.714	0.6	6.75	20.875	22.2
00300	OXYGEN, DISSOLVED MG/L	12/11/69-02/19/74	12	11.05	10.375	13.5	7.	5.195	2.279	7.09	8.225	12.375	13.2
00400	PH (STANDARD UNITS)	11/19/69-02/19/74	12	7.75	7.733	8.3	7.3	0.081	0.284	7.33	7.525	7.875	8.24
00400	CONVERTED PH (STANDARD UNITS)	11/19/69-02/19/74	12	7.747	7.656	8.3	7.3	0.087	0.295	7.33	7.525	7.875	8.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/69-02/19/74	12	0.018	0.022	0.05	0.005	0.	0.013	0.006	0.013	0.03	0.047
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	11	90.	759.636	4300.	21.	1963414.255	1401.219	27.	58.	500.	3972.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	11	1.954	2.28	3.633	1.322	0.533	0.73	1.399	1.763	2.699	3.592
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			190.407								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0231

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-02/19/74	12	13.5	12.667	23.	0.	60.242	7.762	1.05	6.	20.875	22.4
00300	OXYGEN, DISSOLVED MG/L	12/11/69-02/19/74	12	9.3	9.908	14.	7.2	3.697	1.923	7.32	8.675	11.325	13.22
00400	PH (STANDARD UNITS)	11/19/69-02/19/74	13	7.6	7.554	8.	6.8	0.113	0.336	6.92	7.35	7.8	7.96
00400	CONVERTED PH (STANDARD UNITS)	11/19/69-02/19/74	13	7.6	7.412	8.	6.8	0.135	0.367	6.92	7.35	7.8	7.96
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/69-02/19/74	13	0.025	0.039	0.158	0.01	0.002	0.041	0.011	0.016	0.045	0.127
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	11	240.	934.273	3500.	2.	1625817.618	1275.076	12.	133.	1300.	3460.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	11	2.38	2.457	3.544	0.301	0.833	0.913	0.584	2.124	3.114	3.539
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			286.196								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0231

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-02/19/74	9	10.5	12.389	24.	1.5	60.236	7.761	1.5	6.25	19.75	24.
00300	OXYGEN, DISSOLVED MG/L	12/11/69-02/19/74	9	11.	10.233	13.2	7.	4.15	2.037	7.	8.15	11.6	13.2
00400	PH (STANDARD UNITS)	11/19/69-02/19/74	9	7.8	7.556	8.2	6.5	0.278	0.527	6.5	7.15	7.85	8.2
00400	CONVERTED PH (STANDARD UNITS)	11/19/69-02/19/74	9	7.8	7.212	8.2	6.5	0.411	0.641	6.5	7.15	7.85	8.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/69-02/19/74	9	0.016	0.061	0.316	0.006	0.01	0.1	0.006	0.014	0.075	0.316
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	9	440.	769.667	2300.	57.	632528.25	795.316	57.	93.5	1380.	2300.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	9	2.643	2.582	3.362	1.756	0.368	0.607	1.756	1.97	3.137	3.362
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			381.907								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0231

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-02/19/74	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	12/11/69-02/19/74	1	11.2	11.2	11.2	11.2	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/19/69-02/19/74	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/19/69-02/19/74	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/69-02/19/74	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	1	32.	32.	32.	32.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-02/19/74	1	1.505	1.505	1.505	1.505	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			32.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0232

NPS Station ID: SHEN0232
 Location: 865 BR IN PORT REPUBLIC.
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:

LAT/LON: 38.297782/ -78.809449

Agency: 1113VABD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): NOR 10 /0
 Within Park Boundary: No

Date Created: / /

RMI-Miles:
 HUC: 02070005
 Major Basin: SHENANDOAH RIVER
 Minor Basin: NORTH RIVER NORTH R AT RT
 RF1 Index: 02070005004
 RF3 Index: 02070005034600.00

Depth of Water: 999
 Elevation: 0

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 11.70
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Description:
 REQUESTED BY AIR AND WATER DIVISION IN CONNECTION WITH A LAWSUIT. NEEDED TO AID IN MODEL VERIFICATION AND IN THE EVALUATION OF WASTE TREATMENT
 NEEDS FOR HARRISONBURG AREA.

Parameter Inventory for Station: SHEN0232

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0233

NPS Station ID: SHEN0233
 Location: NORTH RIV IN PORT REPUBLIC 077
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005004
 RF3 Index: 02070005004800.00
 Description:

LAT/LON: 38.297782/ -78.810837

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.350
 RF3 Mile Point: 0.99

Agency: 1112A9WQ
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): UP-POT-077 /SHEN-077 /077 /N RIV 077
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0233

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	3	14.	13.667	22.5	4.5	81.083	9.005	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/19/72-04/16/73	3	11.2	11.333	13.1	9.7	2.903	1.704	**	**	**
00400	PH (STANDARD UNITS)	02/13/73-02/13/73	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/13/73-02/13/73	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/13/73-02/13/73	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/72-04/16/73	3	0.06	0.082	0.13	0.055	0.002	0.042	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/19/72-04/16/73	3	0.478	0.56	0.884	0.319	0.085	0.291	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/19/72-04/16/73	3	1.61	1.5	1.77	1.12	0.115	0.339	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/19/72-04/16/73	3	0.12	0.253	0.54	0.1	0.062	0.248	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-02/13/73	2	1.255	1.255	2.5	0.01	3.1	1.761	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	09/19/72-02/13/73	2	34.95	34.95	41.	28.9	73.205	8.556	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-02/13/73	2	1.	1.	1.	1.	0.	0.	**	**	**
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	09/19/72-02/13/73	2##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/72-04/16/73	3	0.16	0.353	0.74	0.16	0.112	0.335	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0233

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
39370	DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	2	0	0.00	1	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0234

NPS Station ID: SHEN0234 LAT/LON: 38.297783/ -78.810566
 Location: RT. 659 BRIDGE NEAR LYNWOOD BELOW GROTTOS
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005003 RF1 Mile Point: 19.660
 RF3 Index: 02070005000310.60 RF3 Mile Point: 11.67

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF100.07 /VA1B03-X0074/VA1B6X0074
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.06

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 03 TOPO MAP #: 0055 TOPO MAP NAME: GROTTOS, VA

Parameter Inventory for Station: SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	84	15.6	14.631	27.8	1.1	53.529	7.316	4.4	7.35	21.55	23.6
00060	FLOW, STREAM, MEAN DAILY CFS	42	905.5	1212.69	5270.	197.	1090241.39	1044.146	364.4	460.25	1480.	2859.
00300	OXYGEN, DISSOLVED MG/L	84	9.8	9.896	15.2	5.8	4.105	2.026	7.5	8.25	11.175	12.75
00310	BOD, 5 DAY, 20 DEG C MG/L	6	1.6	1.683	2.2	1.4	0.102	0.319	**	**	**	**
00400	PH (STANDARD UNITS)	85	8.5	8.409	9.3	7.	0.247	0.497	7.66	8.	8.8	9.
00400	CONVERTED PH (STANDARD UNITS)	85	8.5	8.076	9.3	7.	0.359	0.599	7.66	8.	8.8	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	85	0.003	0.008	0.1	0.001	0.	0.015	0.001	0.002	0.01	0.022
00403	PH, LAB, STANDARD UNITS SU	3	7.6	7.567	7.7	7.4	0.023	0.153	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	3	7.6	7.548	7.7	7.4	0.024	0.154	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.025	0.028	0.04	0.02	0.	0.01	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	3	105.	102.333	120.	82.	366.333	19.14	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	5	261.	235.8	264.	176.	1498.7	38.713	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	5	62.	76.8	127.	59.	834.7	28.891	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	5	158.	159.	201.	100.	1832.5	42.808	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	5	10.	15.8	39.	5.	187.7	13.7	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	5	4.	3.4	6.	0.	4.8	2.191	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	5	10.	12.4	36.	1.	191.3	13.831	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	52 ##	0.05	0.078	0.25	0.05	0.002	0.045	0.05	0.05	0.1	0.131
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	51	0.02	0.025	0.2	0.005	0.001	0.031	0.005	0.01	0.03	0.048
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	51	1.399	1.368	2.029	0.3	0.148	0.385	0.816	1.239	1.599	1.867
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	52	0.4	0.363	0.7	0.05	0.019	0.138	0.2	0.3	0.5	0.5
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	2	6.5	6.5	8.	5.	4.5	2.121	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	9 ##	1.5	1.667	2.5	0.5	0.688	0.829	0.5	1.	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	13 ##	5.	5.038	10.	0.5	3.769	1.941	2.3	5.	5.	8.
01034	CHROMIUM, TOTAL (UG/L AS CR)	22 ##	5.	7.045	20.	5.	20.617	4.541	5.	5.	6.25	17.
01042	COPPER, TOTAL (UG/L AS CU)	22 ##	5.	6.136	10.	5.	4.6	2.145	5.	5.	6.25	10.
01045	IRON, TOTAL (UG/L AS FE)	2	250.	250.	300.	200.	5000.	70.711	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	19 ##	5.	6.737	20.	2.	17.316	4.161	2.	5.	10.	12.
01055	MANGANESE, TOTAL (UG/L AS MN)	2	40.	40.	60.	20.	800.	28.284	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	12 ##	50.	54.167	100.	50.	208.333	14.434	50.	50.	50.	85.
01092	ZINC, TOTAL (UG/L AS ZN)	22 ##	7.5	16.136	100.	5.	454.6	21.321	5.	5.	20.	37.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	6	4450.	5960.	15000.	430.	34578040.	5880.31	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	6	3.648	3.463	4.176	2.633	0.458	0.676	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =		2906.974									
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-11/02/77	74	100.	863.514	8000.	50.	3721938.171	1929.233	50.	50.	400.	2900.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-11/02/77	74	2.	2.269	3.903	1.699	0.458	0.677	1.699	1.699	2.602	3.456
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		185.871									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	52	0.1	0.142	0.4	0.05	0.01	0.101	0.05	0.05	0.2	0.3
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	52	0.1	0.13	0.4	0.03	0.01	0.1	0.05	0.05	0.165	0.3
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-02/01/77	22 ##	0.25	0.261	0.5	0.25	0.003	0.053	0.25	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0234

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	84	0	0.00	22	0	0.00	40	0	0.00	22	0	0.00			
00400	PH	Fresh Chronic	9.	85	13	0.15	23	7	0.30	40	3	0.08	22	3	0.14			
		Other-Lo Lim.	6.5	85	0	0.00	23	0	0.00	40	0	0.00	22	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	51	0	0.00	13	0	0.00	25	0	0.00	13	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	51	0	0.00	13	0	0.00	25	0	0.00	13	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	50.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	2 &	1	0.50	1	0	0.00	1	0	0.00	1	1	1.00			
		Drinking Water	5.	2 &	1	0.50	1	0	0.00	1	0	0.00	1	1	1.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00			
		Drinking Water	1300.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	19	0	0.00	6	0	0.00	9	0	0.00	4	0	0.00			
		Drinking Water	15.	19	1	0.05	6	0	0.00	9	1	0.11	4	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	12	0	0.00	4	0	0.00	4	0	0.00	4	0	0.00			
		Drinking Water	100.	12	1	0.08	4	0	0.00	4	0	0.00	4	1	0.25			
01092	ZINC, TOTAL	Fresh Acute	120.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00			
		Drinking Water	5000.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	6	4	0.67	3	1	0.33				3	3	1.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	74	30	0.41	19	9	0.47	37	16	0.43	18	5	0.28			
71900	MERCURY, TOTAL	Fresh Acute	2.4	22	0	0.00	7	0	0.00	9	0	0.00	6	0	0.00			
		Drinking Water	2.	22	0	0.00	7	0	0.00	9	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1970 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	20.6	15.811	26.1	5.6	73.144	8.552	5.6	6.95	22.8	26.1
00060	FLOW, STREAM, MEAN DAILY CFS	9	506.	643.556	1380.	197.	190441.778	436.396	197.	257.5	1058.5	1380.
00300	OXYGEN, DISSOLVED MG/L	9	8.8	9.778	14.4	7.4	5.814	2.411	7.4	7.8	11.5	14.4
00400	PH (STANDARD UNITS)	9	8.7	8.578	9.3	7.6	0.322	0.567	7.6	8.15	9.05	9.3
00400	CONVERTED PH (STANDARD UNITS)	9	8.7	8.243	9.3	7.6	0.448	0.669	7.6	8.15	9.05	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.002	0.006	0.025	0.001	0.	0.008	0.001	0.001	0.008	0.025
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	3	0.09	0.1	0.15	0.06	0.002	0.046	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	2	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	2	0.315	0.315	0.33	0.3	0.	0.021	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	3	0.4	0.433	0.6	0.3	0.023	0.153	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2	3550.	3550.	6800.	300.	21125000.	4596.194	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2	3.155	3.155	3.833	2.477	0.919	0.958	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			1428.286								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	3	0.16	0.153	0.2	0.1	0.003	0.05	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	3	0.06	0.09	0.17	0.04	0.005	0.07	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11	16.7	14.191	25.6	3.3	67.727	8.23	3.52	4.4	21.1	24.92
00060	FLOW, STREAM, MEAN DAILY CFS	12	780.	1049.667	2880.	385.	650952.606	806.816	395.5	458.75	1615.	2667.
00300	OXYGEN, DISSOLVED MG/L	12	10.2	10.433	13.8	7.2	5.141	2.267	7.5	8.45	12.4	13.8
00400	PH (STANDARD UNITS)	12	8.5	8.392	8.9	7.2	0.321	0.566	7.23	8.325	8.775	8.9
00400	CONVERTED PH (STANDARD UNITS)	12	8.5	7.934	8.9	7.2	0.55	0.741	7.23	8.325	8.775	8.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.003	0.012	0.063	0.001	0.	0.021	0.001	0.002	0.005	0.059
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12	650.	2525.	8000.	50.	11445227.273	3383.08	50.	100.	6600.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12	2.812	2.833	3.903	1.699	0.723	0.85	1.699	2.	3.772	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			680.18								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	16.15	14.267	20.6	5.6	30.297	5.504	5.6	9.825	19.4	20.42
00060	FLOW, STREAM, MEAN DAILY CFS	12	1100.	1837.333	5270.	437.	2301579.879	1517.096	454.4	697.25	2990.	4763.
00300	OXYGEN, DISSOLVED MG/L	12	9.7	9.717	12.4	8.	2.069	1.438	8.	8.3	10.65	12.22
00400	PH (STANDARD UNITS)	12	8.	8.025	8.8	7.	0.251	0.501	7.15	7.75	8.475	8.74
00400	CONVERTED PH (STANDARD UNITS)	12	8.	7.741	8.8	7.	0.339	0.582	7.15	7.75	8.475	8.74
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.01	0.018	0.1	0.002	0.001	0.027	0.002	0.003	0.018	0.079
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	1	1.579	1.579	1.579	1.579	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12 ##	75.	783.333	6000.	50.	3065606.061	1750.887	50.	50.	300.	4860.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12 ##	1.849	2.214	3.778	1.699	0.5	0.707	1.699	1.699	2.477	3.647
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			163.734								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	12	16.15	14.217	23.3	4.4	46.278	6.803	4.91	6.7	19.85	22.97
00060	FLOW, STREAM, MEAN DAILY CFS	03/02/70-09/20/73	9	1250.	1166.333	2110.	362.	345358.5	587.672	362.	587.5	1585.	2110.
00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	12	9.9	9.992	14.2	7.2	4.364	2.089	7.26	7.95	11.65	13.54
00400	PH (STANDARD UNITS)	03/02/70-11/02/77	12	8.5	8.55	9.	7.5	0.214	0.462	7.65	8.35	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-11/02/77	12	8.5	8.267	9.	7.5	0.301	0.549	7.65	8.35	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-11/02/77	12	0.003	0.005	0.032	0.001	0.	0.009	0.001	0.001	0.005	0.025
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	11 ##	0.05	0.086	0.25	0.05	0.004	0.063	0.05	0.05	0.11	0.228
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	0.02	0.036	0.2	0.005	0.003	0.056	0.005	0.01	0.04	0.17
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.289	1.403	2.029	0.8	0.111	0.334	0.872	1.239	1.579	1.987
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-11/02/77	11	0.5	0.436	0.7	0.2	0.023	0.15	0.22	0.3	0.5	0.68
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	10 ##	50.	130.	400.	50.	16222.222	127.366	50.	50.	225.	390.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	10 ##	1.699	1.957	2.602	1.699	0.134	0.366	1.699	1.699	2.345	2.59
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			90.657								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	11 ##	0.05	0.114	0.3	0.05	0.009	0.092	0.05	0.05	0.2	0.28
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	11	0.1	0.105	0.2	0.05	0.003	0.056	0.05	0.05	0.15	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	12	15.	15.1	24.4	3.3	43.067	6.563	4.47	10.275	21.375	23.98
00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	12	9.9	9.3	12.4	5.8	3.682	1.919	5.92	8.175	10.6	11.86
00400	PH (STANDARD UNITS)	03/02/70-11/02/77	12	8.5	8.358	8.9	7.5	0.217	0.466	7.5	8.05	8.7	8.84
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-11/02/77	12	8.5	8.084	8.9	7.5	0.299	0.547	7.5	8.05	8.7	8.84
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-11/02/77	12	0.003	0.008	0.032	0.001	0.	0.011	0.001	0.002	0.009	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	11 ##	0.05	0.073	0.2	0.05	0.002	0.047	0.05	0.05	0.1	0.18
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	0.01	0.013	0.03	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.399	1.3	1.899	0.68	0.17	0.412	0.698	0.9	1.5	1.899
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-11/02/77	11	0.4	0.355	0.5	0.2	0.015	0.121	0.2	0.2	0.5	0.5
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	11	100.	109.091	300.	50.	5909.091	76.871	50.	50.	100.	280.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	11	2.	1.961	2.477	1.699	0.066	0.258	1.699	1.699	2.	2.442
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			91.469								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	11	0.1	0.164	0.4	0.05	0.018	0.132	0.05	0.05	0.3	0.38
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	11	0.1	0.159	0.4	0.05	0.018	0.136	0.05	0.05	0.3	0.38

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	12	13.3	14.325	23.9	3.3	63.128	7.945	3.81	7.2	23.025	23.9
00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	12	9.95	9.683	11.7	5.8	2.792	1.671	6.34	8.9	11.025	11.55
00400	PH (STANDARD UNITS)	03/02/70-11/02/77	12	8.45	8.425	9.	8.	0.091	0.302	8.	8.2	8.675	8.91
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-11/02/77	12	8.447	8.335	9.	8.	0.1	0.316	8.	8.2	8.675	8.91
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-11/02/77	12	0.004	0.005	0.01	0.001	0.	0.003	0.001	0.002	0.006	0.01
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	11 ##	0.05	0.073	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	0.02	0.021	0.06	0.005	0.	0.018	0.005	0.005	0.03	0.056
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	11	1.479	1.362	1.699	0.88	0.092	0.303	0.882	1.	1.559	1.699
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-11/02/77	11	0.3	0.282	0.5	0.1	0.014	0.117	0.12	0.2	0.4	0.48
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	12	100.	395.833	2100.	50.	415208.333	644.367	50.	62.5	425.	1860.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	12	2.	2.211	3.322	1.699	0.3	0.548	1.699	1.774	2.599	3.26
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			162.588								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	11	0.1	0.118	0.3	0.05	0.007	0.081	0.05	0.05	0.2	0.28
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	11	0.1	0.097	0.2	0.04	0.003	0.05	0.042	0.05	0.14	0.188

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	10	14.15	14.62	27.8	1.1	83.697	9.149	1.27	7.375	22.8	27.3
00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	9	10.2	10.133	13.	6.8	5.133	2.266	6.8	8.2	12.65	13.
00400	PH (STANDARD UNITS)	03/02/70-11/02/77	10	8.9	8.66	9.	7.8	0.203	0.45	7.82	8.375	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-11/02/77	10	8.889	8.412	9.	7.8	0.271	0.521	7.82	8.375	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-11/02/77	10	0.001	0.004	0.016	0.001	0.	0.005	0.001	0.001	0.005	0.015
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	10 ##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	10	0.02	0.031	0.1	0.01	0.001	0.026	0.011	0.02	0.033	0.094
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	10	1.485	1.542	1.979	1.279	0.064	0.254	1.279	1.294	1.737	1.969
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-11/02/77	10	0.3	0.305	0.5	0.05	0.017	0.13	0.065	0.2	0.4	0.49
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	10	150.	620.	4200.	50.	1631777.778	1277.411	50.	50.	550.	3850.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	10	2.151	2.274	3.623	1.699	0.419	0.647	1.699	1.699	2.736	3.545
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	10	0.1	0.145	0.3	0.05	0.006	0.076	0.055	0.1	0.2	0.29
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	10	0.105	0.136	0.37	0.06	0.01	0.099	0.061	0.07	0.168	0.358

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	6	14.25	14.917	25.	3.	78.842	8.879	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	6	9.	10.433	15.2	8.2	8.695	2.949	**	**	**	**
00400	PH (STANDARD UNITS)	03/02/70-11/02/77	6	8.25	8.333	9.	7.7	0.263	0.513	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-11/02/77	6	8.182	8.118	9.	7.7	0.318	0.564	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-11/02/77	6	0.007	0.008	0.02	0.001	0.	0.007	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	5	0.1	0.1	0.2	0.05	0.004	0.061	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	5	0.04	0.031	0.05	0.005	0.	0.018	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	5	1.599	1.479	1.799	1.	0.107	0.327	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-11/02/77	5	0.4	0.46	0.6	0.4	0.008	0.089	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	5 ##	50.	730.	3400.	50.	2228250.	1492.732	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	5 ##	1.699	2.126	3.531	1.699	0.635	0.797	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	5	0.2	0.21	0.4	0.05	0.021	0.143	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	5	0.2	0.222	0.4	0.07	0.022	0.149	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	23	22.8	22.226	27.8	13.3	9.352	3.058	18.44	20.	23.9	25.9
00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	22	8.2	8.418	10.6	6.8	1.026	1.013	7.2	7.55	9.125	9.97
00400	PH (STANDARD UNITS)	03/02/70-11/02/77	23	8.5	8.63	9.3	7.9	0.155	0.394	8.	8.5	9.	9.18
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-11/02/77	23	8.5	8.462	9.3	7.9	0.184	0.429	8.	8.5	9.	9.18
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-11/02/77	23	0.003	0.003	0.013	0.001	0.	0.003	0.001	0.001	0.003	0.01
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	13 ##	0.05	0.065	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	13	0.02	0.017	0.06	0.005	0.	0.015	0.005	0.005	0.02	0.044
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	13	1.539	1.637	2.029	1.289	0.053	0.231	1.333	1.49	1.849	2.009
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-11/02/77	13	0.4	0.396	0.7	0.05	0.029	0.171	0.11	0.25	0.5	0.62
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-02/01/77	6 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-02/01/77	6 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-02/01/77	6 ##	5.	6.5	12.	2.	13.9	3.728	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-02/01/77	6	20.	28.333	100.	5.	1286.667	35.87	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	19	100.	839.474	8000.	50.	3520438.596	1876.283	50.	50.	400.	2400.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	19	2.	2.305	3.903	1.699	0.469	0.685	1.699	1.699	2.602	3.38
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			201.734								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	13	0.2	0.219	0.3	0.05	0.008	0.09	0.07	0.15	0.3	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	13	0.2	0.201	0.37	0.05	0.011	0.105	0.07	0.105	0.3	0.362
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-02/01/77	7 ##	0.25	0.286	0.5	0.25	0.009	0.094	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	39	7.2	8.372	19.4	1.1	19.674	4.435	3.3	5.	11.1	15.6
00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	40	11.1	11.2	15.2	5.8	3.565	1.888	8.62	10.2	12.4	13.8
00400	PH (STANDARD UNITS)	03/02/70-11/02/77	40	8.45	8.27	9.	7.	0.285	0.534	7.5	8.	8.7	8.89
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-11/02/77	40	8.447	7.911	9.	7.	0.418	0.646	7.5	8.	8.7	8.89
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-11/02/77	40	0.004	0.012	0.1	0.001	0.	0.02	0.001	0.002	0.01	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	25 ##	0.05	0.088	0.25	0.05	0.003	0.052	0.05	0.05	0.105	0.17
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	25	0.02	0.028	0.2	0.005	0.002	0.041	0.005	0.005	0.03	0.064
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	25	1.369	1.341	1.899	0.33	0.135	0.368	0.854	1.12	1.579	1.843
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-11/02/77	25	0.4	0.34	0.6	0.1	0.013	0.115	0.2	0.25	0.4	0.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-02/01/77	9 ##	5.	8.333	20.	5.	25.	5.	5.	5.	10.	20.
01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-02/01/77	9 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.	5.
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-02/01/77	9	6.	8.	20.	5.	24.5	4.95	5.	5.	10.	20.
01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-02/01/77	9	10.	13.333	40.	5.	162.5	12.748	5.	5.	20.	40.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	37	100.	693.243	6800.	50.	2385855.856	1544.622	50.	50.	350.	2360.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	37	2.	2.259	3.833	1.699	0.397	0.63	1.699	1.699	2.54	3.364
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			181.355								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	25	0.1	0.128	0.4	0.05	0.011	0.105	0.05	0.05	0.2	0.34
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	25	0.1	0.124	0.4	0.03	0.01	0.102	0.046	0.06	0.135	0.34
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-02/01/77	9 ##	0.25	0.25	0.25	0.25	0.	0.	0.25	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/02/70-11/02/77	22	17.5	17.786	25.	7.2	19.803	4.45	10.33	16.425	21.	22.8
00300	OXYGEN, DISSOLVED MG/L	03/02/70-11/02/77	22	9.2	9.005	11.8	5.8	2.219	1.489	6.62	8.	10.	11.07
00400	PH (STANDARD UNITS)	03/02/70-11/02/77	22	8.5	8.432	9.	7.5	0.203	0.451	7.69	8.	8.8	9.
00400	CONVERTED PH (STANDARD UNITS)	03/02/70-11/02/77	22	8.5	8.189	9.	7.5	0.265	0.515	7.69	8.	8.8	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/02/70-11/02/77	22	0.003	0.006	0.032	0.001	0.	0.008	0.001	0.002	0.01	0.021

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0234

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/02/70-11/02/77	14 ##	0.05	0.071	0.2	0.05	0.002	0.042	0.05	0.05	0.093	0.15
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	13	0.03	0.029	0.05	0.005	0.	0.014	0.007	0.02	0.04	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/02/70-11/02/77	13	1.25	1.149	1.699	0.3	0.163	0.404	0.452	0.825	1.384	1.699
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/02/70-11/02/77	14	0.3	0.371	0.6	0.2	0.021	0.144	0.2	0.275	0.5	0.6
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-02/01/77	7 ##	5.	7.143	20.	5.	32.143	5.669	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-02/01/77	7	10.	8.571	10.	5.	5.952	2.44	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-02/01/77	4 ##	5.	4.25	5.	2.	2.25	1.5	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-02/01/77	7 ##	5.	9.286	30.	5.	86.905	9.322	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	18	100.	1238.889	8000.	50.	6989575.163	2643.78	50.	50.	550.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-11/02/77	18	2.	2.254	3.903	1.699	0.626	0.791	1.699	1.699	2.736	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			179.319								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-11/02/77	14 ##	0.075	0.094	0.2	0.05	0.003	0.056	0.05	0.05	0.115	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-11/02/77	14 ##	0.05	0.075	0.17	0.04	0.002	0.041	0.045	0.05	0.103	0.155
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-02/01/77	6 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0235

NPS Station ID: SHEN0235
 Location: RT. 629/865 BRIDGE AT PORT REPUBLIC
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005004
 RF3 Index: 02070006001602.96
 Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: NORTH RIVER

LAT/LON: 38.298142/ -78.810448

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.350
 RF3 Mile Point: 4.67

AMBIENT MONITORING BASIN: 1B SHENANDOAH
 SECTION: 05 TOPO MAP #: 0055 TOPO MAP NAME: GROTTOS, VA

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BNTH000.18 /VA1B05-X0053/VA1B6X0053
 Within Park Boundary: No

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

Date Created: / /

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	100	15.25	15.019	27.2	1.7	54.601	7.389	5	7.85	21.55	25.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/18/71-07/20/71	4	5.55	14.775	47.	1.	467.536	21.623	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	98	10.15	10.334	16.8	5.8	5.471	2.339	7.8	8.475	11.6	14.
00310	BOD, 5 DAY, 20 DEG C MG/L	12/03/68-11/17/71	14	2.25	2.7	7.1	1.2	2.451	1.565	1.3	1.6	3.5	5.7
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	100	8.5	8.459	9.3	6.9	0.264	0.514	7.71	8.	8.9	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	100	8.5	8.075	9.3	6.9	0.414	0.643	7.71	8.	8.9	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	100	0.003	0.008	0.126	0.001	0.	0.018	0.001	0.001	0.01	0.02
00403	PH, LAB, STANDARD UNITS SU	12/03/68-12/17/70	8	7.65	7.75	8.3	7.3	0.143	0.378	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/03/68-12/17/70	8	7.647	7.621	8.3	7.3	0.162	0.402	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/03/68-12/17/70	8	0.023	0.024	0.05	0.005	0.	0.018	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/03/68-12/17/70	8	124.5	120.	154.	76.	795.143	28.198	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/03/68-05/29/70	7	197.	245.286	382.	156.	7207.238	84.895	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/03/68-05/29/70	7	70.	81.143	177.	50.	1989.476	44.604	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/03/68-05/29/70	7	144.	164.143	291.	102.	4528.476	67.294	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	8.	21.857	78.	5.	713.143	26.705	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	4.	6.	14.	3.	15.	3.873	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/03/68-05/29/70	7	5.	15.857	64.	1.	522.81	22.865	**	**	**	**
00545	RESIDUE, SETTLEABLE (ML/L)	12/03/68-12/03/68	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	66 ##	0.05	0.094	1.099	0.02	0.019	0.138	0.05	0.05	0.1	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	65	0.02	0.023	0.14	0.005	0.	0.022	0.005	0.01	0.03	0.044
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	57	1.279	1.235	1.979	0.15	0.153	0.392	0.728	0.98	1.49	1.779
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	66	0.3	0.352	1.299	0.05	0.063	0.25	0.135	0.2	0.4	0.654
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	8	1.65	1.854	3.2	1.3	0.424	0.651	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	12/03/68-05/11/69	3	0.5	0.49	0.52	0.45	0.001	0.036	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/29/78	10 ##	1.75	1.7	2.5	0.5	0.733	0.856	0.55	1.	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/29/78	13 ##	5.	5.038	10.	0.5	3.769	1.941	2.3	5.	5.	8.
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/08/70-08/29/78	22 ##	5.	5.909	10.	5.	3.896	1.974	5.	5.	5.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/08/70-08/29/78	22 ##	5.	6.818	20.	5.	20.346	4.511	5.	5.	5.	17.
01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/29/78	3	200.	200.	200.	200.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/29/78	20 ##	5.	8.65	51.	5.	111.713	10.569	5.	5.	6.5	18.4
01055	MANGANESE, TOTAL (UG/L AS MN)	04/08/70-04/18/71	2	55.	55.	70.	40.	450.	21.213	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/29/78	12 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	04/08/70-08/29/78	22 ##	5.	13.864	110.	5.	535.552	23.142	5.	5.	12.5	34.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/07/68-09/08/70	13	1500.	3600.846	23000.	91.	36564722.641	6046.877	146.6	680.	4450.	15640.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/07/68-09/08/70	13	3.176	3.177	4.362	1.959	0.391	0.625	2.12	2.801	3.648	4.082
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			1504.484								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	83	100.	578.916	6000.	50.	1607690.273	1267.947	50.	50.	400.	1720.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	83	2.	2.238	3.778	1.699	0.355	0.596	1.699	1.699	2.602	3.235
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			172.958								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	62	0.1	0.158	0.5	0.05	0.014	0.119	0.05	0.05	0.2	0.4
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	62	0.12	0.155	0.5	0.04	0.013	0.116	0.05	0.06	0.2	0.364
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/29/78	23 ##	0.25	0.261	0.6	0.15	0.006	0.077	0.25	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0235

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	1	0	0.00			3	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	98	0	0.00	30	0	0.00	44	0	0.00	24	0	0.00		
00400	PH	Fresh Chronic	9.	100	22	0.22	31	9	0.29	45	8	0.18	24	5	0.21		
		Other-Lo Lim.	6.5	100	0	0.00	31	0	0.00	45	0	0.00	24	0	0.00		
00403	PH, LAB	Fresh Chronic	9.	8	0	0.00	1	0	0.00	4	0	0.00	3	0	0.00		
		Other-Lo Lim.	6.5	8	0	0.00	1	0	0.00	4	0	0.00	3	0	0.00		
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	65	0	0.00	18	0	0.00	31	0	0.00	16	0	0.00		
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	57	0	0.00	15	0	0.00	27	0	0.00	15	0	0.00		
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	8	0	0.00	3	0	0.00	4	0	0.00	1	0	0.00		
01002	ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00		
		Drinking Water	50.	10	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00		
01027	CADMIUM, TOTAL	Fresh Acute	3.9	2 &	1	0.50	1	0	0.00	1	0	0.00	1	1	1.00		
		Drinking Water	5.	2 &	1	0.50	1	0	0.00	1	0	0.00	1	1	1.00		
01034	CHROMIUM, TOTAL	Drinking Water	100.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00		
01042	COPPER, TOTAL	Fresh Acute	18.	22	2	0.09	6	0	0.00	9	1	0.11	7	1	0.14		
		Drinking Water	1300.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00		
01051	LEAD, TOTAL	Fresh Acute	82.	20	0	0.00	6	0	0.00	9	0	0.00	5	0	0.00		
		Drinking Water	15.	20	2	0.10	6	1	0.17	9	1	0.11	5	0	0.00		
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	12	0	0.00	4	0	0.00	4	0	0.00	4	0	0.00		
		Drinking Water	100.	12	0	0.00	4	0	0.00	4	0	0.00	4	0	0.00		
01092	ZINC, TOTAL	Fresh Acute	120.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00		
		Drinking Water	5000.	22	0	0.00	6	0	0.00	9	0	0.00	7	0	0.00		
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	13	8	0.62	7	5	0.71	2	1	0.50	4	2	0.50		
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	83	38	0.46	23	14	0.61	41	18	0.44	19	6	0.32		
71900	MERCURY, TOTAL	Fresh Acute	2.4	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00		
		Drinking Water	2.	23	0	0.00	7	0	0.00	9	0	0.00	7	0	0.00		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	4	20.6	18.925	26.7	7.8	79.943	8.941	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	4	8.75	9.575	12.8	8.	4.789	2.188	**	**	**	**
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	4	8.6	8.625	8.7	8.6	0.002	0.05	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	4	8.6	8.623	8.7	8.6	0.003	0.05	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	4	0.003	0.002	0.003	0.002	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	1	1.129	1.129	1.129	1.129	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	3	16.7	14.633	22.2	5.	77.163	8.784	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	3	8.4	9.4	14.	5.8	17.56	4.19	**	**	**	**
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	3	8.5	8.6	8.8	8.5	0.03	0.173	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	3	8.5	8.579	8.8	8.5	0.031	0.175	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	3	0.003	0.003	0.003	0.002	0.	0.001	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	0.17	0.16	0.19	0.12	0.001	0.036	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	0.02	0.06	0.14	0.02	0.005	0.069	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	3	1.529	1.269	1.539	0.74	0.21	0.458	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	3	0.78	0.766	1.079	0.44	0.102	0.32	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	9	20.	16.289	27.2	6.1	67.419	8.211	6.1	8.35	23.3	27.2
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	9	10.6	11.022	16.8	7.8	8.694	2.949	7.8	8.7	13.3	16.8
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	9	8.7	8.644	9.3	7.8	0.248	0.498	7.8	8.25	9.05	9.3
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	9	8.7	8.38	9.3	7.8	0.326	0.571	7.8	8.25	9.05	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	9	0.002	0.004	0.016	0.001	0.	0.005	0.001	0.001	0.007	0.016
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	4	0.1	0.133	0.28	0.05	0.01	0.102	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	3	0.02	0.02	0.03	0.01	0.	0.01	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	3	0.18	0.566	1.369	0.15	0.483	0.695	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	4	0.3	0.288	0.4	0.15	0.017	0.131	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	1050.	1050.	1600.	500.	605000.	777.817	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	2.952	2.952	3.204	2.699	0.128	0.357	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				894.427								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	4	0.15	0.15	0.2	0.1	0.003	0.058	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	4	0.125	0.123	0.18	0.06	0.003	0.057	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	12	15.	13.992	25.	3.3	54.294	7.368	3.63	6.15	20.45	24.01
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	12	10.7	11.175	14.4	7.2	8.237	2.87	7.56	8.45	14.275	14.4
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	12	8.6	8.467	9.2	7.2	0.324	0.569	7.35	8.15	8.8	9.14

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	12	8.589	8.035	9.2	7.2	0.528	0.726	7.35	8.15	8.8	9.14
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	12	0.003	0.009	0.063	0.001	0.	0.018	0.001	0.002	0.007	0.05
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	150.	804.167	4200.	50.	2132481.061	1460.302	50.	62.5	525.	4020.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.151	2.359	3.623	1.699	0.448	0.67	1.699	1.774	2.703	3.603
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			228.643								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	12	15.3	13.7	19.4	5.	29.425	5.425	5.	9.55	18.9	19.4
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	12	10.	10.017	12.6	7.8	1.982	1.408	7.98	9.	11.	12.36
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	12	8.	7.983	9.	6.9	0.483	0.695	6.93	7.425	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	12	8.	7.541	9.	6.9	0.697	0.835	6.93	7.425	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	12	0.01	0.029	0.126	0.001	0.002	0.041	0.001	0.003	0.038	0.118
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	1	1.75	1.75	1.75	1.75	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	150.	441.667	1900.	50.	385378.788	620.789	50.	50.	750.	1750.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.151	2.271	3.279	1.699	0.341	0.584	1.699	1.699	2.835	3.239
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			186.716								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	11	15.	13.991	23.9	4.4	53.407	7.308	4.74	6.7	21.1	23.78
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	11	10.2	10.318	14.	8.	3.546	1.883	8.04	8.8	11.4	13.68
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.5	8.536	9.	7.7	0.173	0.415	7.76	8.4	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.5	8.332	9.	7.7	0.218	0.467	7.76	8.4	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	11	0.003	0.005	0.02	0.001	0.	0.006	0.001	0.004	0.004	0.018
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11 ##	0.05	0.067	0.2	0.05	0.002	0.045	0.05	0.05	0.06	0.174
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.02	0.019	0.05	0.005	0.	0.014	0.005	0.01	0.03	0.046
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	11	1.299	1.363	1.979	0.6	0.154	0.392	0.684	1.189	1.779	1.949
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	0.3	0.373	1.199	0.2	0.084	0.29	0.2	0.4	1.059	
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	200.	890.909	6000.	50.	3126409.091	1768.165	50.	100.	700.	5160.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.301	2.451	3.778	1.699	0.399	0.632	1.699	2.	2.845	3.674
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			282.293								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.141	0.4	0.05	0.014	0.12	0.05	0.05	0.2	0.38
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.136	0.3	0.04	0.007	0.081	0.042	0.06	0.2	0.28

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	11	16.7	15.273	24.4	3.3	48.946	6.996	4.08	10.	21.7	24.12
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	11	8.9	9.727	13.2	7.	4.068	2.017	7.16	8.	11.6	12.88

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.2	8.309	9.	7.6	0.211	0.459	7.66	8.	8.8	8.98
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.2	8.116	9.	7.6	0.252	0.502	7.66	8.	8.8	8.98
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	11	0.006	0.008	0.025	0.001	0.	0.007	0.001	0.002	0.01	0.023
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11 ##	0.05	0.082	0.2	0.05	0.004	0.06	0.05	0.05	0.1	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.01	0.014	0.03	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	11	1.299	1.209	1.699	0.68	0.131	0.362	0.698	0.8	1.5	1.699
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	0.2	0.255	0.6	0.1	0.017	0.129	0.12	0.2	0.3	0.54
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	122.727	500.	50.	19181.818	138.498	50.	50.	200.	440.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	1.927	2.699	1.699	0.125	0.353	1.699	1.699	2.301	2.619
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			84.472								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.177	0.4	0.05	0.02	0.142	0.05	0.05	0.3	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.173	0.4	0.05	0.021	0.146	0.05	0.05	0.3	0.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	12	14.7	14.142	25.	2.8	63.73	7.983	3.46	7.05	22.475	24.67
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	12	10.25	10.217	14.4	5.8	6.163	2.483	5.92	9.1	11.45	14.04
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	12	8.5	8.458	9.	7.5	0.186	0.432	7.65	8.225	8.85	8.97
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	12	8.5	8.223	9.	7.5	0.247	0.497	7.65	8.225	8.85	8.97
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	12	0.003	0.006	0.032	0.001	0.	0.008	0.001	0.001	0.006	0.025
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11 ##	0.05	0.082	0.3	0.05	0.006	0.075	0.05	0.05	0.1	0.26
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.02	0.019	0.04	0.005	0.	0.011	0.005	0.005	0.02	0.038
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	11	1.259	1.3	1.799	0.78	0.093	0.305	0.804	1.179	1.479	1.775
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	0.2	0.223	0.4	0.05	0.01	0.098	0.06	0.2	0.3	0.38
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	100.	377.273	2000.	50.	351681.818	593.028	50.	50.	500.	1760.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.	2.182	3.301	1.699	0.345	0.587	1.699	1.699	2.699	3.221
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			151.991								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.114	0.2	0.05	0.004	0.06	0.05	0.05	0.2	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.06	0.092	0.2	0.04	0.003	0.054	0.042	0.05	0.14	0.19

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	11	13.9	14.491	27.2	1.7	70.539	8.399	1.92	8.3	22.2	26.32
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	10	10.45	10.72	14.	7.8	4.651	2.157	7.83	8.85	12.95	13.94
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.7	8.718	9.	8.	0.104	0.322	8.1	8.5	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	11	8.7	8.589	9.	8.	0.122	0.349	8.1	8.5	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	11	0.002	0.003	0.01	0.001	0.	0.003	0.001	0.001	0.003	0.009
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	11 ##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	11	0.02	0.027	0.06	0.01	0.	0.017	0.01	0.01	0.04	0.058
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	11	1.279	1.307	1.889	0.95	0.102	0.319	0.952	0.99	1.5	1.867
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	11	0.3	0.332	0.8	0.05	0.043	0.208	0.06	0.2	0.4	0.74
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	636.364	6000.	50.	3175045.455	1781.866	50.	50.	100.	4880.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	2.052	3.778	1.699	0.404	0.635	1.699	1.699	2.	3.543
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			112.768								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	11	0.1	0.136	0.4	0.05	0.01	0.1	0.05	0.1	0.2	0.36
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	11	0.12	0.142	0.39	0.06	0.009	0.096	0.062	0.08	0.16	0.36

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	6	14.	15.	25.5	3.5	78.716	8.872	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	6	9.7	10.933	15.4	8.1	8.139	2.853	**	**	**	**
00400	PH (STANDARD UNITS)	6	8.3	8.433	9.	8.	0.247	0.497	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	6	8.204	8.24	9.	8.	0.291	0.54	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	6	0.006	0.006	0.01	0.001	0.	0.005	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	5	0.1	0.3	1.099	0.05	0.203	0.451	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	5	0.03	0.036	0.08	0.01	0.001	0.027	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	5	1.099	1.005	1.299	0.67	0.059	0.244	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	5	0.4	0.56	1.299	0.3	0.173	0.415	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	5	100.	1440.	6000.	50.	6661750.	2581.037	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	5	2.	2.435	3.778	1.699	0.849	0.921	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	5	0.3	0.3	0.5	0.1	0.025	0.158	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	5	0.3	0.294	0.5	0.12	0.03	0.174	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	24.5	21.343	27.	14.2	27.293	5.224	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	7	10.6	9.429	12.	6.	6.672	2.583	**	**	**	**
00400	PH (STANDARD UNITS)	7	9.	8.829	9.	8.2	0.086	0.293	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	9.	8.715	9.	8.2	0.101	0.317	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.001	0.002	0.006	0.001	0.	0.002	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	6##	0.05	0.058	0.1	0.05	0.	0.02	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	6	0.015	0.028	0.09	0.005	0.001	0.032	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	6	0.5	0.517	0.9	0.3	0.05	0.223	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	6	200.	200.	400.	50.	19000.	137.84	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	6	2.301	2.18	2.602	1.699	0.152	0.389	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	6	0.2	0.217	0.4	0.1	0.018	0.133	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	6	0.23	0.248	0.37	0.14	0.01	0.101	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	2	6.5	6.5	8.	5.	4.5	2.121	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	1	10.8	10.8	10.8	10.8	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	2	7.65	7.65	7.8	7.5	0.045	0.212	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	2	7.625	7.625	7.8	7.5	0.046	0.215	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	2	0.024	0.024	0.032	0.016	0.	0.011	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	2##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	2	0.3	0.3	0.4	0.2	0.02	0.141	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2	150.	150.	200.	100.	5000.	70.711	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2	2.151	2.151	2.301	2.	0.045	0.213	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	2	0.045	0.045	0.05	0.04	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	31	23.3	22.403	27.2	12.2	11.458	3.385	18.34	20.6	25.	26.48
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	30	8.8	8.883	13.	5.8	2.589	1.609	7.02	8.	9.425	11.6
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	31	8.6	8.613	9.3	7.4	0.193	0.44	8.	8.5	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	31	8.6	8.318	9.3	7.4	0.283	0.532	8.	8.5	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	31	0.003	0.005	0.04	0.001	0.	0.009	0.001	0.001	0.003	0.01
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	18 ##	0.05	0.063	0.19	0.05	0.001	0.035	0.05	0.05	0.05	0.109
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	18	0.015	0.016	0.04	0.005	0.	0.01	0.005	0.009	0.02	0.031
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	15	1.299	1.357	1.779	0.99	0.061	0.248	1.037	1.179	1.529	1.731
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	18	0.3	0.324	0.78	0.05	0.027	0.165	0.095	0.275	0.4	0.618
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	23	200.	582.609	3600.	50.	753547.431	868.071	50.	50.	600.	1920.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	23	2.301	2.383	3.556	1.699	0.344	0.587	1.699	1.699	2.778	3.283
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				GEOMETRIC MEAN =								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	17	0.2	0.232	0.4	0.05	0.015	0.121	0.09	0.1	0.35	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	17	0.2	0.229	0.43	0.1	0.013	0.112	0.1	0.13	0.325	0.406

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	45	7.8	8.5	19.4	1.7	18.49	4.3	3.3	5.	11.7	15.
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	44	11.55	11.766	16.8	6.	4.942	2.223	8.7	10.2	13.575	14.4
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	45	8.5	8.344	9.	6.9	0.333	0.577	7.5	8.	8.85	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	45	8.5	7.899	9.	6.9	0.536	0.732	7.5	8.	8.85	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	45	0.003	0.013	0.126	0.001	0.001	0.025	0.001	0.001	0.01	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	31 ##	0.05	0.122	1.099	0.02	0.038	0.195	0.05	0.05	0.1	0.264
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	31	0.02	0.018	0.05	0.005	0.	0.011	0.005	0.01	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	27	1.329	1.265	1.979	0.18	0.188	0.433	0.656	0.9	1.5	1.841
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	31	0.3	0.374	1.299	0.05	0.092	0.303	0.1	0.2	0.44	0.88
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	41	100.	541.463	6000.	50.	1721987.805	1312.245	50.	50.	300.	1460.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	41	2.	2.203	3.778	1.699	0.337	0.58	1.699	1.699	2.477	3.154
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				GEOMETRIC MEAN =								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	29	0.1	0.148	0.5	0.05	0.016	0.126	0.05	0.05	0.2	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	29	0.09	0.143	0.5	0.04	0.015	0.124	0.04	0.055	0.18	0.37

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0235

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/07/68-03/01/79	24	17.5	17.704	27.	8.9	20.54	4.532	10.3	15.	20.	24.4
00300	OXYGEN, DISSOLVED MG/L	07/07/68-03/01/79	24	9.3	9.521	14.2	6.2	3.21	1.792	7.1	8.25	10.95	11.45
00400	PH (STANDARD UNITS)	07/07/68-03/01/79	24	8.6	8.475	9.2	7.8	0.191	0.437	7.95	8.	8.8	9.
00400	CONVERTED PH (STANDARD UNITS)	07/07/68-03/01/79	24	8.6	8.283	9.2	7.8	0.229	0.479	7.95	8.	8.8	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/07/68-03/01/79	24	0.003	0.005	0.016	0.001	0.	0.005	0.001	0.002	0.01	0.011
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/03/68-03/01/79	17 ##	0.05	0.078	0.2	0.05	0.002	0.042	0.05	0.05	0.1	0.136
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/03/68-03/01/79	16	0.03	0.042	0.14	0.005	0.001	0.036	0.009	0.02	0.058	0.105
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/03/68-11/02/77	15	1.019	1.057	1.799	0.15	0.152	0.39	0.468	0.78	1.299	1.643
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/03/68-03/01/79	17	0.2	0.34	1.079	0.2	0.052	0.228	0.2	0.2	0.4	0.696
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	19	100.	655.263	6000.	50.	2566915.205	1602.16	50.	50.	200.	4200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	19	2.	2.138	3.778	1.699	0.41	0.64	1.699	1.699	2.301	3.623
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				GEOMETRIC MEAN =								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/02/70-03/01/79	16	0.1	0.097	0.2	0.05	0.002	0.046	0.05	0.05	0.1	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/02/70-03/01/79	16	0.1	0.096	0.18	0.05	0.002	0.047	0.05	0.05	0.128	0.173

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0236

NPS Station ID: SHEN0236
 Location: LOWER LEWIS RUN TRIB NEAR LYNWOOD, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005007001.22
 Description:

LAT/LON: 38.300837/ -78.738893
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 1.53

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628320
 Within Park Boundary: No

Date Created: 04/09/83

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 11.80
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0236

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/82-06/24/82	3	14.	12.	15.	7.	19.	4.359	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/16/82-06/24/82	3	0.2	0.18	0.3	0.04	0.017	0.131	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/82-06/24/82	2	4.85	4.85	5.	4.7	0.045	0.212	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/82-06/24/82	2	4.825	4.825	5.	4.7	0.046	0.215	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/82-06/24/82	2	14.976	14.976	19.953	10.	49.527	7.038	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/16/82-06/24/82	3	5.1	5.1	5.2	5.	0.01	0.1	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/16/82-06/24/82	3	5.1	5.092	5.2	5.	0.01	0.1	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/82-06/24/82	3	7.943	8.084	10.	6.31	3.42	1.849	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	03/16/82-06/24/82	3	0.01	0.008	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/16/82-06/24/82	3 ##	0.005	0.01	0.02	0.005	0.	0.009	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/16/82-06/24/82	3	2.	2.333	3.	2.	0.333	0.577	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	03/16/82-06/24/82	3	0.2	0.167	0.2	0.1	0.003	0.058	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/82-06/24/82	3	0.4	0.433	0.5	0.4	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/82-06/24/82	3	0.5	0.533	0.6	0.5	0.003	0.058	**	**	**	**
00931	SODIUM ADSORPTION RATIO	03/16/82-06/24/82	3	0.2	0.167	0.2	0.1	0.003	0.058	**	**	**	**
00932	SODIUM, PERCENT	03/16/82-06/24/82	3	29.	29.	30.	28.	1.	1.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/82-06/24/82	3	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	03/16/82-06/24/82	3	1.	0.967	1.	0.9	0.003	0.058	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/16/82-06/24/82	3	3.	2.667	3.	2.	0.333	0.577	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/16/82-06/24/82	3	3.8	3.733	3.8	3.6	0.013	0.115	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-06/24/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0236

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
00403	Fresh Chronic	9.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00631	Drinking Water	10.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0236

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	1	0	0.00	2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0237

NPS Station ID: SHEN0237
 Location: LOWER LEWIS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.301115/ -78.733616

Depth of Water: 0
 Elevation: 1340
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH47
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RH47 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT LOWER LEWIS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.90 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0237

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	3.162	3.162	3.162	3.162	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.58	0.58	0.58	0.58	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0237

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0238

NPS Station ID: SHEN0238
 Location: LOWER LEWIS RUN NEAR LYNWOOD, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005021100.00
 Description:

LAT/LON: 38.301670/ -78.733892

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.75

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628300
 Within Park Boundary: Yes

Date Created: 04/09/83

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 30.80
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0238

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/82-06/21/82	3	14.	12.	15.	7.	19.	4.359	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	03/16/82-06/21/82	3	0.3	0.4	0.7	0.2	0.07	0.265	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/82-06/21/82	3	5.5	5.333	5.6	4.9	0.143	0.379	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/82-06/21/82	3	5.5	5.216	5.6	4.9	0.164	0.405	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/82-06/21/82	3	3.162	6.088	12.589	2.512	31.807	5.64	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/16/82-06/21/82	3	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/16/82-06/21/82	3	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/82-06/21/82	3	3.162	3.162	3.162	3.162	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	03/16/82-06/21/82	3##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	03/16/82-06/21/82	3	0.09	0.077	0.1	0.04	0.001	0.032	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/16/82-06/21/82	3	4.	4.	4.	4.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	03/16/82-06/21/82	3	0.6	0.633	0.7	0.6	0.003	0.058	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/82-06/21/82	3	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/82-06/21/82	3	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	03/16/82-06/21/82	3	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	03/16/82-06/21/82	3	18.	17.667	18.	17.	0.333	0.577	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/82-06/21/82	3	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	03/16/82-06/21/82	3	0.9	0.867	0.9	0.8	0.003	0.058	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/16/82-06/21/82	3	5.	5.	5.	5.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/16/82-06/21/82	3	4.7	4.667	4.8	4.5	0.023	0.153	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-05/20/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0238

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	2	2	1.00						
00403	Fresh Chronic	9.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	2	2	1.00						
00631	Drinking Water	10.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	3	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0238

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	3	0	0.00	1	0	0.00	2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0239

NPS Station ID: SHEN0239
 Location: VAGE502R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.302809/ -78.527615

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_NURE_41 /4089629
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

THE STATION IS LOCATED ON THE SWIFT RUN GAP VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0239

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/77-01/17/77	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/77-01/17/77	1	52.	52.	52.	52.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	01/17/77-01/17/77	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	01/17/77-01/17/77	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/17/77-01/17/77	1	0.316	0.316	0.316	0.316	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	01/17/77-01/17/77	1	25.	25.	25.	25.	0.	0.	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	01/17/77-01/17/77	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01085 VANADIUM, DISSOLVED (UG/L AS V)	01/17/77-01/17/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106 ALUMINUM, DISSOLVED (UG/L AS AL)	01/17/77-01/17/77	1	17.	17.	17.	17.	0.	0.	**	**	**	**
22703 URANIUM, NATURAL, DISSOLVED	01/17/77-01/17/77	1	0.022	0.022	0.022	0.022	0.	0.	**	**	**	**
50761 BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	1	21.	21.	21.	21.	0.	0.	**	**	**	**
82331 DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/17/77-01/17/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0239

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0240

NPS Station ID: SHEN0240
 Location: LOWER LEWIS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005034600.00
 Description:

LAT/LON: 38.304726/ -78.745560

Depth of Water: 0
 Elevation: 354

RF1 Mile Point: 0.000
 RF3 Mile Point: 4.20

Agency: 12NSS
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 2B047076L /2BN2B047076L
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 23.50
 Distance from RF3: 0.62

On/Off RF1:
 On/Off RF3:

THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS, AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS. EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988) WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN; (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0240

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/86-04/15/86	2	11.25	11.25	12.2	10.3	1.805	1.344	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/31/86-04/15/86	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/31/86-04/15/86	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/86-04/15/86	2	18.	18.	18.	18.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/31/86-04/15/86	2	10.2	10.2	10.3	10.1	0.02	0.141	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/31/86-04/15/86	2	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/31/86-04/15/86	2	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/86-04/15/86	2	3.162	3.162	3.162	3.162	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/86-04/15/86	2	5.	5.	5.8	4.2	1.28	1.131	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/31/86-04/15/86	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/31/86-04/15/86	2	0.	0.	0.	0.	0.	0.	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/31/86-04/15/86	2	0.65	0.65	0.7	0.6	0.005	0.071	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/31/86-04/15/86	2	0.4	0.4	0.5	0.3	0.02	0.141	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/86-04/15/86	2	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/86-04/15/86	2	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/86-04/15/86	2	0.61	0.61	0.61	0.61	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/86-04/15/86	2	1.605	1.605	1.61	1.6	0.	0.007	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/86-04/15/86	2	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/86-04/15/86	2	5.25	5.25	5.3	5.2	0.005	0.071	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0240

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/31/86-04/15/86	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/86-04/15/86	2	5.95	5.95	6.	5.9	0.005	0.071	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/31/86-04/15/86	2	7.5	7.5	12.	3.	40.5	6.364	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/31/86-04/15/86	2	13.5	13.5	15.	12.	4.5	2.121	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/86-04/15/86	2	0.015	0.015	0.03	0.	0.	0.021	**	**	**
71885	IRON (UG/L AS FE)	03/31/86-04/15/86	2	74.945	74.945	134.9	14.99	7189.204	84.789	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/31/86-04/15/86	2	1160.	1160.	1160.	1160.	0.	0.	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/31/86-04/15/86	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**
83509	STREAM, WIDTH METER	03/31/86-04/15/86	2	2.	2.	2.	2.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0240

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	2	1.00						2	2	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0241

NPS Station ID: SHEN0241
 Location: VAGE514R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.305309/ -78.477892

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_NURE_43 /4089641
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE STANARDSVILLE VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0241

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/77-01/17/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/77-01/17/77	1	52.	52.	52.	52.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/17/77-01/17/77	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/17/77-01/17/77	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/17/77-01/17/77	1	0.316	0.316	0.316	0.316	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/17/77-01/17/77	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/17/77-01/17/77	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/17/77-01/17/77	1	3.19	3.19	3.19	3.19	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/17/77-01/17/77	1	78.	78.	78.	78.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/17/77-01/17/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/17/77-01/17/77	1	17.	17.	17.	17.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/17/77-01/17/77	1	0.023	0.023	0.023	0.023	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	1	53.	53.	53.	53.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	1	6000.	6000.	6000.	6000.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	1	37.	37.	37.	37.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/17/77-01/17/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0241

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0242

NPS Station ID: SHEN0242
 Location: BIG RUN (LOWER REACH)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.306115/ -78.704392

Depth of Water: 0
 Elevation: 1220
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH48
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RH48 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BIG RUN (LOWER REACH) INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 28.05 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0242

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.63	6.63	6.63	6.63	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.63	6.63	6.63	6.63	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.234	0.234	0.234	0.234	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.69	0.69	0.69	0.69	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	1.25	1.25	1.25	1.25	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	4.8	4.8	4.8	4.8	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0242

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0243

NPS Station ID: SHEN0243
 Location: Onemile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.307504/ -78.660337

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_PARK_ONE3
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0243

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/04/96-09/15/97	3	11.7	12.8	15.1	11.6	3.97	1.992	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/04/96-09/15/97	3	17.	19.	23.	17.	12.	3.464	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/04/96-09/15/97	3	8.9	8.233	9.4	6.4	2.583	1.607	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/04/96-09/15/97	3	5.73	5.547	5.8	5.11	0.144	0.38	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/04/96-09/15/97	3	5.73	5.428	5.8	5.11	0.166	0.407	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/04/96-09/15/97	3	1.862	3.736	7.762	1.585	12.176	3.489	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/15/97-09/15/97	1	14.	14.	14.	14.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0243

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	2	0	0.00						
00406	PH, FIELD	Fresh Chronic	9.	3	0	0.00	1	0	0.00	2	0	0.00						
		Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	2	2	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0244

NPS Station ID: SHEN0244 LAT/LON: 38.309392/ -78.680005
 Location: BEARWALLOW RUN (ONEMILE RUN TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 1380
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH52
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RH52 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT ONEMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.26 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0244

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	5.84	5.84	5.84	5.84	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	5.84	5.84	5.84	5.84	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	1.445	1.445	1.445	1.445	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.51	0.51	0.51	0.51	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	1.33	1.33	1.33	1.33	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0244

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0245

NPS Station ID: SHEN0245
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.310115/ -78.649837

Depth of Water: 0
 Elevation: 1680
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TM03 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.80 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0245

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	3	9.	9.667	12.	8.	4.333	2.082	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	3	28.	26.667	29.	23.	10.333	3.215	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-04/01/93	3	5.81	5.777	5.92	5.6	0.026	0.163	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-04/01/93	3	5.81	5.756	5.92	5.6	0.027	0.165	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-04/01/93	3	1.549	1.754	2.512	1.202	0.46	0.679	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-04/01/93	3	27.	25.333	27.	22.	8.333	2.887	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	3	8.7	8.933	10.3	7.8	1.603	1.266	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	3	1.3	1.267	1.4	1.1	0.023	0.153	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	3	0.9	0.833	0.9	0.7	0.013	0.115	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	3	0.54	0.537	0.58	0.49	0.002	0.045	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	3	1.74	1.733	1.86	1.6	0.017	0.13	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	3	0.9	0.9	1.	0.8	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	3	3.9	4.033	4.4	3.8	0.103	0.321	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	3	4.3	4.367	4.7	4.1	0.093	0.306	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	3	4.7	4.2	5.6	2.3	2.91	1.706	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	3	1.56	1.767	2.53	1.21	0.468	0.684	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0245

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0246

NPS Station ID: SHEN0246
 Location: TWOMILE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.310310/ -78.648782

Depth of Water: 0
 Elevation: 1680

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TM02 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0246

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	3	9.	10.333	14.	8.	10.333	3.215	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	3	24.	26.	30.	24.	12.	3.464	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-04/01/93	3	5.2	5.213	5.3	5.14	0.007	0.081	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-04/01/93	3	5.2	5.208	5.3	5.14	0.007	0.081	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-04/01/93	3	6.31	6.189	7.244	5.012	1.257	1.121	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-04/01/93	3	23.	24.667	28.	23.	8.333	2.887	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	3	-1.3	4.533	13.7	-1.3	64.583	8.036	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	3	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	3	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	3	0.6	0.587	0.62	0.54	0.002	0.042	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	3	2.07	2.103	2.2	2.04	0.007	0.085	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	3	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	3	4.2	4.433	5.	4.1	0.243	0.493	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	3	5.5	5.733	6.7	5.	0.763	0.874	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	3	3.	2.733	3.3	1.9	0.543	0.737	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	3	6.36	6.237	7.3	5.05	1.277	1.13	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0246

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0247

NPS Station ID: SHEN0247
 Location: Twomile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.311198/ -78.649643

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_LTEM_3L302
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. the park's ongoing Long-Term Ecological Monitoring Program. Only the collected using a variety of probes; meters; and kits including: information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA STORET by the National Park Service Water Resources Division; 1201 Oak

Parameter Inventory for Station: SHEN0247

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/21/97	34	13.85	14.253	19.1	10.	6.25	2.5	10.45	13.	15.25	18.25
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/11/95-05/21/97	2	23.5	23.5	25.	22.	4.5	2.121	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/21/89-05/21/97	27	9.	8.941	12.	6.6	1.431	1.196	7.16	8.	9.8	10.52
00406 PH, FIELD, STANDARD UNITS SU	09/16/91-05/21/97	10	5.06	5.304	6.32	4.73	0.374	0.612	4.731	4.793	6.073	6.299
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/16/91-05/21/97	10	5.06	5.052	6.32	4.73	0.445	0.667	4.731	4.792	6.072	6.299
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/16/91-05/21/97	10	8.71	8.871	18.621	0.479	47.41	6.886	0.508	0.847	16.165	18.578
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/11/95-05/21/97	2	15.	15.	16.	14.	2.	1.414	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0247

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard	Exceed	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	27	0	0.00	13	0	0.00	14	0	0.00	14	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	10	0	0.00	6	0	0.00	4	0	0.00	4	0	0.00						
	Other-Lo Lim.	6.5	10	10	1.00	6	6	1.00	4	4	1.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0247

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/21/97	17	15.	15.841	19.1	13.	4.431	2.105	13.48	13.95	18.	19.02
00300 OXYGEN, DISSOLVED MG/L	06/21/89-05/21/97	13	8.	8.154	9.8	6.6	0.821	0.906	6.76	7.55	8.95	9.48

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0247

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/21/97	17	13.1	12.665	15.	10.	3.1	1.761	10.	10.95	13.75	15.
00300 OXYGEN, DISSOLVED MG/L	06/21/89-05/21/97	14	9.2	9.671	12.	8.7	0.91	0.954	8.8	9.	10.1	11.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0248

NPS Station ID: SHEN0248
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.311587/ -78.649865

Depth of Water: 0
 Elevation: 1660
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TM04 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.45 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0248

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	3	9.	9.833	14.5	6.	18.583	4.311	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	3	26.	25.333	27.	23.	4.333	2.082	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-04/01/93	3	5.36	5.34	5.38	5.28	0.003	0.053	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-04/01/93	3	5.36	5.338	5.38	5.28	0.003	0.053	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-04/01/93	3	4.365	4.594	5.248	4.169	0.331	0.575	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-04/01/93	3	24.	24.333	26.	23.	2.333	1.528	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	3	5.3	4.633	5.3	3.3	1.333	1.155	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	3	0.9	0.867	0.9	0.8	0.003	0.058	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	3	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	3	0.56	0.553	0.59	0.51	0.002	0.04	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	3	1.93	1.933	2.04	1.83	0.011	0.105	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	3	1.	0.967	1.	0.9	0.003	0.058	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	3	4.4	4.433	4.7	4.2	0.063	0.252	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	3	4.9	5.133	5.9	4.6	0.463	0.681	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	3	3.1	3.2	3.8	2.7	0.31	0.557	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	3	4.4	4.63	5.29	4.2	0.337	0.58	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0248

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0249

NPS Station ID: SHEN0249
 Location: HANGMAN RUN NEAR ROCKY BAR, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005022400.00
 Description:

LAT/LON: 38.311670/ -78.717227

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 0.94

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628530
 Within Park Boundary: No

Date Created: 04/09/83

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 17.20
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0249

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/82-06/25/82	2	15.	15.	16.	14.	2.	1.414	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/10/82-06/25/82	2	0.135	0.135	0.2	0.07	0.008	0.092	**	**	**	**
00400	PH (STANDARD UNITS)	06/10/82-06/25/82	2	4.85	4.85	4.9	4.8	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/10/82-06/25/82	2	4.847	4.847	4.9	4.8	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/82-06/25/82	2	14.219	14.219	15.849	12.589	5.313	2.305	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/10/82-06/25/82	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/10/82-06/25/82	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/82-06/25/82	2	10.	10.	10.	10.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/10/82-06/25/82	2##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/10/82-06/25/82	2##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/82-06/25/82	2	3.	3.	3.	3.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	06/10/82-06/25/82	2	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/10/82-06/25/82	2	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/10/82-06/25/82	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00931	SODIUM ADSORPTION RATIO	06/10/82-06/25/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	06/10/82-06/25/82	2	20.	20.	21.	19.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/10/82-06/25/82	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	06/10/82-06/25/82	2	0.85	0.85	0.9	0.8	0.005	0.071	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/82-06/25/82	2	4.	4.	4.	4.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/10/82-06/25/82	2	3.95	3.95	4.1	3.8	0.045	0.212	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	06/10/82-06/10/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0249

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00							2	2	1.00			
00403	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00							2	2	1.00			
00631	Drinking Water	10.	2	0	0.00							2	0	0.00			
	Fresh Acute	860.	2	0	0.00							2	0	0.00			
00940	Drinking Water	250.	2	0	0.00							2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0249

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0250

NPS Station ID: SHEN0250 LAT/LON: 38.311948/ -78.771671
 Location: SOUTH FORK SHENANDOAH RIVER UPSTREAM RT.708 BR.
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005000226.76 RF3 Mile Point: 26.94

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF100.11
 Within Park Boundary: No

Date Created: 07/27/91

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH RIVER SECTION: 03 TOPO MAP #: 0055 TOPO MAP NAME: GROTTUES, VIRGINIA

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0250

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0251

NPS Station ID: SHEN0251 LAT/LON: 38.312781/ -78.770281
 Location: SOUTH FORK SHENANDOAH RIVER AT LYNNWOOD, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005000400.00 RF3 Mile Point: 0.88

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628250
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.40
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Description:
 SAMPLED BY USGS. FIELD ANALYSIS BY USGS. STATION LOCATION: ON HWY 659 BRIDGE AT LYNNWOOD, ROCKINGHAM CO AND 2.2 MI DOWNSTREAM FROM CONFLUENCE OF NORTH AND SOUTH RIVERS. NEAREST GAGING STATION: ON LEFT BANK, 1.2 MI NE OF LYNNWOOD, ROCKINGHAM CO, AND 3.3 MI DOWNSTREAM FROM CONFLUENCE OF NORTH AND SOUTH RIVERS. DRAINAGE AREA ABOVE GAGING STATION, 1076 SQ MI. AVERAGE DAILY FLOW: 37 YRS, 952 CFS. PERIOD OF RECORD: SEPT 1930 TO PRESENT.

Parameter Inventory for Station: SHEN0251

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/69-05/14/73	43	11.	11.94	26.	0.	57.857	7.606	2.	5.	20.5	22.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/18/70-03/14/73	6	7.5	9.167	15.	5.	24.167	4.916	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	05/18/70-03/14/73	6	13.5	12.333	27.	0.	133.067	11.535	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	05/18/70-05/15/72	3	282.	275.667	334.	211.	3812.333	61.744	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	12/11/69-05/14/73	42	9.75	9.945	14.	7.3	3.19	1.786	7.7	8.3	11.375	12.37
00310	BOD, 5 DAY, 20 DEG C MG/L	05/19/70-12/13/72	4	1.55	1.775	2.9	1.1	0.622	0.789	**	**	**	**
00400	PH (STANDARD UNITS)	11/19/69-05/14/73	44	7.6	7.6	8.5	6.9	0.097	0.311	7.2	7.325	7.8	8.
00400	CONVERTED PH (STANDARD UNITS)	11/19/69-05/14/73	44	7.6	7.496	8.5	6.9	0.108	0.328	7.2	7.325	7.8	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/69-05/14/73	44	0.025	0.032	0.126	0.003	0.001	0.024	0.01	0.016	0.048	0.063
00405	CARBON DIOXIDE (MG/L AS CO2)	12/13/72-12/13/72	1	4.8	4.8	4.8	4.8	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/19/69-03/14/73	38	119.5	120.237	180.	58.	965.105	31.066	79.3	97.25	139.25	166.9
00440	BICARBONATE ION (MG/L AS HCO3)	11/19/69-03/14/73	12	146.	146.917	214.	98.	1088.083	32.986	103.4	121.25	156.	208.9
00445	CARBONATE ION (MG/L AS CO3)	09/27/72-03/14/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	05/18/70-05/15/72	3	184.	169.333	193.	131.	1122.333	33.501	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	05/18/70-03/14/73	6	13.5	13.167	22.	6.	33.767	5.811	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	05/18/70-03/14/73	6	1.3	1.217	1.6	0.8	0.094	0.306	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/19/69-06/19/72	32	0.08	0.097	0.52	0.	0.011	0.105	0.	0.013	0.158	0.214
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	01/12/70-06/15/70	6	0.295	0.368	0.69	0.21	0.038	0.194	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/69-03/14/73	5	0.14	0.2	0.52	0.02	0.037	0.193	**	**	**	**
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	11/19/69-03/14/73	35	0.	0.002	0.04	0.	0.	0.007	0.	0.	0.	0.01
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/69-03/14/73	38	140.	138.579	200.	72.	1204.196	34.702	91.3	112.25	159.75	190.5
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	11/19/69-03/14/73	12	16.5	16.	24.	7.	16.364	4.045	8.5	14.25	18.	22.2
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	05/18/70-03/14/73	6	33.5	36.	50.	24.	90.8	9.529	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	05/18/70-03/14/73	6	8.55	10.183	17.	8.	12.41	3.523	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	05/18/70-05/15/72	3	7.2	7.9	12.	4.5	14.43	3.799	**	**	**	**
00931	SODIUM ADSORPTION RATIO	05/18/70-05/15/72	3	0.3	0.3	0.4	0.2	0.01	0.1	**	**	**	**
00932	SODIUM, PERCENT	05/18/70-05/15/72	3	10.	11.667	16.	9.	14.333	3.786	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	05/18/70-05/15/72	3	2.1	2.167	2.8	1.6	0.363	0.603	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	05/18/70-03/14/73	6	6.5	8.5	19.	5.	27.5	5.244	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0251

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/69-03/14/73	38	18.	19.368	37.	11.	29.266	5.41	14.9	16.	21.	26.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	05/18/70-03/14/73	6	0.1	0.117	0.2	0.1	0.002	0.041	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/18/70-03/14/73	6	10.	26.333	100.	8.	1320.667	36.341	**	**	**	**
01020	BORON, DISSOLVED (UG/L AS B)	05/18/70-03/14/73	6	35.	46.667	130.	0.	2506.667	50.067	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/18/70-03/14/73	6	0.	6.667	40.	0.	266.667	16.33	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	12/07/70-02/10/71	3	0.	0.	0.	0.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	11/19/69-03/14/73	37	0.	4.703	50.	0.	107.992	10.392	0.	0.	3.	20.
01040	COPPER, DISSOLVED (UG/L AS CU)	11/19/69-03/14/73	38	0.	13.132	110.	0.	787.523	28.063	0.	0.	10.	60.
01046	IRON, DISSOLVED (UG/L AS FE)	05/18/70-03/14/73	6	20.	18.833	40.	0.	180.167	13.423	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/18/70-03/14/73	6	0.	0.	0.	0.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	09/27/72-03/14/73	3	3.	2.667	5.	0.	6.333	2.517	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/18/70-05/15/72	3	30.	26.667	50.	0.	633.333	25.166	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	11/19/69-06/19/72	32	0.	1.375	10.	0.	7.726	2.78	0.	0.	1.75	7.1
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/18/70-03/14/73	6	0.	20.	60.	0.	960.	30.984	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	05/18/70-03/14/73	6	50.	48.333	100.	0.	1816.667	42.622	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-05/14/73	42	265.	678.929	5000.	22.	1148892.409	1071.864	57.	98.25	596.25	2570.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/69-05/14/73	42	2.423	2.451	3.699	1.342	0.325	0.57	1.756	1.992	2.775	3.41
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			282.205								
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/27/72-03/14/73	3	8.	6.667	11.	1.	26.333	5.132	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE), WHOLE WATER, UG/L	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER, UG/L	10/25/72-06/19/73	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39398	ETHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39570	DIAZINON IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39786	TRITHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39790	METHYL TRITHION IN WHOLE WATER SAMPLE (UG/L)	10/25/72-06/19/73	3	0.	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/27/72-03/14/73	3	138.	167.667	231.	134.	3012.333	54.885	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	09/27/72-03/14/73	3	0.19	0.227	0.31	0.18	0.005	0.072	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	01/12/70-03/14/73	33	0.1	0.142	0.45	0.013	0.012	0.11	0.042	0.07	0.195	0.358
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	12/13/72-03/14/73	2	4.9	4.9	5.8	4.	1.62	1.273	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0251

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	42	0	0.00	10	0	0.00	21	0	0.00	11	0	0.00
00400	PH	Fresh Chronic	9.	44	0	0.00	10	0	0.00	23	0	0.00	11	0	0.00
		Other-Lo Lim.	6.5	44	0	0.00	10	0	0.00	23	0	0.00	11	0	0.00
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00
00720	CYANIDE, TOTAL	Fresh Acute	0.022	35	1	0.03	8	0	0.00	18	0	0.00	9	1	0.11
		Drinking Water	0.2	35	0	0.00	8	0	0.00	18	0	0.00	9	0	0.00
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00
		Drinking Water	250.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	38	0	0.00	8	0	0.00	19	0	0.00	11	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0251

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01000 ARSENIC, DISSOLVED	Fresh Acute	360.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
	Drinking Water	50.	6	1	0.17	1	0	0.00	3	1	0.33	2	0	0.00			
01025 CADMIUM, DISSOLVED	Fresh Acute	3.9	6	1	0.17	1	0	0.00	3	0	0.00	2	1	0.50			
	Drinking Water	5.	6	1	0.17	1	0	0.00	3	0	0.00	2	1	0.50			
01030 CHROMIUM, DISSOLVED	Drinking Water	100.	3	0	0.00				3	0	0.00						
01034 CHROMIUM, TOTAL	Drinking Water	100.	37	0	0.00	8	0	0.00	18	0	0.00	11	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	38	8	0.21	8	0	0.00	19	5	0.26	11	3	0.27			
	Drinking Water	1300.	38	0	0.00	8	0	0.00	19	0	0.00	11	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
	Drinking Water	15.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	32	0	0.00	7	0	0.00	16	0	0.00	9	0	0.00			
	Drinking Water	100.	32	0	0.00	7	0	0.00	16	0	0.00	9	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
	Drinking Water	5000.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	42	24	0.57	10	9	0.90	21	8	0.38	11	7	0.64			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	3	0	0.00				2	0	0.00	1	0	0.00			
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	3	0	0.00				2	0	0.00	1	0	0.00			
	Drinking Water	0.2	3	0	0.00				2	0	0.00	1	0	0.00			
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	2.	2	0	0.00				1	0	0.00	1	0	0.00			
39360 DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	3	0	0.00				2	0	0.00	1	0	0.00			
39365 DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	3	0	0.00				2	0	0.00	1	0	0.00			
39370 DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	3	0	0.00				2	0	0.00	1	0	0.00			
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	3	0	0.00				2	0	0.00	1	0	0.00			
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	3	0	0.00				2	0	0.00	1	0	0.00			
	Drinking Water	2.	3	0	0.00				2	0	0.00	1	0	0.00			
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	3.	2	0	0.00				1	0	0.00	1	0	0.00			
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	3	0	0.00				2	0	0.00	1	0	0.00			
	Drinking Water	0.4	3	0	0.00				2	0	0.00	1	0	0.00			
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	3	0	0.00				2	0	0.00	1	0	0.00			
	Drinking Water	0.2	3	0	0.00				2	0	0.00	1	0	0.00			
39540 PARATHION IN WHOLE WATER SAMPLE	Fresh Acute	0.065	3	0	0.00				2	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00				2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0252

NPS Station ID: SHEN0252
 Location: RT. 708 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH-ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005003
 RF3 Index: 02070005000506.87
 Description:

LAT/LON: 38.312781/ -78.770281

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 19.270
 RF3 Mile Point: 10.43

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF100.10 /VA1B03-X0099/VA1B6X0099
 Within Park Boundary: No

Date Created: 06/14/80

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S. F. SHENANDOAH SECTION: 03 TOPO MAP #: 0055 TOPO MAP NAME: GROTTOS, VA

Parameter Inventory for Station: SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	203	15.5	14.875	28.6	0.	61.571	7.847	4.	7.1	22.	24.46
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/02/88-03/09/92	25	4.6	17.176	174.	0.3	1259.647	35.492	0.76	1.85	15.	47.4
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	54	7.2	13.411	188.	0.9	810.902	28.476	1.65	3.025	11.475	19.5
00080	COLOR (PLATINUM-COBALT UNITS)	03/18/91-02/08/93	21	17.	19.429	46.	8.	82.957	9.108	9.6	14.	23.5	34.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/24/79-08/08/89	101	332.	354.475	2769.	163.	68992.992	262.665	208.2	260.5	390.5	439.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	98	312.	306.612	445.	38.	6106.632	78.145	212.6	255.75	368.5	401.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	80	10.1	10.378	15.6	6.7	4.447	2.109	7.81	8.5	12.05	13.09
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	123	9.8	10.2	14.8	2.	4.11	2.027	8.	8.6	11.8	12.96
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	194	1.	1.455	7.	0.5	1.026	1.013	1.	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	200	7.	8.443	55.	0.5	52.242	7.228	2.5	4.	11.	14.
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	203	8.2	8.147	10.	6.3	0.283	0.532	7.5	7.9	8.5	8.7
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	203	8.2	7.722	10.	6.3	0.465	0.682	7.5	7.9	8.5	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	203	0.006	0.019	0.501	0.	0.003	0.052	0.002	0.003	0.013	0.032
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	147	8.1	7.985	9.3	5.9	0.224	0.473	7.4	7.8	8.3	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	147	8.1	7.547	9.3	5.9	0.417	0.646	7.4	7.8	8.3	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	147	0.008	0.028	1.259	0.001	0.012	0.109	0.004	0.005	0.016	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	146	128.	125.719	211.	7.	1518.272	38.965	76.	98.75	160.	170.9
00500	RESIDUE, TOTAL (MG/L)	04/24/79-08/10/92	36	201.5	206.611	354.	142.	2143.787	46.301	150.8	175.25	227.25	251.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/24/79-08/10/92	36	50.	51.444	102.	18.	368.768	19.203	28.5	38.5	58.	84.8
00510	RESIDUE, TOTAL FIXED (MG/L)	04/24/79-08/10/92	36	149.	155.167	289.	94.	1509.686	38.855	110.1	132.25	176.	201.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	199	8.	21.965	652.	0.5	4287.241	65.477	2.	3.	15.	36.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	199	2.	3.827	64.	0.	49.256	7.018	1.	1.5	4.	7.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	200	6.	18.293	588.	0.	3413.053	58.421	1.5	2.5	12.	25.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	195 ##	0.05	0.059	0.8	0.02	0.006	0.079	0.02	0.02	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	194	0.02	0.033	2.	0.005	0.021	0.144	0.005	0.01	0.03	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	195	1.88	1.964	22.99	0.6	2.537	1.593	1.236	1.53	2.2	2.5
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	190	0.3	0.391	2.3	0.05	0.06	0.245	0.2	0.3	0.5	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	191	0.2	0.175	0.7	0.03	0.012	0.111	0.05	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	119	0.12	0.159	0.7	0.03	0.013	0.114	0.05	0.07	0.21	0.33
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	168	3.5	4.429	28.	0.5	14.626	3.824	1.6	2.1	5.	8.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	141	148.	144.397	214.	18.	1425.798	37.76	92.	119.	178.	189.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	102	10.	10.627	19.	2.5	13.875	3.725	6.	8.	13.25	15.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	101	11.	11.782	25.	6.	7.852	2.802	9.	10.	13.	14.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00951	FLUORIDE, TOTAL (MG/L AS F)	01/17/89-04/12/93	30 ##	0.105	0.106	0.25	0.015	0.004	0.064	0.05	0.05	0.143	0.225
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/13/89-02/08/93	31	5.2	4.958	8.6	0.5	5.628	2.372	1.32	2.9	7.2	8.14
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/20/79-07/22/96	4 ##	3.7	7.85	22.	2.	90.59	9.518	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/23/83-07/22/96	2 ##	1.65	1.65	2.5	0.8	1.445	1.202	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/07/82-07/07/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-07/22/96	4 ##	0.36	0.825	2.5	0.08	1.277	1.13	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-07/22/96	4	12.95	13.25	21.1	6.	54.457	7.379	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/07/82-07/07/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/07/82-07/07/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/20/79-07/22/96	4	5.6	6.975	12.7	4.	16.443	4.055	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	07/07/82-07/07/82	1	110.	110.	110.	110.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/07/82-07/07/82	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/20/79-07/22/96	4	14.3	14.775	24.5	6.	64.603	8.038	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/22/96-07/22/96	1	234.	234.	234.	234.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/07/82-07/07/82	1	40.	40.	40.	40.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/07/82-07/07/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-07/22/96	4	7.9	8.5	13.2	5.	14.093	3.754	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/02/91-07/22/96	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/07/82-07/07/82	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/20/79-07/22/96	4	35.3	32.375	43.9	15.	190.136	13.789	**	**	**	**
01098	ANTIMONY IN BOTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/22/96-07/22/96	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/22/96-07/22/96	1	4790.	4790.	4790.	4790.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/23/83-07/22/96	2 ##	0.65	0.65	0.8	0.5	0.045	0.212	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/22/96-07/22/96	1	9080.	9080.	9080.	9080.	0.	0.	**	**	**	**
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/20/82-04/20/82	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/20/82-04/20/82	1	-1.398	-1.398	-1.398	-1.398	0.	0.	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			0.04								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/24/79-12/21/98	187	100.	686.15	8000.	20.	2263220.58	1504.4	50.	50.	400.	1980.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/24/79-12/21/98	187	2.	2.27	3.903	1.301	0.396	0.63	1.699	1.699	2.602	3.295
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			186.033								
32240	TANNIN AND LIGNIN (MG/L)	12/01/92-12/01/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/07/82-01/19/83	2 ##	0.002	0.002	0.004	0.001	0.	0.002	**	**	**	**
34480	THALLIUM DRY WGTBOTMG/KG	06/23/83-06/23/83	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/02/91-07/22/96	2 ##	17.503	17.503	35.	0.005	612.325	24.745	**	**	**	**
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/07/82	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/23/83-07/22/96	3 ##	15.	21.667	50.	0.	658.333	25.658	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/02/91-07/22/96	2 ##	10.25	10.25	20.	0.5	190.125	13.789	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	7.525	7.525	15.	0.05	111.751	10.571	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	7.525	7.525	15.	0.05	111.751	10.571	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/02/91-07/22/96	2 ##	35.25	35.25	70.	0.5	2415.125	49.144	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/02/91-07/22/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/02/91-07/22/96	2 ##	132.5	132.5	250.	15.	27612.5	166.17	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/07/82-07/07/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/23/83-06/23/83	1	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	**	**	**	**	
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/17/82-08/16/83	7	0.	0.043	0.3	0.	0.013	**	**	**	**	
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	76	0.09	0.098	0.26	0.02	0.003	0.055	0.03	0.05	0.14	0.173
71900	MERCURY, TOTAL (UG/L AS HG)	07/07/82-07/07/82	1 ##	0.15	0.15	0.15	0.15	0.	**	**	**	**	
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/20/79-07/22/96	4 ##	0.275	0.35	0.7	0.15	0.058	**	**	**	**	
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/02/91-07/22/96	2 ##	27.5	27.5	50.	5.	1012.5	**	**	**	**	
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/02/91-07/22/96	2 ##	42.5	42.5	50.	35.	112.5	**	**	**	**	
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/18/92-06/20/94	23	4.6	7.309	41.	0.6	84.196	9.176	1.	2.	8.6	21.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0252

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	25	2	0.08	6	1	0.17	12	1	0.08	7	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	54	3	0.06	17	1	0.06	21	1	0.05	16	1	0.06			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	80	0	0.00	25	0	0.00	31	0	0.00	24	0	0.00			
00300	OXYGEN, DISSOLVED	4.	123	1	0.01	39	0	0.00	44	1	0.02	40	0	0.00			
00400	PH	9.	203	10	0.05	64	2	0.03	76	4	0.05	63	4	0.06			
		6.5	203	2	0.01	64	0	0.00	76	2	0.03	63	0	0.00			
00403	PH, LAB	9.	147	3	0.02	44	1	0.02	57	1	0.02	46	1	0.02			
		6.5	147	2	0.01	44	1	0.02	57	1	0.02	46	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	194	1	0.01	57	1	0.02	75	0	0.00	62	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	195	1	0.01	57	0	0.00	75	1	0.01	63	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	860.	102	0	0.00	28	0	0.00	42	0	0.00	32	0	0.00			
		250.	102	0	0.00	28	0	0.00	42	0	0.00	32	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	101	0	0.00	28	0	0.00	41	0	0.00	32	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	30	0	0.00	9	0	0.00	13	0	0.00	8	0	0.00			
01027	CADMIUM, TOTAL	3.9	1	0	0.00	1	0	0.00									
		5.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	18.	1	0	0.00	1	0	0.00									
		1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	82.	1	0	0.00	1	0	0.00									
		15.	1	1	1.00	1	1	1.00									
01067	NICKEL, TOTAL	1400.	1	0	0.00	1	0	0.00									
		100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	120.	1	0	0.00	1	0	0.00									
		5000.	1	0	0.00	1	0	0.00									
31615	FECAL COLIFORM, MPN	200.	1	0	0.00												
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	187	85	0.45	57	27	0.47	70	24	0.34	60	34	0.57			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	20.	2	0	0.00	2	0	0.00									
		1.	2	0	0.00	2	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE	1.1	2	0	0.00	2	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	0.6	2	0	0.00	2	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	1050.	2	0	0.00	2	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	3.	3	0	0.00	3	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	2.4	2	0	0.00	2	0	0.00									
		2.	2	0	0.00	2	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.5	2	0	0.00	2	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	0.18	2	0	0.00	2	0	0.00									
		2.	2	0	0.00	2	0	0.00									
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	40.	2	0	0.00	2	0	0.00									
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	6.	2	0	0.00	2	0	0.00									
		1.	2	0	0.00	2	0	0.00									
50060	CHLORINE, TOTAL RESIDUAL	0.019	7	1	0.14	4	0	0.00	1	1	1.00	2	0	0.00			
71900	MERCURY, TOTAL	2.4	1	0	0.00	1	0	0.00									
		2.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0252

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	23	0	0.00	5	0	0.00	9	0	0.00	9	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1979 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	17.8	16.467	25.9	6.8	33.402	5.779	6.8	11.5	20.1	25.9
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	9	280.	300.667	401.	233.	3827.	61.863	233.	249.	366.5	401.
00300	OXYGEN, DISSOLVED MG/L	9	10.2	10.056	11.2	8.8	0.473	0.688	8.8	9.6	10.4	11.2
00310	BOD, 5 DAY, 20 DEG C MG/L	9	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00340	COD, .25N K2CR2O7 MG/L	9	8.	6.111	10.	1.	11.361	3.371	1.	2.5	8.5	10.
00400	PH (STANDARD UNITS)	9	8.5	8.522	9.	8.	0.139	0.373	8.	8.15	8.85	9.
00400	CONVERTED PH (STANDARD UNITS)	9	8.5	8.382	9.	8.	0.161	0.402	8.	8.15	8.85	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.003	0.004	0.01	0.001	0.	0.004	0.001	0.001	0.008	0.01
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	9	5.	6.111	13.	2.	10.611	3.257	2.	4.	8.	13.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	9	3.	2.833	5.	1.	1.875	1.369	1.	1.5	4.	5.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	9	3.	3.556	8.	0.5	4.465	2.113	0.5	2.25	4.5	8.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	9##	0.05	0.072	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	9	0.01	0.012	0.02	0.005	0.	0.005	0.005	0.01	0.015	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	9	1.6	1.567	2.	1.1	0.078	0.278	1.1	1.35	1.8	2.
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	9	0.2	0.211	0.3	0.1	0.006	0.078	0.1	0.15	0.3	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	9##	0.05	0.083	0.2	0.05	0.003	0.05	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	9	0.08	0.08	0.16	0.03	0.001	0.038	0.03	0.05	0.095	0.16
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	9	5.	6.444	15.	1.	21.778	4.667	1.	3.	10.5	15.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	9	300.	305.556	600.	50.	36527.778	191.122	50.	100.	450.	600.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	9	2.477	2.37	2.778	1.699	0.141	0.376	1.699	2.	2.651	2.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	234.69							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	8	11.75	12.75	23.	4.	67.526	8.217	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	8	355.5	374.5	528.	232.	7991.714	89.396	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	8	11.4	11.225	14.3	8.5	4.428	2.104	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	8	1.5	1.625	3.	1.	0.554	0.744	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	8	5.	5.813	11.	0.5	14.853	3.854	**	**	**	**
00400	PH (STANDARD UNITS)	8	8.6	8.775	10.	7.7	0.516	0.719	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	8	8.589	8.363	10.	7.7	0.711	0.843	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	8	0.003	0.004	0.02	0.	0.	0.007	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	8	9.5	11.188	26.	2.5	83.353	9.13	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	8##	2.5	2.75	6.	1.	2.071	1.439	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	8	8.	9.688	20.	2.5	58.281	7.634	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	8##	0.05	0.063	0.1	0.05	0.001	0.023	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	8	0.02	0.019	0.03	0.01	0.	0.008	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	8	2.05	2.034	2.5	1.5	0.101	0.317	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	8	0.3	0.275	0.4	0.1	0.008	0.089	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	8	0.15	0.156	0.3	0.05	0.007	0.082	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	8	0.09	0.133	0.31	0.04	0.009	0.094	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	8	9.	8.375	15.	1.	18.839	4.34	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	100.	631.25	4200.	50.	2087098.214	1444.679	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	2.	2.187	3.623	1.699	0.421	0.649	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	153.918							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11	17.5	15.6	25.	2.	62.13	7.882	2.2	11.5	22.	24.9
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	11	439.	669.818	2769.	229.	513196.164	716.377	253.	402.	491.	2399.
00300	OXYGEN, DISSOLVED MG/L	11	11.	10.155	14.	2.	12.057	3.472	3.08	8.4	12.7	13.78
00310	BOD, 5 DAY, 20 DEG C MG/L	11	2.	1.909	5.	1.	1.491	1.221	1.	1.	2.	4.6
00340	COD, .25N K2CR2O7 MG/L	11	11.	11.864	37.	0.5	83.005	9.111	1.8	7.	12.	32.4
00400	PH (STANDARD UNITS)	11	8.7	8.574	9.5	7.01	0.513	0.716	7.108	8.4	9.	9.4
00400	CONVERTED PH (STANDARD UNITS)	11	8.7	7.882	9.5	7.01	1.039	1.019	7.108	8.4	9.	9.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.002	0.013	0.098	0.	0.001	0.029	0.	0.001	0.004	0.085
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	13.	52.818	466.	2.5	18893.664	137.454	2.5	2.5	20.	380.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11	4.	7.545	46.	1.	166.173	12.891	1.3	2.5	7.	38.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11	8.	45.273	420.	2.5	15482.718	124.43	2.5	2.5	16.	340.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11 ##	0.05	0.095	0.4	0.05	0.012	0.111	0.05	0.05	0.05	0.36
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11	0.03	0.046	0.2	0.005	0.004	0.06	0.006	0.01	0.04	0.184
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11	1.9	2.055	3.1	1.4	0.211	0.459	1.46	1.7	2.4	2.96
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10	0.5	0.53	1.1	0.3	0.056	0.236	0.3	0.375	0.625	1.06
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10	0.3	0.28	0.4	0.1	0.008	0.092	0.11	0.2	0.325	0.4
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11	0.27	0.263	0.38	0.17	0.004	0.062	0.174	0.22	0.3	0.37
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11	8.	8.773	19.	0.5	26.768	5.174	1.4	5.	13.	18.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11 ##	50.	1154.545	8000.	50.	632327.273	2514.603	50.	50.	300.	7140.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11 ##	1.699	2.238	3.903	1.699	0.646	0.804	1.699	1.699	2.477	3.836
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	173.031							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	19.	15.656	23.5	2.	49.87	7.062	2.	10.2	21.25	23.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	9	336.	328.889	444.	165.	7681.111	87.642	165.	259.5	393.5	444.
00300	OXYGEN, DISSOLVED MG/L	9	9.7	9.967	12.	8.4	1.26	1.122	8.4	9.15	10.75	12.
00310	BOD, 5 DAY, 20 DEG C MG/L	9	1.	1.889	7.	1.	3.861	1.965	1.	1.	2.	7.
00340	COD, .25N K2CR2O7 MG/L	9	8.	13.111	51.	4.	213.111	14.598	4.	5.5	13.	51.
00400	PH (STANDARD UNITS)	9	8.1	7.696	8.3	6.75	0.422	0.649	6.75	6.9	8.185	8.3
00400	CONVERTED PH (STANDARD UNITS)	9	8.1	7.269	8.3	6.75	0.627	0.792	6.75	6.9	8.185	8.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.008	0.054	0.178	0.005	0.005	0.072	0.005	0.007	0.129	0.178
00403	PH, LAB, STANDARD UNITS SU	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	1	61.	61.	61.	61.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	9	11.	84.611	652.	2.5	45394.736	213.06	2.5	6.5	32.	652.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	9	3.	9.611	64.	1.	418.361	20.454	1.	1.5	5.	64.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	9	6.	75.278	588.	2.5	37077.569	192.555	2.5	4.	28.5	588.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	9 ##	0.05	0.1	0.5	0.05	0.023	0.15	0.05	0.05	0.05	0.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	8	0.02	0.27	2.	0.01	0.489	0.699	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	9	2.1	1.838	2.5	0.6	0.346	0.588	0.6	1.445	2.25	2.5
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	9	0.3	0.417	1.2	0.2	0.095	0.308	0.2	0.25	0.45	1.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	9	0.2	0.27	0.45	0.13	0.012	0.109	0.13	0.2	0.375	0.45
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	9	0.19	0.232	0.37	0.12	0.011	0.107	0.12	0.135	0.355	0.37
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	9	6.	7.778	28.	2.	62.694	7.918	2.	3.5	8.5	28.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	9	200.	277.778	900.	50.	68819.444	262.335	50.	75.	350.	900.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	9	2.301	2.279	2.954	1.699	0.174	0.417	1.699	1.849	2.54	2.954
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	190.086							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	13	17.2	14.892	23.5	0.	68.161	8.256	2.	7.2	23.35	23.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	11	334.	287.818	446.	163.	10152.964	100.762	165.2	195.	366.	434.8
00300	OXYGEN, DISSOLVED MG/L	13	9.7	10.462	14.8	7.7	3.381	1.839	8.18	9.35	11.8	13.84
00310	BOD, 5 DAY, 20 DEG C MG/L	11	2.	1.818	5.	1.	1.364	1.168	1.	1.	2.	4.4
00340	COD, .25N K2CR2O7 MG/L	11	7.	8.909	20.	3.	33.491	5.787	3.	5.	15.	19.4
00400	PH (STANDARD UNITS)	13	7.75	7.715	8.4	6.6	0.298	0.546	6.68	7.45	8.2	8.32
00400	CONVERTED PH (STANDARD UNITS)	13	7.75	7.715	8.4	6.6	0.448	0.67	6.68	7.45	8.2	8.32
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	13	0.018	0.045	0.251	0.004	0.005	0.074	0.005	0.006	0.036	0.214
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	11.	30.5	117.	2.5	1165.65	34.142	3.2	7.	51.	104.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11	6.	6.227	16.	2.	17.968	4.239	2.	2.	9.	14.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11	6.	24.5	101.	2.5	910.45	30.174	2.8	4.	42.	90.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11 ##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11	0.01	0.018	0.05	0.005	0.	0.013	0.006	0.01	0.02	0.046
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11	1.79	1.616	2.6	0.79	0.537	0.732	0.792	0.83	2.5	2.58
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11	0.4	0.486	1.2	0.15	0.112	0.335	0.16	0.2	0.8	1.14
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11	0.2	0.184	0.4	0.05	0.013	0.115	0.05	0.05	0.3	0.38
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11	0.17	0.168	0.4	0.04	0.011	0.105	0.042	0.06	0.21	0.372
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11	5.	4.545	6.	2.	1.673	1.293	2.2	4.	6.	6.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	400.	1190.909	6300.	50.	3503909.091	1871.873	50.	50.	1600.	5540.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	2.602	2.548	3.799	1.699	0.604	0.777	1.699	1.699	3.204	3.719
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C		GEOMETRIC MEAN =	352.936								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	12.	12.767	24.5	4.	60.353	7.769	4.	5.7	20.5	24.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	9	282.	291.667	398.	203.	4628.75	68.035	203.	226.5	347.	398.
00300	OXYGEN, DISSOLVED MG/L	9	9.2	10.367	14.2	8.	5.16	2.272	8.	8.25	12.3	14.2
00310	BOD, 5 DAY, 20 DEG C MG/L	10	1.	1.25	2.	0.5	0.292	0.54	0.55	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	10	3.5	3.2	7.	1.	3.956	1.989	1.	1.	4.25	6.8
00400	PH (STANDARD UNITS)	9	8.2	8.13	8.7	7.5	0.149	0.385	7.5	7.81	8.45	8.7
00400	CONVERTED PH (STANDARD UNITS)	9	8.2	7.98	8.7	7.5	0.174	0.417	7.5	7.81	8.45	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.006	0.01	0.032	0.002	0.	0.01	0.002	0.004	0.016	0.032
00403	PH, LAB, STANDARD UNITS SU	4	7.9	7.825	8.	7.5	0.056	0.236	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	4	7.889	7.773	8.	7.5	0.059	0.244	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.013	0.017	0.032	0.01	0.	0.01	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	4	163.	147.25	179.	84.	1834.917	42.836	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10	9.	11.85	32.	2.5	90.169	9.496	2.5	2.5	19.25	30.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10	2.75	3.35	6.	1.	2.947	1.717	1.1	2.375	5.25	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10	6.5	9.25	26.	2.5	64.903	8.056	2.5	2.5	16.5	25.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10 ##	0.05	0.065	0.2	0.05	0.002	0.047	0.05	0.05	0.05	0.185
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10	0.015	0.019	0.06	0.005	0.	0.016	0.006	0.01	0.02	0.056
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10	2.05	2.007	2.6	1.24	0.19	0.435	1.276	1.6	2.4	2.58
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10	0.3	0.34	0.7	0.1	0.034	0.184	0.11	0.2	0.45	0.69
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10	0.1	0.15	0.3	0.05	0.009	0.094	0.05	0.088	0.225	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10	0.1	0.13	0.28	0.04	0.009	0.093	0.04	0.04	0.218	0.279
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10	3.5	3.5	8.	0.5	5.778	2.404	0.5	1.625	5.25	7.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	100.	505.	3600.	50.	1198583.333	1094.798	50.	50.	325.	3280.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	2.	2.221	3.556	1.699	0.336	0.58	1.699	1.699	2.508	3.461
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C		GEOMETRIC MEAN =	166.323								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	10	10.35	12.71	26.	0.5	85.725	9.259	0.67	4.675	22.375	25.75
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-08/08/89	11	248.	272.818	355.	185.	2983.564	54.622	190.8	240.	321.	349.4
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	11	10.	10.045	14.6	7.4	5.503	2.346	7.44	7.8	11.7	14.16
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	11	1.	1.773	7.	0.5	3.268	1.808	0.6	1.	2.	6.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	11	8.	12.091	55.	2.	226.291	15.043	2.2	4.	14.	47.6
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	11	7.7	7.545	8.5	6.3	0.467	0.683	6.32	7.2	7.9	8.44
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	11	7.7	7.004	8.5	6.3	0.789	0.888	6.32	7.2	7.9	8.44
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	11	0.02	0.099	0.501	0.003	0.031	0.176	0.004	0.013	0.063	0.481
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	11	7.7	7.473	8.1	5.9	0.448	0.669	6.02	7.4	7.9	8.06
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	11	7.7	6.798	8.1	5.9	0.948	0.974	6.02	7.4	7.9	8.06
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	11	0.02	0.159	1.259	0.008	0.141	0.376	0.009	0.013	0.04	1.07
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	11	104.	93.636	161.	13.	2042.255	45.191	14.	67.	124.	155.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	11	13.	51.818	344.	2.5	9744.314	98.713	2.5	8.	52.	286.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	11	4.	8.364	48.	0.	178.805	13.372	0.5	2.5	8.	40.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	11	10.	43.909	296.	2.5	7275.441	85.296	2.5	7.	46.	246.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	8 ##	0.05	0.169	0.8	0.05	0.068	0.26	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	8	0.02	0.03	0.06	0.02	0.	0.016	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	8	1.455	1.605	2.5	0.9	0.245	0.495	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	5	0.5	0.8	2.3	0.2	0.74	0.86	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	5	0.2	0.27	0.7	0.05	0.067	0.259	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	8	0.11	0.193	0.7	0.04	0.046	0.214	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	11	4.	6.818	21.	3.	35.964	5.997	3.	3.	7.	20.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	10	112.	117.8	168.	72.	650.4	25.503	75.4	109.	127.75	166.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	11	700.	1186.364	7100.	50.	4014045.455	2003.508	60.	100.	1000.	5960.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	11	2.845	2.706	3.851	1.699	0.369	0.607	1.759	2.	3.	3.71
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			508.241								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	13	16.1	14.385	28.	1.9	72.64	8.523	2.54	6.15	22.1	26.2
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-08/08/89	13	358.	351.154	416.	273.	2651.308	51.491	276.6	305.5	397.5	412.8
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	13	8.8	9.538	12.	7.1	2.581	1.607	7.42	8.3	11.05	11.92
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	13	1.	1.385	2.	0.5	0.381	0.618	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	13	8.	7.462	14.	3.	8.603	2.933	3.8	5.	9.	12.8
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	13	8.	7.946	8.6	6.9	0.154	0.393	7.22	7.75	8.15	8.44
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	13	8.	7.711	8.6	6.9	0.214	0.463	7.22	7.75	8.15	8.44
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	13	0.01	0.019	0.126	0.003	0.001	0.004	0.004	0.007	0.018	0.084
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	13	7.9	7.831	8.3	6.7	0.187	0.433	6.94	7.75	8.1	8.3
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	13	7.9	7.539	8.3	6.7	0.28	0.529	6.94	7.75	8.1	8.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	13	0.013	0.029	0.2	0.005	0.003	0.053	0.005	0.008	0.018	0.14
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	13	138.	137.615	177.	50.	1246.256	35.302	73.2	117.	168.	175.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	13	7.	8.462	23.	2.5	36.519	6.043	2.5	2.5	11.5	19.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	13	2.5	3.308	8.	1.	3.981	1.995	1.4	2.25	3.5	7.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	13	5.	5.923	15.	2.	14.494	3.807	2.2	2.5	8.5	12.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	13 ##	0.05	0.062	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	13	0.02	0.031	0.06	0.01	0.	0.017	0.014	0.02	0.045	0.06
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	13	1.9	2.12	3.3	1.63	0.225	0.474	1.642	1.795	2.36	3.052
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	13	0.5	0.477	0.9	0.1	0.047	0.217	0.18	0.3	0.6	0.86
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	13	0.3	0.308	0.6	0.1	0.021	0.144	0.14	0.2	0.4	0.56
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	13	0.19	0.25	0.46	0.09	0.019	0.138	0.094	0.125	0.395	0.444
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	13	4.	4.462	7.	3.	1.103	1.05	3.4	4.	5.	6.6
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	13	154.	155.385	214.	18.	2450.256	49.5	62.	136.	192.	207.6
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	12	100.	362.5	3000.	50.	696875.	834.79	50.	50.	200.	2190.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	12	2.	2.113	3.477	1.699	0.271	0.521	1.699	1.699	2.301	3.177

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C											
	GEOMETRIC MEAN =			129.623								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	15.5	15.733	28.	4.	88.193	9.391	4.	6.1	25.9	28.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	9	300.	291.778	388.	193.	6599.944	81.24	193.	204.5	383.5	388.
00300	OXYGEN, DISSOLVED MG/L	9	9.6	10.2	13.3	8.3	3.64	1.908	8.3	8.45	11.8	13.3
00310	BOD, 5 DAY, 20 DEG C MG/L	9	1.	1.167	2.	0.5	0.25	0.5	0.5	1.	1.5	2.
00340	COD, .25N K2CR2O7 MG/L	9	5.	6.	10.	3.	9.5	3.082	3.	3.5	10.	10.
00400	PH (STANDARD UNITS)	7	8.3	8.204	8.9	7.4	0.257	0.507	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	8.3	7.946	8.9	7.4	0.335	0.579	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.005	0.011	0.04	0.001	0.	0.014	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	9	7.9	7.856	8.5	7.	0.283	0.532	7.	7.35	8.35	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	9	7.9	7.568	8.5	7.	0.376	0.613	7.	7.35	8.35	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.013	0.027	0.1	0.003	0.001	0.033	0.003	0.004	0.047	0.1
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	9	118.	122.889	211.	71.	2437.111	49.367	71.	76.5	168.	211.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	9	5.	8.278	20.	2.5	39.132	6.256	2.5	2.5	13.	20.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	9	2.5	4.111	11.	1.	10.486	3.238	1.	2.25	6.5	11.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	9	4.	5.167	11.	2.5	9.938	3.152	2.5	2.5	8.	11.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	9##	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	9	0.03	0.028	0.06	0.01	0.	0.015	0.01	0.015	0.03	0.06
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	9	1.57	1.669	2.52	0.89	0.263	0.512	0.89	1.25	2.095	2.52
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	9	0.4	0.389	0.5	0.3	0.009	0.033	0.3	0.3	0.5	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	9	0.1	0.161	0.4	0.05	0.015	0.124	0.05	0.05	0.25	0.4
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	9	0.1	0.118	0.25	0.04	0.006	0.078	0.04	0.05	0.195	0.25
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	7	3.	3.571	5.	3.	0.619	0.787	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	9	138.	134.333	184.	88.	1718.	41.449	88.	90.5	183.	184.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	9	100.	383.333	1700.	50.	304375.	551.702	50.	50.	600.	1700.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	9	2.	2.237	3.23	1.699	0.319	0.564	1.699	1.699	2.753	3.23
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			172.608								
	GEOMETRIC MEAN =			172.608								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	21.1	16.186	26.	1.4	86.125	9.28	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	7	389.	376.429	437.	280.	3542.619	59.52	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	7	9.4	10.586	13.7	8.4	4.678	2.163	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	7	1.	1.286	2.	1.	0.238	0.488	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	7	10.	9.429	13.	6.	6.619	2.573	**	**	**	**
00400	PH (STANDARD UNITS)	7	8.53	8.496	8.92	8.26	0.059	0.244	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	8.53	8.444	8.92	8.26	0.063	0.25	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.003	0.004	0.005	0.001	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	7	8.2	8.243	8.5	8.	0.036	0.19	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	7	8.2	8.208	8.5	8.	0.038	0.194	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.006	0.006	0.01	0.003	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	6	154.	150.833	178.	110.	611.767	24.734	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	7	2.5	2.571	5.	0.5	3.452	1.858	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	7	2.	2.	5.	0.5	2.5	1.581	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	7##	1.	1.571	4.	0.	2.119	1.456	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7	0.06	0.051	0.07	0.02	0.	0.019	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	7	0.03	0.039	0.07	0.02	0.	0.021	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	7	2.3	2.289	2.88	1.8	0.152	0.39	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	7	0.5	0.529	0.7	0.3	0.016	0.125	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	7	0.2	0.154	0.3	0.03	0.009	0.097	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	7	0.1	0.131	0.25	0.06	0.005	0.073	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	5	2.4	2.54	3.1	2.	0.203	0.451	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	7	178.	171.714	204.	124.	681.905	26.113	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	1	25.	25.	25.	25.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	8 ##	50.	68.75	100.	50.	669.643	25.877	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	8 ##	1.699	1.812	2.	1.699	0.024	0.156	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98			GEOMETRIC MEAN =								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	9	21.8	17.	23.5	4.9	67.215	8.198	4.9	6.75	22.75	23.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-08/08/89	4	280.5	288.5	326.	267.	673.667	25.955	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	2	289.5	289.5	301.	278.	264.5	16.263	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	9	8.2	9.433	13.4	7.7	5.073	2.252	7.7	7.85	11.85	13.4
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	6	2.	1.75	3.	0.5	0.775	0.88	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	6	10.5	9.333	19.	0.5	59.367	7.705	**	**	**	**
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	9	8.32	8.347	8.82	8.06	0.056	0.237	8.06	8.17	8.46	8.82
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	9	8.32	8.296	8.82	8.06	0.059	0.243	8.06	8.17	8.46	8.82
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	9	0.005	0.005	0.009	0.002	0.	0.002	0.002	0.004	0.007	0.009
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	6	8.1	8.15	8.4	8.	0.019	0.138	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	6	8.1	8.134	8.4	8.	0.019	0.139	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	6	0.008	0.007	0.01	0.004	0.	0.002	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	6	110.5	117.	138.	103.	238.8	15.453	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	6	11.5	14.417	40.	0.5	232.642	15.253	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	6	3.	2.667	5.	0.5	3.367	1.835	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	6	7.5	11.917	37.	0.5	199.042	14.108	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	5 ##	0.02	0.042	0.08	0.02	0.001	0.03	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	5	0.01	0.021	0.05	0.005	0.	0.019	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	5	1.8	5.898	22.99	1.23	91.359	9.558	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	4	0.45	0.475	0.6	0.4	0.009	0.096	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	5	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	5	0.11	0.088	0.11	0.05	0.001	0.03	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	6	2.35	2.367	3.6	1.3	0.643	0.802	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	6	131.	137.667	156.	124.	211.867	14.556	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	5	9.	9.4	12.	7.	3.3	1.817	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	5	15.	15.8	20.	14.	6.2	2.49	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	5	200.	650.	1800.	50.	597500.	772.981	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	5	2.301	2.459	3.255	1.699	0.447	0.668	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98			GEOMETRIC MEAN =								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	6	9.85	12.333	24.	2.5	76.699	8.758	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	6	336.5	327.833	400.	231.	3805.367	61.688	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	6	10.7	10.617	13.	7.9	4.162	2.04	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	6	2.	2.333	6.	1.	3.467	1.862	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	6	4.5	5.5	10.	2.	10.7	3.271	**	**	**	**
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	6	8.315	8.28	8.66	7.86	0.109	0.33	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	6	8.302	8.178	8.66	7.86	0.121	0.348	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	6	0.005	0.007	0.014	0.002	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	6	8.25	8.25	8.5	8.	0.035	0.187	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	6	8.247	8.217	8.5	8.	0.036	0.191	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	6	0.006	0.006	0.01	0.003	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	6	122.	105.667	147.	7.	2795.467	52.872	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	6	20.	44.25	185.	0.5	4873.375	69.81	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	6	3.	6.083	21.	0.5	62.042	7.877	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	6	17.	38.25	164.	0.5	3864.575	62.166	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	6	0.055	0.082	0.25	0.02	0.008	0.087	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	6	0.025	0.027	0.05	0.01	0.	0.016	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	6	1.985	1.992	2.64	1.31	0.222	0.471	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	6	0.5	0.617	1.3	0.3	0.134	0.366	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	6	0.2	0.2	0.3	0.1	0.008	0.089	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	6	0.115	0.12	0.21	0.05	0.005	0.071	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	6	2.25	2.6	4.1	1.4	1.136	1.066	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	6	158.	155.	198.	110.	910.	30.166	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	6	11.	10.667	14.	6.	9.867	3.141	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	6	15.5	16.	21.	12.	10.	3.162	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	2 ##	1925.	1925.	3800.	50.	7031250.	2651.65	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	2 ##	2.639	2.639	3.58	1.699	1.769	1.33	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98			435.89								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	9	20.5	15.589	23.1	3.4	59.849	7.736	3.4	8.3	22.	23.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	10	340.5	331.3	406.	236.	3415.789	58.445	240.3	280.5	385.5	404.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	8	9.65	10.55	13.3	8.7	3.571	1.89	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	9	2.	1.667	3.	1.	0.5	0.707	1.	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	9	10.	14.5	45.	0.5	203.25	14.257	0.5	3.5	23.	45.
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	9	8.	8.089	8.8	7.7	0.115	0.339	7.7	7.855	8.295	8.8
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	9	8.	7.997	8.8	7.7	0.125	0.353	7.7	7.855	8.295	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	9	0.01	0.01	0.02	0.002	0.	0.006	0.002	0.005	0.014	0.02
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	10	8.3	8.25	8.5	8.	0.023	0.151	8.01	8.1	8.325	8.49
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	10	8.3	8.226	8.5	8.	0.023	0.153	8.01	8.1	8.325	8.49
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	10	0.005	0.006	0.01	0.003	0.	0.002	0.003	0.005	0.008	0.01
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	10	145.5	145.5	178.	98.	738.278	27.171	100.6	124.	169.25	177.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	9	6.	12.167	55.	1.5	293.75	17.139	1.5	3.5	14.5	55.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	9	1.	1.389	3.	1.	0.486	0.697	1.	1.	1.75	3.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	10	5.	7.05	20.	1.5	37.803	6.148	1.55	2.75	10.	19.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	9 ##	0.02	0.033	0.1	0.02	0.001	0.028	0.02	0.02	0.04	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	9	0.02	0.02	0.04	0.005	0.	0.013	0.005	0.008	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	9	1.91	1.871	2.48	1.31	0.131	0.362	1.31	1.555	2.13	2.48
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	9	0.3	0.344	0.6	0.2	0.015	0.124	0.2	0.25	0.4	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	9	0.2	0.161	0.2	0.05	0.004	0.06	0.05	0.1	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	9	0.1	0.092	0.15	0.03	0.002	0.041	0.03	0.05	0.125	0.15
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	9	2.	2.122	3.2	1.5	0.269	0.519	1.5	1.75	2.45	3.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	9	154.	161.556	194.	122.	507.778	22.534	122.	149.	183.	194.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	9.	10.3	16.	7.	10.233	3.199	7.	7.75	13.	15.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	12.	12.7	17.	11.	3.567	1.889	11.	11.	14.	16.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	5 ##	50.	1096.	5000.	50.	4777580.	2185.768	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	5 ##	1.699	2.263	3.699	1.699	0.77	0.878	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			183.18								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	10	14.65	14.39	24.6	3.4	57.939	7.612	3.71	6.875	21.425	24.32
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	10	306.5	286.	376.	188.	4145.778	64.388	190.1	221.	333.75	374.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	9	9.5	10.222	14.2	8.1	4.139	2.035	8.1	8.45	11.55	14.2
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	1	10.2	10.2	10.2	10.2	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	9	1.	1.111	2.	1.	0.111	0.333	1.	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	11	12.	9.818	16.	3.	21.164	4.6	3.2	5.	14.	15.6
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	10	8.2	8.24	9.3	7.5	0.263	0.513	7.52	7.85	8.475	9.24
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	10	8.2	8.021	9.3	7.5	0.316	0.562	7.52	7.85	8.475	9.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	10	0.006	0.01	0.032	0.001	0.	0.01	0.001	0.003	0.014	0.03
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	10	8.2	8.12	8.6	6.7	0.273	0.522	6.84	8.1	8.4	8.58
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	10	8.2	7.602	8.6	6.7	0.571	0.755	6.84	8.1	8.4	8.58
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	10	0.006	0.025	0.2	0.003	0.004	0.061	0.003	0.004	0.008	0.18
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	10	121.	116.6	160.	75.	921.6	30.358	75.8	85.25	143.25	159.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	10	4.5	11.9	43.	2.	247.878	15.744	2.	3.5	16.75	42.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	10	1.	1.75	5.	0.	3.069	1.752	0.1	1.	2.375	5.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	10	3.5	10.3	38.	2.	194.233	13.937	2.	2.75	14.75	37.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	11 ##	0.02	0.026	0.07	0.02	0.	0.016	0.02	0.02	0.02	0.064
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	11	0.01	0.016	0.03	0.005	0.	0.01	0.005	0.005	0.03	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	11	1.74	1.695	2.1	1.14	0.091	0.302	1.194	1.47	1.96	2.094
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	11	0.3	0.364	0.5	0.2	0.015	0.121	0.2	0.3	0.5	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	11	0.1	0.132	0.2	0.05	0.003	0.056	0.06	0.1	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	3	0.06	0.063	0.07	0.06	0.	0.006	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	11	2.6	3.1	6.6	0.5	4.43	2.105	0.5	1.8	5.5	6.48
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	11	148.	139.364	180.	90.	1176.855	34.305	90.	102.	170.	178.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	8.	8.8	14.	4.	10.178	3.19	4.2	6.75	11.	14.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	12.	12.	14.	10.	1.556	1.247	10.1	11.	13.	13.9
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	10 ##	50.	288.	2300.	20.	500617.778	707.543	23.	50.	102.5	2081.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	10 ##	1.699	1.92	3.362	1.301	0.304	0.551	1.341	1.699	2.01	3.23
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			83.157								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	8	0.08	0.091	0.15	0.06	0.001	0.034	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	10	13.65	15.01	25.5	4.2	55.49	7.449	4.44	8.1	22.125	25.2
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	294.	282.917	405.	38.	10470.083	102.323	92.6	228.5	369.25	404.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	10	10.55	10.46	14.2	7.8	4.934	2.221	7.85	8.3	12.325	14.05
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	10	1.	1.65	6.	0.5	2.558	1.599	0.55	1.	2.	5.6
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	12	6.5	7.583	20.	2.	32.72	5.72	2.15	2.5	11.	17.9
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	11	7.9	8.045	8.9	7.4	0.251	0.501	7.42	7.7	8.5	8.88
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	11	7.9	7.843	8.9	7.4	0.296	0.544	7.42	7.7	8.5	8.88
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	11	0.013	0.014	0.04	0.001	0.	0.012	0.001	0.003	0.02	0.038

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	12	8.4	8.35	9.3	7.7	0.226	0.476	7.73	7.925	8.5	9.21
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	12	8.389	8.156	9.3	7.7	0.268	0.517	7.73	7.925	8.5	9.21
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	12	0.004	0.007	0.02	0.001	0.	0.006	0.001	0.003	0.012	0.019
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	12	128.5	132.	183.	85.	1385.636	37.224	85.9	90.	169.	180.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	4.	7.667	24.	1.5	61.97	7.872	1.5	1.5	12.25	23.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	1.5	2.125	7.	1.	2.824	1.68	1.	1.125	2.75	5.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	3.5	6.167	21.	1.5	38.061	6.169	1.5	1.5	9.5	18.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	12	0.04	0.038	0.1	0.02	0.001	0.023	0.02	0.02	0.04	0.088
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	12	0.01	0.014	0.05	0.005	0.	0.013	0.005	0.01	0.01	0.044
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	12	2.045	2.013	2.89	0.99	0.231	0.48	1.149	1.753	2.315	2.74
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	12	0.35	0.321	0.5	0.05	0.015	0.123	0.095	0.225	0.4	0.47
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	12	0.15	0.142	0.2	0.05	0.004	0.063	0.05	0.1	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	12	2.05	2.658	7.1	1.2	2.63	1.622	1.32	1.7	2.85	6.29
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	12	164.	158.917	202.	108.	1194.447	34.561	109.8	121.75	192.	199.6
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	10.5	10.833	16.	6.	11.97	3.46	6.	8.	14.5	15.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	11	12.	11.364	14.	6.	4.255	2.063	6.8	11.	12.	13.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	11	100.	622.727	4100.	50.	1456681.818	1206.931	50.	50.	600.	3520.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	11	2.	2.261	3.613	1.699	0.453	0.673	1.699	1.699	2.778	3.506
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	11	2.	2.261	3.613	1.699	0.453	0.673	1.699	1.699	2.778	3.506
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	11	0.12	0.103	0.19	0.03	0.004	0.062	0.03	0.04	0.16	0.186

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	12	15.45	15.908	28.6	1.	71.506	8.456	2.8	10.45	24.375	28.24
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	5	1.7	2.8	7.	0.9	6.295	2.509	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	10	305.5	305.8	404.	148.	7075.511	84.116	155.9	243.5	386.	403.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	12	11.2	11.175	13.1	8.5	2.637	1.624	8.59	9.95	12.875	13.07
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	10	1.05	1.14	1.8	0.5	0.116	0.341	0.55	1.	1.325	1.76
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	10	8.	7.6	10.	6.	1.822	1.35	6.	6.	8.25	9.9
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	12	8.4	8.275	8.6	7.5	0.124	0.352	7.56	8.075	8.5	8.57
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	12	8.4	8.107	8.6	7.5	0.154	0.393	7.56	8.075	8.5	8.57
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	12	0.004	0.008	0.032	0.003	0.	0.009	0.003	0.003	0.009	0.028
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	10	8.1	8.08	9.3	7.2	0.306	0.553	7.24	7.675	8.25	9.21
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	10	8.1	7.822	9.3	7.2	0.38	0.617	7.24	7.675	8.25	9.21
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	10	0.008	0.015	0.063	0.001	0.	0.018	0.001	0.006	0.021	0.059
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	10	127.	126.6	174.	57.	1489.378	38.592	59.6	98.75	161.5	173.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	10	9.	9.45	25.	1.5	58.636	7.657	1.5	1.5	13.75	24.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	10	1.75	2.	4.	1.	0.778	0.882	1.05	1.5	2.25	3.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	10	7.5	7.95	21.	1.5	40.636	6.375	1.5	1.5	11.75	20.3
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	10	0.045	0.045	0.09	0.02	0.001	0.026	0.02	0.02	0.065	0.089
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	10	0.025	0.03	0.08	0.01	0.001	0.024	0.01	0.01	0.05	0.077
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	10	2.055	1.953	2.59	1.03	0.233	0.483	1.061	1.663	2.295	2.562
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	10	0.3	0.29	0.4	0.1	0.01	0.099	0.11	0.2	0.4	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	10	0.1	0.13	0.2	0.05	0.004	0.063	0.05	0.088	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	10	2.45	2.53	3.5	1.4	0.433	0.658	1.46	2.075	3.05	3.5
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	10	146.	141.8	190.	67.	1971.956	44.407	69.5	101.	185.5	189.7
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	10	12.	12.	19.	5.	17.111	4.137	5.2	9.25	14.5	18.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	10	10.	10.	12.	8.	1.333	1.155	8.1	9.	11.	11.9
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	10	100.	170.	600.	50.	34555.556	185.891	50.	50.	250.	580.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	10	2.	2.048	2.778	1.699	0.155	0.394	1.699	1.699	2.376	2.761
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	10	2.	2.048	2.778	1.699	0.155	0.394	1.699	1.699	2.376	2.761
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	10	0.105	0.091	0.14	0.03	0.003	0.051	0.03	0.038	0.14	0.14

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	12	12.2	14.617	27.3	1.3	72.132	8.493	2.65	7.825	22.325	27.
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	7.2	11.767	55.	1.5	226.242	15.041	1.53	2.8	12.525	45.73
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	311.5	285.417	399.	121.	8465.902	92.01	130.9	192.	341.25	399.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	11	9.8	10.364	15.	7.2	4.943	2.223	7.48	8.8	12.5	14.5
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	11	1.1	1.164	2.	0.5	0.309	0.555	0.5	0.5	1.6	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	12	9.	8.458	17.	2.5	20.93	4.575	2.5	3.375	11.75	15.8
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	12	8.3	8.342	8.9	8.	0.09	0.3	8.	8.025	8.5	8.87
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	12	8.3	8.259	8.9	8.	0.097	0.312	8.	8.025	8.5	8.87
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	12	0.005	0.006	0.01	0.001	0.	0.003	0.001	0.003	0.009	0.01
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	12	7.9	7.783	8.2	7.	0.158	0.397	7.03	7.5	8.075	8.17
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	12	7.9	7.581	8.2	7.	0.203	0.45	7.03	7.5	8.075	8.17
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	12	0.013	0.026	0.1	0.006	0.001	0.031	0.007	0.008	0.034	0.094
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	12	118.	110.417	161.	40.	1565.902	39.571	45.1	69.5	138.5	160.1
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	7.	13.667	65.	1.5	322.197	17.95	1.5	3.25	15.75	54.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	12###	1.5	2.25	8.	1.5	3.795	1.948	1.5	1.5	1.5	6.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	6.	11.875	57.	1.5	249.142	15.784	1.5	2.125	14.	47.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	12###	0.03	0.038	0.08	0.02	0.	0.022	0.02	0.02	0.06	0.074
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	12	0.02	0.024	0.07	0.01	0.	0.018	0.01	0.01	0.03	0.061
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	12	1.545	1.485	2.3	0.67	0.228	0.478	0.682	1.153	1.74	2.198
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	12	0.3	0.258	0.4	0.1	0.006	0.079	0.13	0.2	0.3	0.37
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	12	0.115	0.128	0.2	0.05	0.005	0.069	0.05	0.05	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	12	3.1	3.133	4.6	1.5	0.972	0.986	1.59	2.275	4.05	4.45
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	12	137.	127.083	189.	55.	1877.538	43.331	58.	80.75	155.25	184.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	11.	10.333	16.	4.	17.333	4.163	4.	6.	13.75	15.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	11.	10.75	13.	7.	3.114	1.765	7.3	10.25	11.75	13.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	12	100.	1087.5	7800.	50.	5278238.636	2297.442	50.	50.	1025.	6390.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	12	2.	2.3	3.892	1.699	0.6	0.775	1.699	1.699	2.911	3.772
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	12	2.	2.3	3.892	1.699	0.6	0.775	1.699	1.699	2.911	3.772
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	12	0.085	0.094	0.18	0.03	0.002	0.048	0.033	0.053	0.128	0.174

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	13	14.6	14.831	27.9	0.9	79.947	8.941	2.58	6.6	24.1	26.58
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/14/93-12/21/98	12	8.8	16.683	100.	2.5	708.582	26.619	2.89	5.35	13.75	75.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	12	273.5	285.5	410.	213.	3375.364	58.098	213.6	229.75	325.25	387.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	13	10.1	9.931	12.7	7.	3.397	1.843	7.08	8.1	11.4	12.38
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	11###	0.5	1.182	3.	0.5	0.814	0.902	0.5	0.5	2.	2.8
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	12	6.5	7.25	14.	2.5	19.568	4.424	2.5	2.5	11.75	13.7
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	13	8.2	8.085	8.4	7.6	0.071	0.267	7.6	7.9	8.3	8.36
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	13	8.2	8.	8.4	7.6	0.079	0.281	7.6	7.9	8.3	8.36
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	13	0.006	0.01	0.025	0.004	0.	0.007	0.004	0.005	0.013	0.025
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	12	7.95	7.967	8.4	7.7	0.048	0.219	7.7	7.8	8.075	8.37
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	12	7.947	7.922	8.4	7.7	0.05	0.224	7.7	7.8	8.075	8.37
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	12	0.011	0.012	0.02	0.004	0.	0.005	0.004	0.008	0.016	0.02
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	12	110.	111.417	166.	78.	697.72	26.414	79.8	86.	133.25	157.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	11.	22.167	134.	5.	1297.424	36.02	5.	5.5	18.25	103.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	12###	1.5	2.625	9.	1.5	5.778	2.404	1.5	1.5	2.625	8.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	9.	19.583	125.	4.	1141.902	33.792	4.	4.5	16.25	95.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	11###	0.02	0.027	0.06	0.02	0.	0.013	0.02	0.02	0.04	0.056
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	11	0.02	0.016	0.03	0.005	0.	0.009	0.005	0.01	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	11	2.	2.038	3.3	1.23	0.402	0.634	1.28	1.54	2.32	3.238
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	11	0.2	0.245	0.4	0.1	0.011	0.104	0.1	0.2	0.3	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	11	0.1	0.109	0.2	0.05	0.004	0.063	0.05	0.05	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	8	2.2	2.375	5.7	0.5	2.511	1.585	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	127.	132.417	194.	94.	790.447	28.115	96.4	110.25	152.5	182.6
00940	CHLORIDE, TOTAL IN WATER MG/L	12	9.	9.292	15.	2.5	11.566	3.401	3.55	7.25	11.5	14.7
00945	SULFATE, TOTAL (MG/L AS SO4)	12	11.	10.75	14.	8.	2.75	1.658	8.3	9.25	11.	13.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	200.	1200.	8000.	50.	6159444.444	2481.823	50.	87.5	950.	7430.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	2.301	2.487	3.903	1.699	0.49	0.7	1.699	1.925	2.865	3.849
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			306.682								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11	0.06	0.067	0.14	0.03	0.001	0.032	0.032	0.05	0.09	0.132

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	16.4	14.667	24.5	3.5	56.837	7.539	3.65	7.45	21.7	23.84
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12	7.3	7.283	15.2	2.	15.24	3.904	2.21	4.075	10.1	13.79
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	334.	333.5	397.	205.	2546.636	50.464	230.8	317.5	369.75	391.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12	10.05	10.867	15.6	7.9	7.037	2.653	8.05	8.525	13.475	15.24
00310	BOD, 5 DAY, 20 DEG C MG/L	12	1.	1.375	3.	0.5	0.688	0.829	0.65	1.	1.75	3.
00340	COD, .25N K2CR2O7 MG/L	12	7.	7.542	12.	2.5	8.157	2.856	3.25	5.25	10.	11.4
00400	PH (STANDARD UNITS)	12	8.15	8.158	8.5	7.6	0.057	0.239	7.69	8.1	8.3	8.47
00400	CONVERTED PH (STANDARD UNITS)	12	8.147	8.088	8.5	7.6	0.063	0.25	7.69	8.1	8.3	8.47
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.007	0.008	0.025	0.003	0.	0.006	0.003	0.005	0.008	0.021
00403	PH, LAB, STANDARD UNITS SU	12	8.2	8.15	8.5	7.6	0.063	0.25	7.69	7.95	8.3	8.47
00403	CONVERTED PH, LAB, STANDARD UNITS	12	8.2	8.075	8.5	7.6	0.069	0.262	7.69	7.95	8.3	8.47
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.006	0.008	0.025	0.003	0.	0.006	0.003	0.005	0.011	0.021
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	152.5	144.917	174.	76.	708.992	26.627	88.9	132.25	160.75	171.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12	8.5	8.208	15.	1.5	17.157	4.142	1.95	4.25	11.	14.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12 ##	1.5	1.625	3.	1.5	0.188	0.433	1.5	1.5	1.5	2.55
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12	7.	6.667	14.	1.5	15.106	3.887	1.5	3.	9.	13.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.02	0.064	0.38	0.02	0.102	0.107	0.02	0.02	0.043	0.314
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12	0.015	0.015	0.03	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	1.81	1.882	2.9	1.42	0.159	0.398	1.453	1.618	1.93	2.735
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.4	0.375	0.6	0.3	0.008	0.087	0.3	0.3	0.4	0.54
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12	0.2	0.158	0.3	0.05	0.006	0.076	0.05	0.1	0.2	0.27
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	163.5	157.25	186.	83.	764.386	27.648	100.4	144.75	176.5	185.4
00940	CHLORIDE, TOTAL IN WATER MG/L	12	11.5	11.583	17.	7.	8.811	2.968	7.3	9.25	13.75	16.4
00945	SULFATE, TOTAL (MG/L AS SO4)	12	11.5	11.083	13.	8.	2.629	1.621	8.3	9.5	12.	13.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12	100.	262.5	1900.	50.	272329.545	521.852	50.	50.	200.	1420.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12	2.	2.071	3.279	1.699	0.222	0.471	1.699	1.699	2.301	3.038
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			117.778								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	12	0.1	0.093	0.16	0.02	0.003	0.051	0.026	0.04	0.14	0.157

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	17.15	15.258	24.4	5.6	58.561	7.653	5.66	7.075	22.575	24.16
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12	6.75	23.167	188.	1.3	2735.013	52.297	1.48	2.5	16.55	137.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	372.	335.25	445.	130.	10749.841	103.681	158.2	246.5	426.	444.1
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12	9.1	9.85	12.7	6.7	4.894	2.212	6.91	7.925	12.4	12.64
00310	BOD, 5 DAY, 20 DEG C MG/L	12 ##	1.	1.083	2.	1.	0.083	0.289	1.	1.	1.	1.7
00340	COD, .25N K2CR2O7 MG/L	12	6.5	7.083	21.	2.5	28.72	5.359	2.5	2.5	7.75	18.6
00400	PH (STANDARD UNITS)	12	7.85	7.983	8.7	7.3	0.222	0.471	7.3	7.7	8.375	8.67
00400	CONVERTED PH (STANDARD UNITS)	12	7.847	7.772	8.7	7.3	0.27	0.52	7.3	7.7	8.375	8.67

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	12	0.014	0.017	0.05	0.002	0.	0.017	0.002	0.004	0.02	0.05
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	12	8.05	7.742	8.3	6.8	0.284	0.533	6.83	7.4	8.175	8.27
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	12	8.047	7.421	8.3	6.8	0.397	0.63	6.83	7.4	8.175	8.27
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	12	0.009	0.038	0.158	0.005	0.003	0.051	0.005	0.007	0.04	0.149
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	12	156.5	138.917	190.	50.	2029.356	45.048	63.2	98.25	176.75	188.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	12.5	30.167	255.	1.5	5061.742	71.146	1.5	3.	18.	184.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	12 ##	1.5	4.208	34.	1.5	88.021	9.382	1.5	1.5	1.5	24.25
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	12	10.5	25.708	221.	1.5	3821.384	61.817	1.5	1.5	15.25	160.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	12 ##	0.02	0.024	0.07	0.02	0.	0.014	0.02	0.02	0.02	0.055
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	12 ##	0.008	0.013	0.03	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	12	1.9	1.728	2.22	0.67	0.207	0.455	0.817	1.513	2.088	2.19
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	12	0.35	0.433	1.	0.2	0.053	0.231	0.2	0.3	0.6	0.88
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	12	0.2	0.217	0.4	0.1	0.009	0.094	0.1	0.125	0.3	0.37
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	12	146.	140.167	203.	61.	2515.424	50.154	62.5	98.25	183.25	200.3
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	12	11.5	11.542	18.	2.5	25.43	5.043	3.55	7.25	16.5	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	12	10.5	10.583	14.	7.	5.72	2.392	7.	9.	12.75	14.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	12	250.	1129.167	7200.	50.	4386117.424	2094.306	50.	62.5	1375.	5910.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	12	2.389	2.477	3.857	1.699	0.531	0.729	1.699	1.774	3.114	3.739
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	12		299.751								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	12	0.14	0.14	0.26	0.03	0.006	0.076	0.036	0.063	0.198	0.251

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	63	22.1	21.981	28.6	2.5	16.651	4.081	17.7	20.5	24.4	26.36
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-08/08/89	32	389.5	378.969	471.	214.	3108.354	55.753	304.8	349.25	406.5	445.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	28	366.5	331.107	427.	38.	7441.507	86.264	218.5	286.5	393.75	411.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	25	8.5	8.624	11.	6.7	1.019	1.01	7.24	7.85	9.5	9.92
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	39	8.6	8.605	10.4	7.1	0.497	0.705	7.7	8.2	9.	9.5
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	59	1.	1.317	6.	0.5	0.712	0.844	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	61	8.	8.525	19.	0.5	19.995	4.472	2.5	5.5	11.5	14.
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	64	8.2	8.105	9.	6.6	0.233	0.482	7.5	7.855	8.4	8.7
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	64	8.2	7.742	9.	6.6	0.367	0.606	7.5	7.855	8.4	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	64	0.006	0.018	0.251	0.001	0.002	0.04	0.002	0.004	0.014	0.032
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	44	8.1	8.057	9.	5.9	0.235	0.485	7.7	7.925	8.3	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	44	8.1	7.379	9.	5.9	0.706	0.84	7.7	7.925	8.3	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	44	0.008	0.042	1.259	0.001	0.036	0.19	0.004	0.005	0.012	0.02
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	43	155.	137.093	179.	7.	1762.324	41.98	79.2	118.	167.	170.
00500	RESIDUE, TOTAL (MG/L)	04/24/79-08/10/92	11	228.	234.818	338.	176.	1766.964	42.035	181.	209.	249.	321.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/24/79-08/10/92	11	58.	61.727	102.	22.	495.418	22.258	26.	54.	83.	99.4
00510	RESIDUE, TOTAL FIXED (MG/L)	04/24/79-08/10/92	11	170.	173.091	236.	120.	1071.691	32.737	122.2	151.	194.	229.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	61	11.	15.189	134.	0.5	382.085	19.547	2.5	5.	16.5	36.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	60	2.	3.	11.	0.5	5.127	2.264	1.	1.5	4.	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	61	8.	11.5	125.	0.5	299.017	17.292	1.5	4.	12.	23.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	57 ###	0.05	0.046	0.2	0.02	0.001	0.032	0.02	0.02	0.05	0.062
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	57	0.02	0.053	2.	0.005	0.069	0.263	0.005	0.01	0.02	0.042
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	57	2.02	2.005	2.99	0.99	0.164	0.405	1.418	1.74	2.3	2.518
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	57	0.4	0.429	0.9	0.2	0.029	0.17	0.2	0.3	0.55	0.62
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	57	0.2	0.224	0.6	0.03	0.012	0.109	0.1	0.2	0.3	0.4
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	35	0.19	0.223	0.46	0.09	0.01	0.101	0.1	0.15	0.29	0.394
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	50	4.	4.25	13.	0.5	6.772	2.602	1.72	2.4	6.	8.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	43	175.	162.558	214.	18.	1325.014	36.401	109.4	148.	184.	194.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	28	13.	11.911	18.	2.5	11.89	3.448	7.	10.	14.75	15.2
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	28	12.	11.929	21.	6.	6.735	2.595	9.	11.	13.	14.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	57	100.	609.649	8000.	50.	1891467.732	1375.306	50.	50.	350.	1500.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	57	2.	2.265	3.903	1.699	0.355	0.596	1.699	1.699	2.54	3.173
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	57	2.	2.265	3.903	1.699	0.355	0.596	1.699	1.699	2.54	3.173
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	22	0.14	0.136	0.23	0.07	0.002	0.039	0.09	0.1	0.16	0.19

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	75	6.2	6.727	15.9	0.	13.114	3.621	1.96	4.	10.2	11.58
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-08/08/89	36	290.	387.083	2769.	163.	185604.879	430.819	190.6	235.	377.	502.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	40	307.	306.575	445.	121.	6458.046	80.362	209.4	253.25	373.5	404.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	31	12.5	12.419	15.6	9.8	1.878	1.37	10.52	11.5	13.1	14.36
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	44	11.95	11.836	14.8	2.	3.813	1.953	10.25	11.2	12.925	13.85
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	72	1.	1.603	7.	0.5	1.661	1.289	1.	1.	2.	2.7
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	77	6.	8.234	55.	0.5	97.01	9.849	2.	2.75	10.	14.6
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	76	8.265	8.161	9.5	6.3	0.366	0.605	7.4	7.803	8.5	8.9
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	76	8.265	7.591	9.5	6.3	0.695	0.834	7.4	7.802	8.5	8.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	76	0.005	0.026	0.501	0.	0.006	0.076	0.001	0.003	0.016	0.04
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	57	8.1	7.974	9.3	6.5	0.221	0.47	7.28	7.7	8.25	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	57	8.1	7.642	9.3	6.5	0.333	0.577	7.28	7.7	8.25	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	57	0.008	0.023	0.316	0.001	0.002	0.048	0.003	0.006	0.02	0.053
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	57	119.	121.86	190.	18.	1678.48	40.969	65.8	88.5	159.5	176.4
00500	RESIDUE, TOTAL (MG/L)	04/24/79-08/10/92	13	189.	201.769	354.	142.	2895.359	53.809	146.	173.	227.5	307.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/24/79-08/10/92	13	42.	44.231	65.	25.	106.526	10.321	29.	37.	51.5	61.4
00510	RESIDUE, TOTAL FIXED (MG/L)	04/24/79-08/10/92	13	146.	157.538	289.	96.	2330.936	48.28	104.4	130.	179.	253.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	76	5.	26.454	652.	0.5	8131.161	90.173	1.5	2.5	9.75	29.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	76 ##	2.	4.408	64.	0.	96.511	9.824	1.	1.5	2.5	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	76	3.	22.783	588.	0.	6458.069	80.362	1.5	2.	7.	25.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	75 ##	0.05	0.072	0.8	0.02	0.013	0.114	0.02	0.02	0.06	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	75	0.01	0.021	0.2	0.005	0.001	0.025	0.005	0.01	0.03	0.044
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	75	1.93	2.2	22.99	0.6	6.252	2.5	1.14	1.53	2.34	2.706
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	74	0.3	0.354	2.3	0.05	0.099	0.314	0.1	0.2	0.4	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	75	0.1	0.163	0.7	0.05	0.014	0.118	0.05	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	46	0.1	0.147	0.7	0.03	0.018	0.133	0.04	0.06	0.2	0.37
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	64	2.95	4.364	28.	0.5	23.85	4.884	1.35	1.925	4.775	9.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	55	142.	138.636	204.	55.	1606.458	40.081	81.6	112.	170.	194.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	42	11.	11.202	19.	2.5	17.208	4.148	6.	8.	14.	16.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	41	12.	12.659	25.	7.	9.98	3.159	10.	11.	14.	16.6
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	70 ##	50.	332.	3800.	50.	507758.261	712.572	50.	50.	225.	700.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	70 ##	1.699	2.087	3.58	1.699	0.27	0.519	1.699	1.699	2.345	2.845
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			122.27								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	29	0.06	0.091	0.26	0.03	0.004	0.062	0.04	0.04	0.14	0.19

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0252

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/24/79-12/21/98	65	17.8	17.391	27.9	7.2	29.099	5.394	9.8	12.45	21.95	23.86
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-08/08/89	33	306.	295.152	439.	174.	4161.133	64.507	208.4	246.	333.5	374.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/17/89-12/21/98	30	287.5	283.8	368.	148.	3694.717	60.784	190.7	240.	335.25	362.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	09/09/91-12/21/98	24	9.25	9.567	12.8	7.2	2.114	1.454	7.65	8.4	10.575	11.55
00300	OXYGEN, DISSOLVED MG/L	04/24/79-03/09/92	40	9.7	9.955	14.3	7.4	2.542	1.594	8.	8.55	10.925	12.54
00310	BOD, 5 DAY, 20 DEG C MG/L	04/24/79-12/21/98	63	1.	1.414	5.	0.5	0.58	0.762	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/21/98	62	8.	8.621	37.	0.5	29.801	5.459	3.	5.	11.	14.
00400	PH (STANDARD UNITS)	04/24/79-12/21/98	63	8.2	8.172	10.	7.	0.242	0.492	7.58	7.9	8.4	8.7
00400	CONVERTED PH (STANDARD UNITS)	04/24/79-12/21/98	63	8.2	7.928	10.	7.	0.302	0.55	7.58	7.9	8.4	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/79-12/21/98	63	0.006	0.012	0.1	0.	0.	0.016	0.002	0.004	0.013	0.027
00403	PH, LAB, STANDARD UNITS SU	02/04/82-12/21/98	46	8.	7.93	9.3	6.7	0.219	0.468	7.34	7.775	8.2	8.43
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-12/21/98	46	8.	7.65	9.3	6.7	0.299	0.547	7.34	7.775	8.2	8.43
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-12/21/98	46	0.01	0.022	0.2	0.001	0.001	0.036	0.004	0.006	0.017	0.047
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-12/21/98	46	119.5	119.87	211.	57.	981.138	31.323	77.7	98.	138.75	160.4
00500	RESIDUE, TOTAL (MG/L)	04/24/79-08/10/92	12	189.	186.	225.	145.	769.455	27.739	145.9	163.	210.25	222.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/24/79-08/10/92	12	48.5	49.833	101.	18.	436.697	20.897	21.6	34.25	58.75	89.9
00510	RESIDUE, TOTAL FIXED (MG/L)	04/24/79-08/10/92	12	138.5	136.167	168.	94.	564.697	23.763	96.1	117.25	159.	165.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/24/79-12/21/98	62	11.5	23.129	466.	0.5	3470.409	58.91	2.5	5.75	22.	41.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/24/79-12/21/98	63	2.5	3.913	46.	0.5	34.593	5.882	1.	1.5	4.	8.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/24/79-12/21/98	63	9.	19.452	420.	0.5	2781.772	52.743	2.5	5.	18.	36.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/24/79-12/21/98	63 ##	0.05	0.056	0.4	0.02	0.003	0.051	0.02	0.02	0.06	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	62	0.02	0.028	0.12	0.005	0.	0.02	0.01	0.01	0.03	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/24/79-12/21/98	63	1.7	1.646	2.6	0.67	0.155	0.394	1.116	1.35	1.9	2.03
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/24/79-12/21/98	59	0.4	0.4	1.2	0.1	0.04	0.199	0.2	0.3	0.5	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/21/98	59	0.1	0.144	0.4	0.05	0.007	0.086	0.05	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-12/14/93	38	0.09	0.116	0.28	0.04	0.005	0.07	0.04	0.06	0.17	0.232
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/24/79-08/20/96	54	4.	4.67	16.	0.5	11.381	3.374	2.	2.475	5.625	9.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/21/98	43	136.	133.605	185.	65.	861.816	29.357	92.8	112.	154.	174.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/02/88-12/21/98	32	9.	8.75	14.	4.	6.516	2.553	5.3	7.	10.	12.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/02/88-12/21/98	32	11.	10.531	16.	7.	3.934	1.984	8.	9.	11.	13.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	60	200.	1172.	8000.	20.	4351277.288	2085.972	50.	100.	1225.	4190.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/24/79-12/21/98	60	2.301	2.486	3.903	1.301	0.509	0.714	1.699	2.	3.085	3.622
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			306.348								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/92-12/21/98	25	0.06	0.071	0.16	0.02	0.002	0.04	0.03	0.035	0.11	0.134

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0253

NPS Station ID: SHEN0253
 Location: S.F.SHEN.R. RTE 659 NE GROTTOS
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005003
 RF3 Index: 02070005000501.59
 Description:

LAT/LON: 38.313059/ -78.770559

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 19.270
 RF3 Mile Point: 3.88

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 017 /017 /SF SHEN S-10
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0253

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	9	24.5	24.5	25.	24.	0.25	0.5	24.	24.	25.	25.
00060 FLOW, STREAM, MEAN DAILY CFS	06/21/67-06/23/67	3	307.	319.	347.	303.	592.	24.331	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	10	7.4	7.4	8.6	6.8	0.298	0.546	6.8	6.875	7.6	8.53
00310 BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	10	4.15	4.74	7.4	2.9	2.245	1.498	2.93	3.65	6.175	7.3
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	490.	7382.	34800.	200.	235036870.	15330.912	**	**	**	**
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	06/21/67-06/22/67	5	2.69	3.018	4.542	2.301	0.798	0.893	**	**	**	**
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			1041.716								
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	230.	612.	2100.	170.	695220.	833.799	**	**	**	**
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	2.362	2.559	3.322	2.23	0.192	0.439	**	**	**	**
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			362.183								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0253

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	10	0	0.00							10	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	2	0.40							5	2	0.40			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	4	0.80							5	4	0.80			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0254

NPS Station ID: SHEN0254
 Location: S.F.SHEN.R. RTE 659 B N GROTTUES
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005003
 RF3 Index: 02070005000501.59
 Description:

LAT/LON: 38.313059/ -78.770559

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 19.270
 RF3 Mile Point: 3.88

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 070 /070 /SFSHEN-S10
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0254

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	23.25	23.25	23.5	23.	0.125	0.354	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	45.	45.	65.	25.	800.	28.284	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	7.05	7.05	7.3	6.8	0.125	0.354	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	2.45	2.45	3.1	1.8	0.845	0.919	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.04	0.04	0.05	0.029	0.	0.015	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	0.901	0.901	1.065	0.736	0.054	0.233	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.71	1.71	2.	1.42	0.168	0.41	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	20600.	20600.	24000.	17200.	23120000.	4808.326	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	4.308	4.308	4.38	4.236	0.01	0.102	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =		20317.48									
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	22850.	22850.	34800.	10900.	285605000.	16899.852	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	4.29	4.29	4.542	4.037	0.127	0.356	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =		19476.139									
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	13.5	13.5	15.	12.	4.5	2.121	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.66	0.66	0.8	0.52	0.039	0.198	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0254

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	1	0.50	2	1	0.50							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0255

NPS Station ID: SHEN0255
 Location: Onemile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.314503/ -78.671670

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F128
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0255

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/94-06/23/98	6	15.7	15.717	18.6	13.	3.298	1.816	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/04/96-06/23/98	5	16.	16.6	18.	16.	0.8	0.894	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/04/96-06/23/98	5	8.8	8.88	9.1	8.7	0.027	0.164	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/04/96-06/23/98	5	5.59	5.826	6.8	5.43	0.315	0.562	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/04/96-06/23/98	5	5.59	5.653	6.8	5.43	0.353	0.594	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/04/96-06/23/98	5	2.57	2.224	3.715	0.158	1.942	1.394	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/04/96-06/23/98	3	10.	10.333	11.	10.	0.333	0.577	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/25/96-06/23/98	3	9.92	9.64	11.5	7.5	4.059	2.015	**	**	**
83509	STREAM, WIDTH METER	06/25/96-06/23/98	3	3.	2.767	3.1	2.2	0.243	0.493	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/25/96-06/23/98	3	0.01	0.017	0.03	0.01	0.	0.012	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0255

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	1	0	0.00				4	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	5	0	0.00	1	0	0.00				4	0	0.00			
		Other-Lo Lim.	6.5	5	4	0.80	1	1	1.00				4	3	0.75			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0256

NPS Station ID: SHEN0256
 Location: RT 671 BRIDGE (ROCKINGHAM CO)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.316393/ -78.819171

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BMIC001.00
 Within Park Boundary: No

Date Created: 06/05/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: MILL CREEK SECTION: 05 TOPO MAP #: 0055 TOPO MAP NAME: GROTTTOES, VA

Parameter Inventory for Station: SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/93-12/10/98	67	13.8	13.925	27.8	0.	71.67	8.466	2.4	5.7	21.2	25.22
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/16/94-12/10/98	57	6.7	10.921	71.	1.2	157.895	12.566	3.38	4.7	12.1	23.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	01/07/98-01/07/98	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/93-12/10/98	67	476.	474.582	560.	363.	1561.732	39.519	422.6	455.	502.	524.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/22/93-12/10/98	66	10.4	10.317	15.8	5.	6.667	2.582	6.85	8.325	12.4	13.46
00310	BOD, 5 DAY, 20 DEG C MG/L	07/22/93-12/10/98	67	1.	1.546	7.	0.5	1.086	1.042	0.5	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	07/22/93-12/10/98	67	11.	12.328	52.	2.5	64.118	8.007	6.8	8.	14.	19.
00400	PH (STANDARD UNITS)	07/22/93-12/10/98	67	8.1	8.116	8.8	6.9	0.102	0.319	7.7	7.9	8.3	8.5
00400	CONVERTED PH (STANDARD UNITS)	07/22/93-12/10/98	67	8.1	7.966	8.8	6.9	0.125	0.353	7.7	7.9	8.3	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	67	0.008	0.011	0.126	0.002	0.	0.016	0.003	0.005	0.013	0.02
00403	PH, LAB, STANDARD UNITS SU	07/22/93-12/10/98	67	8.2	8.157	8.6	7.1	0.06	0.245	7.9	8.	8.3	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	07/22/93-12/10/98	67	8.2	8.063	8.6	7.1	0.069	0.263	7.9	8.	8.3	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	67	0.006	0.009	0.079	0.003	0.	0.01	0.004	0.005	0.01	0.013
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	67	218.	210.537	280.	2.	1602.98	40.037	174.	207.	229.	238.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/22/93-12/10/98	66	8.	12.598	60.	1.5	154.771	12.441	4.	5.75	15.	24.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/22/93-12/10/98	66 ##	1.5	2.629	10.	1.	3.049	1.746	1.5	1.5	3.	4.3
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/22/93-12/10/98	66	6.	10.068	51.	1.5	116.461	10.792	3.	4.	12.	20.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/93-12/10/98	67 ##	0.02	0.048	0.36	0.02	0.003	0.058	0.02	0.02	0.06	0.112
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	67	0.02	0.034	0.21	0.005	0.002	0.043	0.005	0.01	0.04	0.082
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	67	1.42	1.7	7.8	0.54	1.104	1.051	0.744	1.03	2.4	2.81
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/22/93-12/10/98	67	0.5	0.549	1.9	0.1	0.103	0.321	0.3	0.3	0.6	1.
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/22/93-12/10/98	67	0.06	0.079	0.5	0.02	0.005	0.073	0.03	0.04	0.1	0.122
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/22/93-08/13/96	39	4.2	4.759	12.	2.1	5.118	2.262	2.7	3.1	5.5	8.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	66	244.5	240.985	454.	116.	1601.246	40.016	194.1	223.5	256.25	273.3
00940	CHLORIDE, TOTAL IN WATER MG/L	07/22/93-12/10/98	66	14.	14.197	23.	10.	10.253	3.202	11.	11.75	16.	19.
00945	SULFATE, TOTAL (MG/L AS SO4)	07/22/93-12/10/98	66	13.	14.242	34.	6.	48.494	6.964	7.	8.	18.	24.6
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	48	1950.	5430.	16000.	130.	39380514.894	6275.39	230.	467.5	9200.	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	48	3.286	3.312	4.204	2.114	0.479	0.692	2.362	2.67	3.964	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)				2051.214								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/22/93-02/23/95	19	1600.	1784.211	5700.	50.	2284459.064	1511.443	50.	700.	2700.	3800.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	07/22/93-02/23/95	19	3.204	3.003	3.756	1.699	0.367	0.606	1.699	2.845	3.431	3.58
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				1006.525								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/22/93-12/10/98	67	0.04	0.047	0.37	0.005	0.003	0.052	0.01	0.02	0.05	0.082

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
82078 TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	07/22/93-05/17/94	10	7.2	8.84	28.	2.1	55.438	7.446	2.19	3.9	10.175	26.45

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0256

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00076 TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	57	2	0.04	18	1	0.06	25	1	0.04	14	0	0.00			
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	66	0	0.00	18	0	0.00	32	0	0.00	16	0	0.00			
00400 PH	Fresh Chronic	9.	67	0	0.00	19	0	0.00	32	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	67	0	0.00	19	0	0.00	32	0	0.00	16	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	67	0	0.00	20	0	0.00	31	0	0.00	16	0	0.00			
	Other-Lo Lim.	6.5	67	0	0.00	20	0	0.00	31	0	0.00	16	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	67	0	0.00	20	0	0.00	31	0	0.00	16	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	67	0	0.00	20	0	0.00	31	0	0.00	16	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	66	0	0.00	20	0	0.00	30	0	0.00	16	0	0.00			
	Drinking Water	250.	66	0	0.00	20	0	0.00	30	0	0.00	16	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	66	0	0.00	20	0	0.00	30	0	0.00	16	0	0.00			
31615 FECAL COLIFORM, MPN	Other-Hi Lim.	200.	48	47	0.98	14	14	1.00	21	20	0.95	13	13	1.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	19	16	0.84	6	6	1.00	10	7	0.70	3	3	1.00			
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	10	0	0.00	2	0	0.00	6	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1993 - Station SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/93-12/10/98	5	19.	15.38	26.3	3.7	82.527	9.084	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/93-12/10/98	5	456.	457.2	490.	427.	503.7	22.443	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/22/93-12/10/98	5	10.5	11.18	13.6	9.1	3.457	1.859	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	07/22/93-12/10/98	5	2.	2.	3.	1.	0.5	0.707	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	07/22/93-12/10/98	5	9.	10.	15.	7.	9.	3.	**	**	**	**
00400	PH (STANDARD UNITS)	07/22/93-12/10/98	5	8.3	8.3	8.5	8.	0.035	0.187	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/22/93-12/10/98	5	8.3	8.265	8.5	8.	0.037	0.191	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	5	0.005	0.005	0.01	0.003	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/22/93-12/10/98	5	8.4	8.38	8.5	8.2	0.012	0.11	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/22/93-12/10/98	5	8.4	8.368	8.5	8.2	0.012	0.11	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	5	0.004	0.004	0.006	0.003	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	5	226.	230.	245.	218.	117.5	10.84	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/22/93-12/10/98	4	9.	8.25	11.	4.	8.917	2.986	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/22/93-12/10/98	4	2.5	2.25	3.	1.	0.917	0.957	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/22/93-12/10/98	4	6.5	6.	8.	3.	4.667	2.16	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/93-12/10/98	5 ##	0.02	0.048	0.12	0.02	0.002	0.044	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	5	0.01	0.033	0.12	0.005	0.002	0.049	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	5	1.31	1.468	2.89	0.54	0.778	0.882	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/22/93-12/10/98	5	0.5	0.6	1.3	0.2	0.19	0.436	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/22/93-12/10/98	5 ##	0.05	0.07	0.1	0.05	0.001	0.027	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	4	257.	258.25	274.	245.	174.917	13.226	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	07/22/93-12/10/98	4	12.5	12.5	14.	11.	1.667	1.291	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/22/93-12/10/98	4	8.5	8.5	10.	7.	1.667	1.291	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/22/93-12/10/98	5	0.05	0.04	0.05	0.01	0.	0.017	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/93-12/10/98	13	12.1	13.469	25.3	1.1	68.377	8.269	1.62	6.5	20.7	25.14
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/16/94-12/10/98	8	5.55	4.913	6.7	1.2	3.77	1.942	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/93-12/10/98	13	447.	443.923	502.	370.	1193.41	34.546	388.4	422.	461.5	499.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/22/93-12/10/98	13	10.2	9.854	13.4	5.8	5.581	2.362	6.32	7.8	12.05	13.12
00310	BOD, 5 DAY, 20 DEG C MG/L	07/22/93-12/10/98	13	1.8	2.192	7.	1.	2.389	1.546	1.	1.5	2.3	5.4
00340	COD, .25N K2CR2O7 MG/L	07/22/93-12/10/98	13	12.	12.769	29.	7.	27.692	5.262	8.2	10.	13.	23.4
00400	PH (STANDARD UNITS)	07/22/93-12/10/98	13	8.2	8.208	8.5	7.7	0.047	0.218	7.86	8.1	8.4	8.5
00400	CONVERTED PH (STANDARD UNITS)	07/22/93-12/10/98	13	8.2	8.152	8.5	7.7	0.051	0.225	7.86	8.1	8.4	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	13	0.006	0.007	0.02	0.003	0.	0.004	0.003	0.004	0.008	0.015
00403	PH, LAB, STANDARD UNITS SU	07/22/93-12/10/98	13	8.	8.046	8.6	7.1	0.131	0.362	7.42	7.9	8.3	8.52
00403	CONVERTED PH, LAB, STANDARD UNITS	07/22/93-12/10/98	13	8.	7.857	8.6	7.1	0.17	0.412	7.42	7.9	8.3	8.52
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	13	0.01	0.014	0.079	0.003	0.	0.02	0.003	0.005	0.013	0.053
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	13	210.	194.846	232.	55.	2364.641	48.628	90.2	183.5	223.5	230.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/22/93-12/10/98	13	14.	15.577	52.	1.5	166.577	12.906	3.3	6.5	19.	42.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/22/93-12/10/98	13	3.	3.308	8.	1.5	4.022	2.006	1.5	2.	3.5	7.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/22/93-12/10/98	13	11.	12.423	44.	1.5	121.994	11.045	2.1	4.5	15.5	34.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/93-12/10/98	13	0.04	0.068	0.36	0.02	0.009	0.094	0.02	0.02	0.065	0.272
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	13	0.03	0.031	0.06	0.005	0.	0.017	0.007	0.02	0.045	0.056
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	13	1.14	1.718	3.38	0.72	0.796	0.892	0.8	1.02	2.545	3.152
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/22/93-12/10/98	13	0.5	0.554	1.6	0.2	0.114	0.338	0.24	0.4	0.55	1.24
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/22/93-12/10/98	13	0.1	0.101	0.3	0.03	0.004	0.064	0.038	0.065	0.1	0.22
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	13	238.	248.615	454.	178.	4188.59	64.719	194.8	224.	247.	376.
00940	CHLORIDE, TOTAL IN WATER MG/L	07/22/93-12/10/98	13	14.	13.769	19.	11.	5.526	2.351	11.	11.5	15.5	17.8
00945	SULFATE, TOTAL (MG/L AS SO4)	07/22/93-12/10/98	13	11.	12.385	26.	6.	36.256	6.021	6.4	7.5	17.	23.2
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	04/16/94-12/10/98	1	1700.	1700.	1700.	1700.	0.	0.	**	**	**	**
31615	LOG FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	04/16/94-12/10/98	1	3.23	3.23	3.23	3.23	0.	0.	**	**	**	**
31615	GM FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	04/16/94-12/10/98			1700.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/22/93-12/10/98	13	0.04	0.045	0.19	0.005	0.002	0.047	0.007	0.02	0.045	0.142

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/93-12/10/98	13	14.6	14.231	25.6	0.	76.604	8.752	1.44	4.95	22.4	25.44
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/16/94-12/10/98	13	5.6	8.746	23.	1.9	44.361	6.66	2.18	4.15	14.5	21.12
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/93-12/10/98	13	510.	504.846	560.	463.	900.641	30.011	466.2	472.5	524.5	549.2
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/22/93-12/10/98	13	8.8	9.185	13.9	5.	9.958	3.156	5.	6.15	11.9	13.42
00310 BOD, 5 DAY, 20 DEG C MG/L	07/22/93-12/10/98	13	1.3	1.2	2.2	0.5	0.352	0.593	0.5	0.5	1.65	2.12
00340 COD, .25N K2CR2O7 MG/L	07/22/93-12/10/98	13	13.	12.923	19.	7.	15.91	3.989	7.4	9.	16.5	18.6
00400 PH (STANDARD UNITS)	07/22/93-12/10/98	13	8.1	8.108	8.8	7.5	0.136	0.368	7.58	7.85	8.3	8.76
00400 CONVERTED PH (STANDARD UNITS)	07/22/93-12/10/98	13	8.1	7.979	8.8	7.5	0.154	0.392	7.58	7.85	8.3	8.76
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	13	0.008	0.01	0.032	0.002	0.	0.008	0.002	0.005	0.014	0.027
00403 PH, LAB, STANDARD UNITS SU	07/22/93-12/10/98	13	8.	7.992	8.3	7.6	0.051	0.225	7.64	7.8	8.2	8.3
00403 CONVERTED PH, LAB, STANDARD UNITS	07/22/93-12/10/98	13	8.	7.938	8.3	7.6	0.054	0.232	7.64	7.8	8.2	8.3
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	13	0.01	0.012	0.025	0.005	0.	0.006	0.005	0.006	0.016	0.023
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	13	213.	219.385	249.	191.	255.756	15.992	197.	209.	230.	246.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/22/93-12/10/98	13	8.	10.192	23.	1.5	46.731	6.836	2.1	6.	16.5	22.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/22/93-12/10/98	13##	1.5	2.308	5.	1.5	1.397	1.182	1.5	1.5	3.	4.6
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/22/93-12/10/98	13	6.	8.038	19.	1.5	31.769	5.636	2.1	4.5	12.5	18.6
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/93-12/10/98	13##	0.02	0.061	0.27	0.02	0.005	0.07	0.02	0.02	0.08	0.206
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	13	0.04	0.07	0.21	0.005	0.006	0.076	0.005	0.008	0.145	0.202
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	13	1.17	1.275	2.41	0.58	0.292	0.54	0.596	0.895	1.735	2.222
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/22/93-12/10/98	13	0.4	0.446	0.8	0.1	0.039	0.198	0.14	0.3	0.6	0.76
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/22/93-12/10/98	13	0.06	0.083	0.2	0.02	0.003	0.05	0.028	0.05	0.11	0.18
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	13	248.	246.846	288.	212.	510.141	22.586	215.2	225.5	257.5	284.8
00940 CHLORIDE, TOTAL IN WATER MG/L	07/22/93-12/10/98	13	16.	16.692	22.	13.	7.064	2.658	13.4	14.5	19.	20.8
00945 SULFATE, TOTAL (MG/L AS SO4)	07/22/93-12/10/98	13	12.	14.923	27.	6.	59.41	7.708	6.4	8.	22.5	26.6
31615 FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	11	5400.	5518.182	16000.	220.	24813896.364	4981.355	274.	790.	9200.	14640.
31615 LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	11	3.732	3.468	4.204	2.342	0.375	0.612	2.412	2.898	3.964	4.156
31615 GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			2937.974								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/22/93-12/10/98	13	0.04	0.046	0.09	0.01	0.001	0.026	0.014	0.025	0.065	0.09

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/93-12/10/98	11	11.4	11.991	27.2	0.2	74.707	8.643	0.64	3.8	19.	25.92
00076 TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/16/94-12/10/98	12	6.9	13.2	54.	3.5	228.904	15.13	3.74	4.675	19.15	46.5
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/93-12/10/98	12	492.5	483.333	531.	363.	1749.879	41.832	393.3	476.	505.75	524.4
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/22/93-12/10/98	11	10.2	10.627	14.	7.6	5.026	2.242	7.7	8.4	12.8	13.86
00310 BOD, 5 DAY, 20 DEG C MG/L	07/22/93-12/10/98	12	1.	1.292	3.	0.5	0.612	0.782	0.5	0.625	2.	2.7
00340 COD, .25N K2CR2O7 MG/L	07/22/93-12/10/98	12	12.	13.708	42.	2.5	109.021	10.441	3.85	7.25	13.	36.9
00400 PH (STANDARD UNITS)	07/22/93-12/10/98	11	8.2	8.164	8.5	7.8	0.069	0.262	7.8	7.9	8.4	8.5
00400 CONVERTED PH (STANDARD UNITS)	07/22/93-12/10/98	11	8.2	8.093	8.5	7.8	0.074	0.272	7.8	7.9	8.4	8.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	11	0.006	0.008	0.016	0.003	0.	0.005	0.003	0.004	0.013	0.016
00403 PH, LAB, STANDARD UNITS SU	07/22/93-12/10/98	12	8.25	8.233	8.5	8.	0.026	0.161	8.	8.1	8.375	8.47
00403 CONVERTED PH, LAB, STANDARD UNITS	07/22/93-12/10/98	12	8.247	8.206	8.5	8.	0.027	0.164	8.	8.1	8.375	8.47
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	12	0.006	0.006	0.01	0.003	0.	0.002	0.003	0.004	0.008	0.01
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	12	209.	206.667	228.	148.	500.424	22.37	159.7	198.	224.25	227.7
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/22/93-12/10/98	12	6.5	12.75	49.	4.	193.841	13.923	4.	4.25	20.	42.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/22/93-12/10/98	12 ##	1.5	2.5	7.	1.5	3.	1.732	1.5	1.5	3.75	6.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/22/93-12/10/98	12	5.	10.583	42.	3.	144.811	12.034	3.	4.	16.5	36.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/93-12/10/98	12 ##	0.03	0.043	0.1	0.02	0.001	0.03	0.02	0.02	0.058	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	12	0.02	0.025	0.08	0.005	0.	0.022	0.005	0.01	0.038	0.071
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	12	2.115	2.49	7.8	1.19	3.158	1.777	1.193	1.605	2.55	6.414
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/22/93-12/10/98	12	0.4	0.583	1.9	0.2	0.22	0.469	0.23	0.3	0.675	1.63
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/22/93-12/10/98	12	0.045	0.086	0.5	0.02	0.018	0.133	0.023	0.03	0.068	0.383
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	12	244.5	241.333	284.	180.	634.606	25.191	192.	231.5	253.75	277.4
00940	CHLORIDE, TOTAL IN WATER MG/L	07/22/93-12/10/98	12	15.	14.833	23.	11.	11.061	3.326	11.3	12.25	15.	21.8
00945	SULFATE, TOTAL (MG/L AS SO4)	07/22/93-12/10/98	12	17.5	18.583	34.	13.	33.356	5.775	13.3	14.25	20.75	30.7
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	12	1500.	4749.167	16000.	230.	46433262.879	6814.196	230.	370.	12550.	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	12	3.172	3.198	4.204	2.362	0.479	0.692	2.362	2.561	3.989	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			1575.879								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/22/93-12/10/98	12	0.03	0.06	0.37	0.005	0.01	0.1	0.007	0.02	0.048	0.283

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/93-12/10/98	12	13.95	14.383	25.3	1.5	84.736	9.205	2.01	5.425	24.175	25.27
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/16/94-12/10/98	12	8.1	12.017	45.	5.	117.9	10.858	5.21	7.05	13.15	36.21
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/93-12/10/98	12	494.	486.917	516.	451.	555.356	23.566	451.3	466.25	508.	515.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/22/93-12/10/98	11	12.3	11.473	15.8	6.5	8.036	2.835	6.72	9.	13.1	15.5
00310	BOD, 5 DAY, 20 DEG C MG/L	07/22/93-12/10/98	12 ##	1.	1.333	3.	0.5	1.061	1.03	0.5	0.5	2.5	3.
00340	COD, .25N K2CR2O7 MG/L	07/22/93-12/10/98	12	8.	8.375	15.	2.5	10.778	3.283	3.25	6.25	10.5	14.1
00400	PH (STANDARD UNITS)	07/22/93-12/10/98	12	8.1	8.117	8.5	7.7	0.067	0.259	7.7	7.925	8.3	8.47
00400	CONVERTED PH (STANDARD UNITS)	07/22/93-12/10/98	12	8.1	8.044	8.5	7.7	0.073	0.27	7.7	7.925	8.3	8.47
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	12	0.008	0.009	0.02	0.003	0.	0.006	0.003	0.005	0.012	0.02
00403	PH, LAB, STANDARD UNITS SU	07/22/93-12/10/98	12	8.35	8.292	8.4	8.	0.017	0.131	8.06	8.2	8.4	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	07/22/93-12/10/98	12	8.347	8.272	8.4	8.	0.018	0.133	8.06	8.2	8.4	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	12	0.004	0.005	0.01	0.004	0.	0.002	0.004	0.004	0.006	0.009
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	12	229.5	229.	280.	196.	597.818	24.45	198.4	208.75	246.5	272.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/22/93-12/10/98	12	8.	12.583	57.	4.	208.265	14.431	4.3	6.	13.5	44.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/22/93-12/10/98	12 ##	1.5	2.25	6.	1.5	1.841	1.357	1.5	1.5	3.	5.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/22/93-12/10/98	12	6.	10.292	51.	1.5	175.566	13.25	1.95	4.25	10.5	39.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/93-12/10/98	12 ##	0.02	0.039	0.13	0.02	0.002	0.041	0.02	0.02	0.035	0.127
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	12	0.025	0.026	0.09	0.005	0.001	0.025	0.005	0.006	0.03	0.078
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	12	1.48	1.747	2.82	0.68	0.563	0.75	0.761	1.205	2.55	2.817
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/22/93-12/10/98	12	0.5	0.558	1.1	0.3	0.077	0.278	0.3	0.3	0.7	1.07
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/22/93-12/10/98	12	0.05	0.057	0.13	0.02	0.001	0.031	0.023	0.033	0.075	0.118
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	12	254.5	244.75	273.	116.	1861.841	43.149	146.3	250.	268.75	272.4
00940	CHLORIDE, TOTAL IN WATER MG/L	07/22/93-12/10/98	12	12.5	13.75	20.	10.	12.023	3.467	10.	11.	16.75	19.7
00945	SULFATE, TOTAL (MG/L AS SO4)	07/22/93-12/10/98	12	11.5	14.333	33.	8.	58.061	7.62	8.	8.25	16.75	30.3
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	12	3150.	6491.667	16000.	230.	51733633.333	7192.61	230.	315.	16000.	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	12	3.496	3.36	4.204	2.362	0.599	0.774	2.362	2.498	4.204	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			2288.593								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/22/93-12/10/98	12	0.03	0.033	0.07	0.005	0.	0.02	0.007	0.02	0.05	0.067

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0256

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/22/93-12/10/98	13	13.5	14.731	27.8	0.6	76.214	8.73	2.	6.9	24.2	26.64
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	04/16/94-12/10/98	12	6.35	13.908	71.	3.1	357.674	18.912	3.19	4.65	17.925	55.22
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/22/93-12/10/98	12	467.5	461.167	527.	363.	1821.061	42.674	373.8	456.25	484.25	515.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	07/22/93-12/10/98	13	9.7	10.338	14.5	7.1	5.289	2.3	7.26	8.5	12.1	14.06
00310	BOD, 5 DAY, 20 DEG C MG/L	07/22/93-12/10/98	12 ##	1.	1.5	4.	1.	0.818	0.905	1.	1.	2.	3.4
00340	COD, .25N K2CR2O7 MG/L	07/22/93-12/10/98	12	10.	14.75	52.	2.5	185.432	13.617	2.5	7.25	18.75	44.2
00400	PH (STANDARD UNITS)	07/22/93-12/10/98	13	7.9	7.923	8.5	6.9	0.18	0.425	7.14	7.7	8.15	8.5
00400	CONVERTED PH (STANDARD UNITS)	07/22/93-12/10/98	13	7.9	7.68	8.5	6.9	0.244	0.494	7.14	7.7	8.15	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	13	0.013	0.021	0.126	0.003	0.001	0.033	0.003	0.007	0.02	0.088
00403	PH, LAB, STANDARD UNITS SU	07/22/93-12/10/98	12	8.2	8.15	8.4	7.9	0.019	0.138	7.93	8.025	8.2	8.37
00403	CONVERTED PH, LAB, STANDARD UNITS	07/22/93-12/10/98	12	8.2	8.13	8.4	7.9	0.02	0.14	7.93	8.025	8.2	8.37
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/22/93-12/10/98	12	0.006	0.007	0.013	0.004	0.	0.002	0.004	0.006	0.009	0.012
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	12	223.	195.25	235.	2.	4419.477	66.479	47.9	173.25	231.5	234.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/22/93-12/10/98	12	7.5	13.292	60.	1.5	252.566	15.892	2.25	4.25	15.5	48.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/22/93-12/10/98	12 ##	1.5	2.875	10.	1.5	6.051	2.46	1.5	1.5	3.75	8.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/22/93-12/10/98	12	5.5	10.333	50.	1.5	180.924	13.451	1.5	3.	11.75	40.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/22/93-12/10/98	12 ##	0.02	0.028	0.11	0.02	0.001	0.026	0.02	0.02	0.02	0.083
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	12	0.015	0.015	0.03	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/22/93-12/10/98	12	1.2	1.399	2.77	0.72	0.413	0.643	0.729	0.87	1.865	2.569
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/22/93-12/10/98	12	0.5	0.592	1.3	0.3	0.068	0.261	0.33	0.425	0.675	1.15
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/22/93-12/10/98	12	0.04	0.07	0.27	0.02	0.005	0.068	0.023	0.033	0.09	0.219
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/22/93-12/10/98	12	221.	216.5	275.	167.	904.455	30.074	172.4	188.25	235.25	266.9
00940	CHLORIDE,TOTAL IN WATER MG/L	07/22/93-12/10/98	12	11.	12.333	21.	10.	10.242	3.2	10.	10.25	12.75	19.5
00945	SULFATE, TOTAL (MG/L AS SO4)	07/22/93-12/10/98	12	12.	13.	33.	7.	51.455	7.173	7.	7.5	14.75	28.2
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	12	2400.	5279.167	16000.	130.	44504535.606	6671.172	163.	362.5	13350.	16000.
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	04/16/94-12/10/98	12	3.329	3.243	4.204	2.114	0.581	0.762	2.194	2.555	4.086	4.204
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			1748.657								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/22/93-12/10/98	12	0.035	0.053	0.18	0.02	0.002	0.046	0.02	0.023	0.068	0.153

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0257

NPS Station ID: SHEN0257
 Location: Onemile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.318226/ -78.680976

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F127
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0257

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/12/94-07/12/94	4	18.9	19.275	20.5	18.8	0.676	0.822	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/12/94-07/12/94	3	7.05	6.967	7.13	6.72	0.047	0.217	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/12/94-07/12/94	3	7.05	6.928	7.13	6.72	0.049	0.222	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/12/94-07/12/94	3	0.089	0.118	0.191	0.074	0.004	0.063	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0257

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00										
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0258

NPS Station ID: SHEN0258
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.318253/ -78.652753

Depth of Water: 0
 Elevation: 1520
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TM05 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.23 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0258

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	3	10.	11.167	17.5	6.	34.083	5.838	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	3	25.	25.	27.	23.	4.	2.	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-04/01/93	3	5.42	5.387	5.43	5.31	0.004	0.067	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-04/01/93	3	5.42	5.383	5.43	5.31	0.004	0.067	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-04/01/93	3	3.802	4.138	4.898	3.715	0.434	0.659	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-04/01/93	3	23.	23.667	26.	22.	4.333	2.082	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	3	17.8	14.5	23.7	2.	125.89	11.22	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	3	0.9	0.867	0.9	0.8	0.003	0.058	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	3	0.7	0.733	0.8	0.7	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	3	0.55	0.533	0.56	0.49	0.001	0.038	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	3	1.93	1.947	2.11	1.8	0.024	0.156	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	3	1.	0.933	1.	0.8	0.013	0.115	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	3	4.7	4.7	5.1	4.3	0.16	0.4	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	3	4.7	5.167	6.2	4.6	0.803	0.896	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	3	2.3	2.867	4.	2.3	0.963	0.981	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	3	3.83	4.17	4.94	3.74	0.447	0.668	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0258

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	3	3	1.00	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Fresh Acute	860.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0259

NPS Station ID: SHEN0259
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.320337/ -78.654531

Depth of Water: 0
 Elevation: 1530
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TM06 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0259

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-08/19/93	4	14.	13.	18.	6.	36.	6.	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-08/19/93	4	24.5	26.25	35.	21.	40.917	6.397	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-08/19/93	4	5.59	5.605	5.76	5.48	0.014	0.118	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-08/19/93	4	5.589	5.593	5.76	5.48	0.014	0.119	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-08/19/93	4	2.577	2.551	3.311	1.738	0.435	0.659	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-08/19/93	4	23.5	25.25	34.	20.	40.917	6.397	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-08/19/93	4	9.95	9.675	16.9	1.9	63.642	7.978	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-08/19/93	4	0.85	0.9	1.3	0.6	0.1	0.316	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-08/19/93	4	0.75	0.8	1.1	0.6	0.047	0.216	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-08/19/93	4	0.62	0.655	0.82	0.56	0.013	0.116	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-08/19/93	4	1.985	2.07	2.6	1.71	0.185	0.43	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-08/19/93	4	0.9	0.9	1.	0.8	0.007	0.082	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-08/19/93	4	5.65	6.25	9.2	4.5	4.897	2.213	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-08/19/93	4	6.45	6.85	9.5	5.	4.63	2.152	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-08/19/93	4	1.15	1.175	1.4	1.	0.029	0.171	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-08/19/93	4	2.6	2.573	3.34	1.75	0.444	0.666	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0259

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0260

NPS Station ID: SHEN0260
 Location: BEARWALLOW RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.320809/ -78.683616

Depth of Water: 0
 Elevation: 1300
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH51
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RH51 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BEARWALLOW RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.55 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0260

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	4.91	4.91	4.91	4.91	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	4.91	4.91	4.91	4.91	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	12.303	12.303	12.303	12.303	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.74	0.74	0.74	0.74	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0260

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0261

NPS Station ID: SHEN0261
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.321087/ -78.658726

 Depth of Water: 0
 Elevation: 1440

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TM07 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0261

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-08/19/93	4	14.	13.375	18.5	7.	30.729	5.543	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-08/19/93	4	24.	25.25	31.	22.	15.583	3.948	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-08/19/93	4	5.415	5.428	5.64	5.24	0.03	0.172	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-08/19/93	4	5.41	5.403	5.64	5.24	0.031	0.175	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-08/19/93	4	3.889	3.956	5.754	2.291	2.228	1.493	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-08/19/93	4	23.	24.25	30.	21.	15.583	3.948	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-08/19/93	4	11.9	12.575	21.2	5.3	59.409	7.708	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-08/19/93	4	0.8	0.825	1.	0.7	0.016	0.126	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-08/19/93	4	0.8	0.8	0.9	0.7	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-08/19/93	4	0.565	0.6	0.76	0.51	0.012	0.11	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-08/19/93	4	1.965	2.008	2.35	1.75	0.085	0.292	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-08/19/93	4	0.95	0.925	1.	0.8	0.009	0.096	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-08/19/93	4	5.15	5.65	7.7	4.6	2.07	1.439	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-08/19/93	4	5.65	6.1	8.5	4.6	3.407	1.846	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-08/19/93	4	1.4	1.65	2.6	1.2	0.41	0.64	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-08/19/93	4	3.92	3.988	5.8	2.31	2.26	1.503	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0261

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0262

NPS Station ID: SHEN0262
 Location: Twomile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.321753/ -78.659781

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F099
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0262

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-06/28/94	1	17.	17.	17.	17.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0263

NPS Station ID: SHEN0263
 Location: S F SHENANDOAH RIVER NEAR LYNNWOOD, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005022600.00
 Description:

LAT/LON: 38.322503/ -78.755005
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 3.08

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628500
 Within Park Boundary: No
 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 34.60
 Distance from RF3: 0.02

Date Created: / /
 On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0263

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/05/68-05/23/69	3	5.	10.	20.	75.	8.66	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	09/14/30-05/23/69	9	454.	637.222	1860.	341152.194	584.082	168.	203.5	974.	1860.
00080	COLOR (PLATINUM-COBALT UNITS)	09/14/30-05/23/69	9	7.	6.111	10.	0.	3.586	0.	3.	9.5	10.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/08/52-05/23/69	6	340.5	328.667	374.	233.	2562.267	50.619	**	**	**
00400	PH (STANDARD UNITS)	10/08/52-05/23/69	6	8.05	8.033	8.4	7.7	0.067	0.258	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/08/52-05/23/69	6	8.047	7.972	8.4	7.7	0.071	0.267	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/08/52-05/23/69	6	0.009	0.011	0.02	0.004	0.	0.006	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/05/68-05/23/69	3	123.	117.	144.	84.	927.	30.447	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/14/30-05/23/69	9	170.	152.222	204.	54.	2748.694	52.428	54.	106.5	197.
00445	CARBONATE ION (MG/L AS CO3)	09/14/30-05/23/69	5	0.	0.6	3.	0.	1.8	1.342	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/05/68-05/23/69	3	0.51	0.497	0.59	0.39	0.01	0.101	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/14/30-05/23/69	9	162.	141.	195.	50.	2293.25	47.888	50.	99.	176.5
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/08/52-05/23/69	6	16.5	18.5	28.	12.	35.5	5.958	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/14/30-05/23/69	9	41.	37.111	50.	14.	140.861	11.868	14.	27.5	47.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/14/30-05/23/69	9	11.	11.833	17.	3.7	25.873	5.087	3.7	7.4	17.
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/14/30-05/23/69	9	4.1	4.511	7.4	2.1	4.201	2.05	2.1	2.7	6.55
00931	SODIUM ADSORPTION RATIO	03/05/68-05/23/69	3	0.3	0.267	0.3	0.2	0.003	0.058	**	**	**
00932	SODIUM, PERCENT	03/05/68-05/23/69	3	9.	10.	14.	7.	13.	3.606	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/14/30-05/23/69	8	1.8	1.563	2.3	0.7	0.448	0.67	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/14/30-05/23/69	9	6.	6.333	10.	2.	10.5	3.24	2.	3.	10.
00945	SULFATE, TOTAL (MG/L AS SO4)	09/14/30-05/23/69	9	15.	14.889	22.	7.	28.111	5.302	7.	10.	20.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/06/45-05/23/69	7	0.1	0.114	0.2	0.1	0.001	0.038	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/14/30-05/23/69	9	5.6	5.078	13.	0.7	13.557	3.682	0.7	1.75	6.25
01046	IRON, DISSOLVED (UG/L AS FE)	03/05/68-05/23/69	3	70.	56.667	100.	0.	2633.333	51.316	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/14/30-05/23/69	9	180.	161.778	209.	61.	2353.444	48.512	61.	126.	196.5
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/05/68-05/23/69	3	173.	162.	188.	125.	1083.	32.909	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	03/05/68-05/23/69	3	221.	244.	305.	206.	2847.	53.357	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/05/68-05/23/69	3	0.24	0.23	0.26	0.19	0.001	0.036	**	**	**
71835	OXYGEN CONSUMED, FILTERED MG/L	09/14/30-03/31/31	2	2.05	2.05	2.5	1.6	0.405	0.636	**	**	**
71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/14/30-03/31/31	2	2.05	2.05	2.1	2.	0.005	0.071	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/14/30-05/23/69	9	3.1	3.356	5.8	1.2	1.6	1.265	1.2	2.9	4.
71885	IRON (UG/L AS FE)	09/14/30-01/17/56	6	25.	23.333	50.	0.	306.667	17.512	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	08/27/74-07/22/75	2	541.5	541.5	1013.	70.	444624.5	666.802	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0263

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
	Drinking Water	250.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	7	0	0.00	2	0	0.00	4	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	9	0	0.00	3	0	0.00	4	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0264

NPS Station ID: SHEN0264
 Location: Onemile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.324087/ -78.686115

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F126
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0264

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/94-06/23/98	9	18.7	18.4	20.	15.2	2.018	1.42	15.2	17.9	19.25	20.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/04/96-06/23/98	5	13.	13.4	14.	13.	0.3	0.548	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/11/94-06/23/98	8	8.5	8.375	9.	7.4	0.408	0.639	**	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/11/94-06/23/98	8	5.49	5.363	5.55	5.08	0.044	0.211	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/11/94-06/23/98	8	5.49	5.316	5.55	5.08	0.047	0.217	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/11/94-06/23/98	8	3.237	4.832	8.318	2.818	6.019	2.453	**	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/04/96-06/23/98	3	9.	9.333	10.	9.	0.333	0.577	**	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/25/96-06/23/98	3	3.31	3.56	4.2	3.17	0.312	0.559	**	**	**	**
83509	STREAM, WIDTH METER	06/25/96-06/23/98	3	4.6	4.367	4.9	3.6	0.463	0.681	**	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/25/96-06/23/98	3	0.03	0.033	0.04	0.03	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0264

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	8	0	0.00	4	0	0.00	4	0	0.00	4	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	8	0	0.00	4	0	0.00	4	0	0.00	4	0	0.00			
		Other-Lo Lim.	6.5	8	8	1.00	4	4	1.00				4	4	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0265

NPS Station ID: SHEN0265
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.324253/ -78.661366

Depth of Water: 0
 Elevation: 1340
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TM10 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.58 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0265

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-08/19/93	4	14.5	14.125	20.5	7.	41.229	6.421	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-08/19/93	4	22.	22.5	25.	21.	3.667	1.915	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-08/19/93	4	5.805	5.813	6.01	5.63	0.024	0.156	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-08/19/93	4	5.805	5.792	6.01	5.63	0.025	0.158	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-08/19/93	4	1.568	1.614	2.344	0.977	0.316	0.562	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-08/19/93	4	21.	21.5	24.	20.	3.667	1.915	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-08/19/93	4	6.95	8.9	17.	4.7	30.66	5.537	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-08/19/93	4	0.75	0.75	0.9	0.6	0.017	0.129	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-08/19/93	4	0.7	0.7	0.8	0.6	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-08/19/93	4	0.585	0.595	0.71	0.5	0.008	0.089	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-08/19/93	4	1.865	1.87	2.06	1.69	0.041	0.202	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-08/19/93	4	0.9	0.9	1.	0.8	0.007	0.082	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-08/19/93	4	4.9	4.975	5.8	4.3	0.443	0.665	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-08/19/93	4	5.5	5.775	7.6	4.5	2.243	1.497	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-08/19/93	4	1.35	1.475	2.2	1.	0.263	0.512	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-08/19/93	4	1.585	1.63	2.36	0.99	0.318	0.564	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0265

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0266

NPS Station ID: SHEN0266
 Location: TWOMILE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.325226/ -78.662420

Depth of Water: 0
 Elevation: 1440

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TM08 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0266

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	2	10.25	10.25	11.5	9.	3.125	1.768	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	2	22.	22.	22.	22.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	03/13/92-04/01/93	2	5.99	5.99	6.03	5.95	0.003	0.057	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/13/92-04/01/93	2	5.988	5.988	6.03	5.95	0.003	0.057	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-04/01/93	2	1.028	1.028	1.122	0.933	0.018	0.133	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-04/01/93	2	21.	21.	21.	21.	0.	0.	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	2	13.7	13.7	13.7	13.7	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	2	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	2	0.7	0.7	0.73	0.67	0.002	0.042	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	2	2.235	2.235	2.28	2.19	0.004	0.064	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	2	0.95	0.95	1.	0.9	0.005	0.071	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	2	5.95	5.95	6.1	5.8	0.045	0.212	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	2	6.15	6.15	6.3	6.	0.045	0.212	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	2	0.045	0.045	0.07	0.02	0.001	0.035	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	2	1.035	1.035	1.13	0.94	0.018	0.134	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0266

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	2	2	1.00				1	1	1.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	2	2	1.00				1	1	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	2	0	0.00				1	0	0.00	1	0	0.00				
	Fresh Acute								1	0	0.00	1	0	0.00				
	Drinking Water	250.	2	0	0.00				1	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	2	0	0.00				1	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	2	0	0.00				1	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0267

NPS Station ID: SHEN0267
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.325615/ -78.663810

Depth of Water: 0
 Elevation: 1370

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TM11 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0267

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-08/19/93	4	14.5	14.125	21.5	6.	50.896	7.134	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-08/19/93	4	22.5	22.75	25.	21.	2.917	1.708	**	**	**	**
00400 PH (STANDARD UNITS)	03/13/92-08/19/93	4	5.76	5.772	5.9	5.67	0.013	0.115	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/13/92-08/19/93	4	5.753	5.761	5.9	5.67	0.013	0.116	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-08/19/93	4	1.767	1.733	2.138	1.259	0.199	0.447	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-08/19/93	4	21.5	21.75	24.	20.	2.917	1.708	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-08/19/93	4	4.45	4.85	10.3	0.2	22.63	4.757	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-08/19/93	4	0.75	0.725	0.8	0.6	0.009	0.096	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-08/19/93	4	0.7	0.7	0.8	0.6	0.007	0.082	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-08/19/93	4	0.595	0.605	0.71	0.52	0.007	0.081	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-08/19/93	4	1.89	1.893	2.06	1.73	0.035	0.188	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-08/19/93	4	0.9	0.9	1.	0.8	0.007	0.082	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-08/19/93	4	4.95	5.025	5.8	4.4	0.376	0.613	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-08/19/93	4	5.55	5.85	7.6	4.7	2.003	1.415	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-08/19/93	4	1.2	1.35	1.9	1.1	0.137	0.37	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-08/19/93	4	1.785	1.75	2.16	1.27	0.204	0.452	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0267

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0268

NPS Station ID: SHEN0268
 Location: TWOMILE RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.325920/ -78.661226

Depth of Water: 0
 Elevation: 1425
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TM09 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.79 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0268

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-04/01/93	2	10.	10.	11.	9.	2.	1.414	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-04/01/93	2	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-04/01/93	2	5.66	5.66	5.72	5.6	0.007	0.085	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-04/01/93	2	5.656	5.656	5.72	5.6	0.007	0.085	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-04/01/93	2	2.209	2.209	2.512	1.905	0.184	0.429	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-04/01/93	2	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-04/01/93	2	9.3	9.3	11.6	7.	10.58	3.253	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-04/01/93	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-04/01/93	2	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-04/01/93	2	0.545	0.545	0.6	0.49	0.006	0.078	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-04/01/93	2	1.715	1.715	1.73	1.7	0.	0.021	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-04/01/93	2	0.9	0.9	1.	0.8	0.02	0.141	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-04/01/93	2	4.4	4.4	4.5	4.3	0.02	0.141	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-04/01/93	2	5.75	5.75	6.1	5.4	0.245	0.495	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-04/01/93	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-04/01/93	2	2.225	2.225	2.53	1.92	0.186	0.431	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0268

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	2	2	1.00				1	1	1.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	2	2	1.00				1	1	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	2	0	0.00				1	0	0.00	1	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	2	0	0.00				1	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	2	0	0.00				1	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	2	0	0.00				1	0	0.00	1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0269

NPS Station ID: SHEN0269
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.328531/ -78.667393

Depth of Water: 0
 Elevation: 1270
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TM12 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.03 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0269

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-11/19/94	5	10.5	12.9	19.5	6.	34.175	5.846	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-11/19/94	5	22.	22.2	25.	20.	3.7	1.924	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-11/19/94	5	5.83	5.81	5.86	5.71	0.004	0.06	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-11/19/94	5	5.83	5.806	5.86	5.71	0.004	0.061	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-11/19/94	5	1.479	1.561	1.95	1.38	0.053	0.231	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-11/19/94	5	22.	21.6	24.	20.	2.8	1.673	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-11/19/94	5	6.6	6.7	12.	2.9	11.125	3.335	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-11/19/94	5	0.7	0.68	0.7	0.6	0.002	0.045	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-11/19/94	5	0.7	0.7	0.8	0.6	0.005	0.071	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-11/19/94	5	0.63	0.656	0.84	0.52	0.015	0.122	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-11/19/94	5	1.85	1.908	2.16	1.72	0.041	0.202	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-11/19/94	5	0.9	0.9	1.	0.8	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-11/19/94	5	5.2	5.18	6.1	4.4	0.447	0.669	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-11/19/94	5	6.3	5.94	7.6	4.7	1.543	1.242	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-11/19/94	5	1.2	1.081	1.8	0.006	0.434	0.659	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-11/19/94	5	1.49	1.574	1.97	1.39	0.056	0.236	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0269

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	2	2	1.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	2	2	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0270

NPS Station ID: SHEN0270
 Location: Twomile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.329198/ -78.667865

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F102
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0270

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-06/24/98	4	17.	16.9	17.5	16.1	0.4	0.632	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/24/96-06/24/98	3	17.	17.333	18.	17.	0.333	0.577	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/24/96-06/24/98	3	8.3	8.3	8.3	8.3	0.	0.	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/24/96-06/24/98	3	5.33	5.52	5.95	5.28	0.139	0.373	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/24/96-06/24/98	3	5.33	5.434	5.95	5.28	0.15	0.388	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/24/96-06/24/98	3	4.677	3.682	5.248	1.122	4.998	2.236	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/24/98-06/24/98	1	11.	11.	11.	11.	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/24/96-06/24/98	3	4.18	3.977	4.95	2.8	1.187	1.089	**	**	**
83509	STREAM, WIDTH METER	06/24/96-06/24/98	3	4.1	4.	4.5	3.4	0.31	0.557	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/24/96-06/24/98	3	0.01	0.013	0.02	0.01	0.	0.006	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0270

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding		-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard	Obs	Exceed	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00												
00406	PH, FIELD	Fresh Chronic	9.	3	0	0.00												
		Other-Lo Lim.	6.5	3	3	1.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0271

NPS Station ID: SHEN0271
 Location: Twomile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.333698/ -78.671781

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_LTEM_3L303
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle just outside Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0271

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/14/97	37	16.4	15.77	21.3	4.7	14.103	3.755	11.26	13.	18.35	20.76
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/13/95-05/14/97	4	16.	16.25	18.	15.	1.583	1.258	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/21/89-05/14/97	30	9.65	9.547	13.2	6.8	2.854	1.689	7.62	8.	10.625	12.
00406 PH, FIELD, STANDARD UNITS SU	05/29/91-05/14/97	15	6.05	6.545	8.95	5.46	1.627	1.275	5.484	5.67	6.64	8.944
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/29/91-05/14/97	15	6.05	5.928	8.95	5.46	2.035	1.427	5.484	5.67	6.64	8.944
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/29/91-05/14/97	15	0.891	1.181	3.467	0.001	1.257	1.121	0.001	0.229	2.138	3.284
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/13/95-05/14/97	4	10.	10.	11.	9.	0.667	0.816	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0271

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	30	0	0.00	15	0	0.00	1	0	0.00	14	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	15	0	0.00	7	0	0.00	1	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	15	11	0.73	7	7	1.00	1	1	1.00	7	3	0.43			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0271

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/14/97	18	17.5	17.644	20.7	12.4	4.326	2.08	14.74	16.475	19.575	20.52
00300 OXYGEN, DISSOLVED MG/L	06/21/89-05/14/97	15	8.2	8.52	10.	6.8	0.869	0.932	7.28	7.9	9.	10.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0271

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/14/97	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/21/89-05/14/97	1	13.2	13.2	13.2	13.2	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0271

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/89-05/14/97	18	14.3	14.511	21.3	8.7	12.933	3.596	10.14	11.9	15.5	21.03
00300 OXYGEN, DISSOLVED MG/L	06/21/89-05/14/97	14	10.35	10.386	13.	7.	2.429	1.559	7.5	9.9	11.325	12.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0272

NPS Station ID: SHEN0272
 Location: Twomile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.333753/ -78.671448

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_FISH_3F103
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0272

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/28/94-06/24/98	6	19.35	19.167	20.	18.2	0.523	0.723	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/24/96-06/24/98	3	17.	17.	17.	17.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/28/94-06/24/98	6	8.8	8.75	9.	8.4	0.079	0.281	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/28/94-06/24/98	5	5.96	6.498	7.82	5.51	1.299	1.14	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/28/94-06/24/98	5	5.96	5.855	7.82	5.51	1.816	1.348	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/28/94-06/24/98	5	1.096	1.396	3.09	0.015	2.149	1.466	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/24/98-06/24/98	1	11.	11.	11.	11.	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/24/96-06/24/98	3	4.09	4.183	5.36	3.1	1.283	1.133	**	**	**
83509	STREAM, WIDTH METER	06/24/96-06/24/98	3	3.9	3.9	4.3	3.5	0.16	0.4	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/24/96-06/24/98	3	0.02	0.017	0.02	0.01	0.	0.006	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0272

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding		-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard	Obs	Exceed	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00							6	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	5	0	0.00							5	0	0.00			
		Other-Lo Lim.	6.5	5	3	0.60							5	3	0.60			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0273

NPS Station ID: SHEN0273
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.333892/ -78.671392

Depth of Water: 0
 Elevation: 1220
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH53
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RH 53 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.53 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0273

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	5.77	5.77	5.77	5.77	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	5.77	5.77	5.77	5.77	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	1.698	1.698	1.698	1.698	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.51	0.51	0.51	0.51	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	1.49	1.49	1.49	1.49	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0273

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0274

NPS Station ID: SHEN0274
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.333920/ -78.671420

Depth of Water: 0
 Elevation: 1220
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_TM01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TM01 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.56 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0274

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/13/92-11/19/94	5	10.5	12.7	19.	6.	33.325	5.773	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/13/92-11/19/94	5	20.	19.8	21.	17.	2.7	1.643	**	**	**	**
00400	PH (STANDARD UNITS)	03/13/92-11/19/94	5	5.95	5.866	5.98	5.68	0.018	0.133	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/13/92-11/19/94	5	5.95	5.849	5.98	5.68	0.018	0.135	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/13/92-11/19/94	5	1.122	1.416	2.089	1.047	0.21	0.459	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/13/92-11/19/94	5	19.	18.8	20.	16.	2.7	1.643	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/13/92-11/19/94	5	4.4	5.54	12.8	0.3	22.083	4.699	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/13/92-11/19/94	5	0.6	0.62	0.7	0.5	0.007	0.084	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/13/92-11/19/94	5	0.6	0.62	0.7	0.5	0.007	0.084	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/13/92-11/19/94	5	0.65	0.648	0.73	0.55	0.005	0.072	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/13/92-11/19/94	5	1.55	1.61	1.73	1.51	0.011	0.106	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/13/92-11/19/94	5	0.9	0.9	1.	0.8	0.005	0.071	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/13/92-11/19/94	5	4.7	4.6	5.6	3.3	0.76	0.872	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/13/92-11/19/94	5	6.5	6.14	7.8	4.9	1.463	1.21	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/13/92-11/19/94	5	0.8	0.701	1.1	0.006	0.173	0.416	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/13/92-11/19/94	5	1.13	1.43	2.11	1.06	0.216	0.465	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0274

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	5	5	1.00	2	2	1.00	2	2	1.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	2	2	1.00	2	2	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	2	0	0.00	2	0	0.00	1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0275

NPS Station ID: SHEN0275
 Location: TWOMILE RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.333920/ -78.671476

Depth of Water: 0
 Elevation: 1220
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_SWAS_VT53
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT53 IS LOCATED ON THE MCGAHEYSVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT TWOMILE RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.56 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0275

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-07/30/97	29	10.	10.993	19.	2.4	29.654	5.446	4.	7.	16.75	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/14/87-07/30/97	41	19.	18.976	23.	16.	2.074	1.44	17.	18.	20.	21.
00400	PH (STANDARD UNITS)	08/14/87-07/30/97	41	5.98	5.945	6.21	5.37	0.035	0.187	5.638	5.85	6.08	6.146
00400	CONVERTED PH (STANDARD UNITS)	08/14/87-07/30/97	41	5.98	5.9	6.21	5.37	0.037	0.192	5.638	5.85	6.08	6.146
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/14/87-07/30/97	41	1.047	1.259	4.266	0.617	0.487	0.698	0.715	0.832	1.413	2.309
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/14/87-07/30/97	41	18.	18.463	22.	16.	1.905	1.38	17.	17.5	19.5	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/14/87-07/30/97	41	22.8	42.998	140.4	2.8	1636.343	40.452	6.34	10.75	74.75	113.32
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/14/87-07/30/97	41	0.6	0.573	0.7	0.5	0.003	0.05	0.5	0.5	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/14/87-07/30/97	41	0.6	0.578	0.7	0.5	0.004	0.061	0.5	0.5	0.6	0.68
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/14/87-07/30/97	41	0.62	0.621	0.73	0.55	0.002	0.043	0.56	0.59	0.645	0.678
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/14/87-07/30/97	41	1.54	1.545	1.83	1.41	0.01	0.098	1.422	1.47	1.59	1.696
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/14/87-07/30/97	41	0.8	0.844	1.	0.7	0.005	0.067	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/14/87-07/30/97	41	4.7	4.566	5.6	2.9	0.342	0.585	3.72	4.25	5.	5.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/14/87-07/30/97	41	5.9	5.963	8.8	4.	1.081	1.04	4.72	5.1	6.9	7.3
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	6	11.76	11.471	16.785	4.482	22.577	4.752	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-07/30/97	15	11.144	12.271	20.674	6.728	19.726	4.441	6.95	8.496	16.508	18.962
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/14/87-07/30/97	41	0.2	0.278	1.1	0.	0.104	0.322	0.	0.006	0.5	0.8
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/14/87-07/30/97	41	1.06	1.27	4.3	0.62	0.494	0.703	0.718	0.84	1.42	2.33

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0275

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
	Other-Lo Lim.	6.5	41	41	1.00	11	11	1.00	20	20	1.00	10	10	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	41	41	1.00	11	11	1.00	20	20	1.00	10	10	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
	Fresh Acute	860.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
	Drinking Water	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				
	Drinking Water	44.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0275

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	18.	18.545	23.	17.	2.873	1.695	17.	18.	19.	22.4
00400	PH (STANDARD UNITS)	11	5.96	5.912	6.21	5.37	0.06	0.246	5.42	5.76	6.08	6.188
00400	CONVERTED PH (STANDARD UNITS)	11	5.96	5.838	6.21	5.37	0.067	0.258	5.42	5.76	6.08	6.188
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	1.096	1.453	4.266	0.617	1.132	1.064	0.652	0.832	1.738	3.892
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11	18.	18.182	22.	16.	3.164	1.779	16.2	17.	20.	21.6
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11	22.8	35.945	74.4	11.2	609.055	24.679	11.2	19.4	59.6	74.38
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11	0.5	0.555	0.7	0.5	0.005	0.069	0.5	0.5	0.6	0.68
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11	0.5	0.536	0.7	0.5	0.005	0.067	0.5	0.5	0.6	0.68
00930	SODIUM, DISSOLVED (MG/L AS NA)	11	0.64	0.639	0.68	0.61	0.	0.019	0.612	0.63	0.65	0.676
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11	1.57	1.595	1.83	1.43	0.013	0.113	1.438	1.54	1.68	1.808
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11	0.8	0.8	0.9	0.7	0.002	0.045	0.72	0.8	0.8	0.88
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11	4.	3.927	5.	2.9	0.326	0.571	2.96	3.6	4.3	4.86
00955	SILICA, DISSOLVED (MG/L AS SI02)	11	7.	7.018	8.8	6.	0.578	0.76	6.02	6.5	7.3	8.56
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11	0.5	0.428	1.1	0.	0.125	0.354	0.	0.009	0.6	1.04
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11	1.11	1.465	4.3	0.62	1.149	1.072	0.656	0.84	1.75	3.924

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0275

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	20	19.5	19.45	22.	17.	1.418	1.191	18.	19.	20.	21.
00400	PH (STANDARD UNITS)	20	5.965	5.926	6.19	5.58	0.027	0.165	5.614	5.813	6.047	6.089
00400	CONVERTED PH (STANDARD UNITS)	20	5.965	5.894	6.19	5.58	0.028	0.169	5.614	5.812	6.047	6.089
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	20	1.085	1.277	2.63	0.646	0.3	0.548	0.815	0.896	1.542	2.443
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	20	19.	18.9	21.	16.	1.358	1.165	17.1	18.	20.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	20	24.4	48.585	140.4	2.8	2227.781	47.199	3.05	9.1	87.	130.76
00915	CALCIUM, DISSOLVED (MG/L AS CA)	20	0.6	0.585	0.6	0.5	0.001	0.037	0.5	0.6	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	20	0.6	0.6	0.7	0.5	0.003	0.056	0.5	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	20	0.615	0.616	0.73	0.55	0.002	0.047	0.56	0.575	0.653	0.679
00935	POTASSIUM, DISSOLVED (MG/L AS K)	20	1.505	1.523	1.7	1.41	0.009	0.093	1.411	1.44	1.605	1.656
00941	CHLORIDE, DISSOLVED IN WATER MG/L	20	0.9	0.865	1.	0.8	0.004	0.067	0.8	0.8	0.9	0.99
00946	SULFATE, DISSOLVED (MG/L AS SO4)	20	4.9	4.82	5.6	3.7	0.204	0.451	3.95	4.6	5.1	5.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	20	5.8	5.935	7.4	5.	0.579	0.761	5.	5.3	6.3	7.27
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	20	0.009	0.203	0.8	0.	0.085	0.292	0.	0.	0.4	0.79
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	20	1.095	1.288	2.65	0.65	0.303	0.551	0.822	0.905	1.548	2.46

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0275

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	18.5	18.5	21.	16.	2.056	1.434	16.1	17.75	19.25	20.9
00400	PH (STANDARD UNITS)	10	6.07	6.02	6.16	5.71	0.022	0.147	5.724	5.94	6.135	6.159
00400	CONVERTED PH (STANDARD UNITS)	10	6.068	5.995	6.16	5.71	0.022	0.149	5.724	5.94	6.135	6.159
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.855	1.011	1.95	0.692	0.159	0.399	0.693	0.733	1.157	1.896
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10	18.	17.9	20.	16.	1.211	1.101	16.1	17.	18.25	19.9
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10	12.4	39.58	125.4	6.9	1749.675	41.829	6.99	8.475	75.125	120.38
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10	0.6	0.57	0.6	0.5	0.002	0.048	0.5	0.5	0.6	0.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10	0.6	0.58	0.6	0.5	0.002	0.042	0.5	0.575	0.6	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	10	0.6	0.61	0.71	0.55	0.003	0.051	0.55	0.565	0.64	0.706
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10	1.52	1.535	1.73	1.47	0.006	0.075	1.47	1.485	1.553	1.713
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10	0.8	0.85	1.	0.8	0.005	0.071	0.8	0.8	0.9	0.99
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10	4.75	4.76	5.2	4.5	0.043	0.207	4.51	4.6	4.9	5.17
00955	SILICA, DISSOLVED (MG/L AS SI02)	10	4.95	4.86	5.6	4.	0.227	0.477	4.03	4.525	5.2	5.56

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0275

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/14/87-07/30/97	10	0.2	0.265	1.	0.	0.102	0.32	0.001	0.009	0.375	0.96
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/14/87-07/30/97	10	0.86	1.019	1.97	0.7	0.162	0.403	0.701	0.74	1.165	1.915

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0276

NPS Station ID: SHEN0276
 Location: Twomile Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.333920 / -78.671476

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_PARK_VTS53
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the McGaheysville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0276

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-10/29/97	6	11.15	10.783	17.5	5.1	21.17	4.601	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-10/29/97	6	16.	16.5	19.	15.	1.9	1.378	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/26/95-10/29/97	5	8.9	9.	11.1	6.5	3.48	1.865	**	**	**	**
00301 OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/30/96-10/30/96	1	85.7	85.7	85.7	85.7	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/26/95-10/29/97	6	6.015	5.912	6.14	5.42	0.077	0.278	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/26/95-10/29/97	6	6.009	5.826	6.14	5.42	0.086	0.293	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/95-10/29/97	6	0.98	1.494	3.802	0.724	1.412	1.188	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-10/29/97	6	10.5	10.5	12.	9.	1.1	1.049	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0276

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	6	1.00	1	1	1.00	3	3	1.00	2	2	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0277

NPS Station ID: SHEN0277
 Location: TWOMILE RUN NEAR MCGAHEYSVILLE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005022604.96
 Description:

LAT/LON: 38.334448/ -78.672226

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 4.99

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628700
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0277

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/23/81-06/22/82	5	13.5	10.2	15.	2.	34.325	5.859	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/23/81-06/22/82	5	0.9	1.7	5.	0.2	3.89	1.972	**	**	**	**
00400	PH (STANDARD UNITS)	09/23/81-06/22/82	5	5.8	5.84	6.	5.7	0.013	0.114	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/23/81-06/22/82	5	5.8	5.828	6.	5.7	0.013	0.115	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/23/81-06/22/82	5	1.585	1.485	1.995	1.	0.142	0.376	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/23/81-06/22/82	5	6.	5.94	6.	5.8	0.018	0.134	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/23/81-06/22/82	5	6.	5.923	6.1	5.8	0.018	0.135	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/23/81-06/22/82	5	1.	1.193	1.585	0.794	0.135	0.368	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/23/81-06/22/82	5 ##	0.005	0.01	0.03	0.005	0.	0.011	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/23/81-06/22/82	5	0.07	0.068	0.1	0.04	0.001	0.024	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/23/81-06/22/82	5	4.	3.34	4.	0.7	2.178	1.476	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/23/81-06/22/82	5	0.5	0.54	0.7	0.4	0.013	0.114	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/23/81-06/22/82	5	0.6	0.58	0.6	0.5	0.002	0.045	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/23/81-06/22/82	5	0.6	0.64	0.7	0.6	0.003	0.055	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/23/81-06/22/82	5	0.1	0.14	0.2	0.1	0.003	0.055	**	**	**	**
00932	SODIUM, PERCENT	09/23/81-06/22/82	5	19.	20.4	26.	18.	11.3	3.362	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/23/81-06/22/82	5	1.4	1.34	1.5	1.	0.043	0.207	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/23/81-06/22/82	5	0.8	0.8	0.9	0.7	0.005	0.071	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/23/81-06/22/82	5	4.	4.4	5.	4.	0.3	0.548	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/23/81-06/22/82	5	4.8	5.14	6.2	4.7	0.413	0.643	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/21/82-05/21/82	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0277

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00403	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
00631	Drinking Water	10.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0277

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	5	0	0	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0278

NPS Station ID: SHEN0278
 Location: SWIFT RUN AT LYDIA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204022900.00
 Description:

LAT/LON: 38.341948/ -78.511116

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.57

Agency: 112WRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): 02032589
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 21.10
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0278

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/25/82	6	13.5	11.333	15.	2.5	23.267	4.824	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/25/82	6	4.	5.167	15.	1.	26.967	5.193	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/25/82	6	7.	7.017	7.4	6.6	0.09	0.299	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/25/82	6	7.	6.933	7.4	6.6	0.098	0.313	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/25/82	6	0.1	0.117	0.251	0.04	0.006	0.078	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/25/82	6	7.2	7.167	7.3	7.	0.019	0.137	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/25/82	6	7.2	7.148	7.3	7.	0.019	0.138	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/25/82	6	0.063	0.071	0.1	0.05	0.001	0.023	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/25/82	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/25/82	6	0.1	0.145	0.3	0.01	0.016	0.125	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/25/82	6	15.5	13.667	18.	4.	25.067	5.007	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/25/82	6	4.05	4.	4.5	3.3	0.2	0.447	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/25/82	6	1.45	1.483	1.8	1.2	0.054	0.232	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/25/82	6	3.65	3.667	4.	3.3	0.067	0.258	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/25/82	6	0.4	0.4	0.4	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/25/82	6	33.	32.667	36.	30.	5.867	2.422	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/25/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/25/82	6	6.5	6.333	8.	5.	1.467	1.211	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/25/82	6	3.	3.167	4.	3.	0.167	0.408	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/25/82	6	11.	11.	12.2	9.7	1.068	1.033	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/21/82-05/21/82	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0278

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0278

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0279

NPS Station ID: SHEN0279
 Location: Swift Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.342003/ -78.511838

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_FISH_3F041
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Swift Run Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0279

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/95-06/22/98	2	16.15	16.15	16.5	15.8	0.245	0.495	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/11/95-06/22/98	2	63.	63.	70.	56.	98.	9.899	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/11/95-06/22/98	2	9.35	9.35	9.7	9.	0.245	0.495	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/11/95-06/22/98	2	6.865	6.865	6.9	6.83	0.002	0.049	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/11/95-06/22/98	2	6.864	6.864	6.9	6.83	0.002	0.05	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/11/95-06/22/98	2	0.137	0.137	0.148	0.126	0.	0.016	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/11/95-06/22/98	2	42.5	42.5	45.	40.	12.5	3.536	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/22/98-06/22/98	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**
83509	STREAM, WIDTH METER	06/22/98-06/22/98	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0279

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0280

NPS Station ID: SHEN0280
 Location: 1.3 MILES UPSTREAM OF RT. 649 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.342227/ -78.713892

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF093.74
 Within Park Boundary: No

Date Created: 04/10/99

Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: SOUTH FORK SHENANDOAH RIVER

AMBIENT MONITORING SECTION: 03 BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 TOPO MAP #: 187C TOPO MAP NAME: MCGAHEYSVILLE, VA

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0280

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0281

NPS Station ID: SHEN0281
 Location: VAGE501R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86

LAT/LON: 38.343810/ -78.533892

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_NURE_42 /4089628
 Within Park Boundary: Yes

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE SWIFT RUN GAP VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS INSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0281

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/17/77-01/17/77	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/17/77-01/17/77	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/17/77-01/17/77	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/17/77-01/17/77	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/17/77-01/17/77	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/17/77-01/17/77	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/17/77-01/17/77	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/17/77-01/17/77	1	1.55	1.55	1.55	1.55	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/17/77-01/17/77	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/17/77-01/17/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/17/77-01/17/77	1	20.	20.	20.	20.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/17/77-01/17/77	1	0.018	0.018	0.018	0.018	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/17/77-01/17/77	1	5300.	5300.	5300.	5300.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/17/77-01/17/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0281

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0282

NPS Station ID: SHEN0282
 Location: RT. 651 BRIDGE (ROCKINGHAM COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070005000314.57

LAT/LON: 38.345559/ -78.733059

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 14.57

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: CUB RUN SECTION: 03 TOPO MAP #: 0054 TOPO MAP NAME: MCGAHEYSVILLE, VA

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BCBR000.80
 Within Park Boundary: No

Date Created: 08/24/91

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.20
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0282

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	29	13.5	13.772	25.9	1.5	66.131	8.132	3.8	5.6	22.2	23.7
00070	TURBIDITY, (JACKSON CANDLE UNITS)	2	6.8	6.8	11.	2.6	35.28	5.94	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	17	3.4	6.141	46.	0.7	112.679	10.615	0.94	1.65	4.45	18.
00080	COLOR (PLATINUM-COBALT UNITS)	4	22.5	27.5	50.	15.	257.667	16.052	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	26	403.	533.538	4303.	144.	596618.338	772.411	295.3	353.75	448.25	473.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	26	10.7	10.881	18.6	5.8	11.346	3.368	6.67	7.75	13.2	15.44
00300	OXYGEN, DISSOLVED MG/L	2	13.6	13.6	14.3	12.9	0.98	0.99	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	26	1.	1.185	5.	0.5	0.861	0.928	0.5	0.875	1.	2.4
00340	COD, .25N K2CR2O7 MG/L	25	9.	10.94	48.	2.5	87.361	9.347	2.5	6.	12.	20.8
00400	PH (STANDARD UNITS)	29	8.1	8.083	8.8	6.3	0.259	0.509	7.5	7.85	8.4	8.8
00400	CONVERTED PH (STANDARD UNITS)	29	8.1	7.565	8.8	6.3	0.537	0.733	7.5	7.85	8.4	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	29	0.008	0.027	0.501	0.002	0.008	0.092	0.002	0.004	0.014	0.032
00403	PH, LAB, STANDARD UNITS SU	26	8.2	8.165	8.9	7.5	0.108	0.329	7.67	7.975	8.4	8.56
00403	CONVERTED PH, LAB, STANDARD UNITS	26	8.2	8.047	8.9	7.5	0.123	0.35	7.67	7.975	8.4	8.56
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	26	0.006	0.009	0.032	0.001	0.	0.007	0.003	0.004	0.011	0.022
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	26	173.5	160.615	216.	2.	2718.486	52.139	70.	137.75	202.	212.6
00500	RESIDUE, TOTAL (MG/L)	3	235.	251.333	292.	227.	1256.333	35.445	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	3	60.	61.667	67.	58.	22.333	4.726	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	3	177.	189.667	232.	160.	1416.333	37.634	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	26	4.	23.077	422.	1.5	6715.034	81.945	1.5	1.5	7.5	33.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	26 ##	1.5	3.769	51.	1.	94.405	9.716	1.	1.5	1.5	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	26	3.	19.923	372.	1.5	5225.174	72.285	1.5	1.5	6.5	27.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	27 ##	0.02	0.048	0.29	0.02	0.003	0.058	0.02	0.02	0.07	0.114
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	27	0.01	0.016	0.06	0.005	0.	0.016	0.005	0.005	0.02	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	27	2.15	2.002	4.53	0.02	1.394	1.181	0.088	1.1	2.85	3.244
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	27	0.3	0.443	2.2	0.05	0.162	0.403	0.18	0.2	0.5	0.82
00665	PHOSPHORUS, TOTAL (MG/L AS P)	27 ##	0.05	0.089	0.6	0.05	0.012	0.108	0.05	0.05	0.1	0.12
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	2 ##	0.023	0.023	0.04	0.005	0.001	0.025	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	16	3.3	4.544	16.8	1.6	15.555	3.944	1.6	2.525	3.975	12.53
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	25	200.	180.2	236.	16.	2859.917	53.478	84.	164.5	215.	233.8
00940	CHLORIDE, TOTAL IN WATER MG/L	26	11.	10.385	16.	5.	6.406	2.531	7.1	9.	12.	14.
00945	SULFATE, TOTAL (MG/L AS SO4)	26	15.	15.808	24.	10.	16.162	4.02	11.	12.75	19.	22.
00951	FLUORIDE, TOTAL (MG/L AS F)	5 ##	0.05	0.11	0.25	0.05	0.008	0.089	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0282

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00955	SILICA, DISSOLVED (MG/L AS SI02)	01/07/92-11/12/92	4	5.	4.7	8.5	0.3	13.033	3.61	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/27/92-07/31/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/27/92-07/31/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-07/31/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-07/31/96	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/27/92-07/31/96	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/27/92-07/31/96	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/31/96-07/31/96	1	333.	333.	333.	333.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/27/92-07/31/96	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/27/92-07/31/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/27/92-07/31/96	1	23.	23.	23.	23.	0.	0.	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/31/96-07/31/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/31/96-07/31/96	1	3650.	3650.	3650.	3650.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/27/92-07/31/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/31/96-07/31/96	1	19100.	19100.	19100.	19100.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/07/92-11/30/98	26	200.	1009.615	8000.	50.	3521603.846	1876.594	50.	50.	625.	4060.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/07/92-11/30/98	26	2.239	2.415	3.903	1.699	0.521	0.722	1.699	1.699	2.795	3.608
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			259.745								
32240	TANNIN AND LIGNIN (MG/L)	07/27/92-11/12/92	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/27/92-07/31/96	1##	30.	30.	30.	30.	0.	0.	**	**	**	**
39333	ALDRIN IN BOT TOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/27/92-07/31/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-07/31/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/27/92-07/31/96	1##	70.	70.	70.	70.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/27/92-07/31/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/27/92-07/31/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/27/92-11/30/98	25	0.02	0.046	0.25	0.005	0.003	0.053	0.005	0.02	0.055	0.11
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/27/92-07/31/96	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/27/92-07/31/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/27/92-07/31/96	1##	30.	30.	30.	30.	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	07/27/92-02/23/94	7	3.9	38.543	240.	1.3	7911.77	88.948	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0282

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00			1	0	0.00	1	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	17	0	0.00	5	0	0.00	8	0	0.00	4	0	0.00		
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	26	0	0.00	8	0	0.00	12	0	0.00	6	0	0.00		
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00			1	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	29	0	0.00	9	0	0.00	13	0	0.00	7	0	0.00		
		Other-Lo Lim.	6.5	29	1	0.03	9	0	0.00	13	1	0.08	7	0	0.00		
00403	PH, LAB	Fresh Chronic	9.	26	0	0.00	7	0	0.00	13	0	0.00	6	0	0.00		
		Other-Lo Lim.	6.5	26	0	0.00	7	0	0.00	13	0	0.00	6	0	0.00		
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	27	0	0.00	8	0	0.00	13	0	0.00	6	0	0.00		
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	27	0	0.00	8	0	0.00	13	0	0.00	6	0	0.00		
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	26	0	0.00	7	0	0.00	13	0	0.00	6	0	0.00		
		Drinking Water	250.	26	0	0.00	7	0	0.00	13	0	0.00	6	0	0.00		
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	26	0	0.00	7	0	0.00	13	0	0.00	6	0	0.00		
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00		
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	26	13	0.50	8	6	0.75	12	3	0.25	6	4	0.67		
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	7	1	0.14	2	0	0.00	4	1	0.25	1	0	0.00		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0282

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	22.7	22.111	25.9	13.5	11.964	3.459	13.5	21.95	23.85	25.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	7	449.	962.	4303.	212.	2178250.	1475.89	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	8	7.5	7.5	9.3	6.6	0.8	0.894	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	7	1.	1.2	2.4	0.5	0.53	0.728	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	7	10.	12.5	28.	2.5	65.583	8.098	**	**	**	**
00400	PH (STANDARD UNITS)	9	8.	8.011	8.6	7.5	0.111	0.333	7.5	7.75	8.25	8.6
00400	CONVERTED PH (STANDARD UNITS)	9	8.	7.906	8.6	7.5	0.124	0.352	7.5	7.75	8.25	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.01	0.012	0.032	0.003	0.	0.009	0.003	0.006	0.018	0.032
00403	PH, LAB, STANDARD UNITS SU	7	8.1	8.129	8.4	7.8	0.046	0.214	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	7	8.1	8.083	8.4	7.8	0.048	0.219	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.008	0.008	0.016	0.004	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	7	200.	182.286	214.	79.	2162.571	46.503	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	7	9.	15.571	45.	1.5	255.869	15.996	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	7 ##	1.5	3.	6.	1.5	4.5	2.121	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	7	8.	13.	39.	1.5	185.25	13.611	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	8	0.075	0.065	0.13	0.02	0.002	0.041	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	8	0.01	0.019	0.05	0.005	0.	0.018	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	8	1.36	1.328	3.62	0.04	1.314	1.146	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	8	0.6	0.563	0.9	0.2	0.051	0.226	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	8 ##	0.075	0.075	0.1	0.05	0.001	0.027	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	7	210.	197.143	236.	94.	2194.81	46.849	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	7	11.	10.857	14.	5.	9.81	3.132	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	7	13.	14.857	22.	10.	25.476	5.047	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	650.	2187.5	8000.	50.	7883392.857	2807.738	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	2.812	2.856	3.903	1.699	0.688	0.829	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			717.91								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	8	0.055	0.068	0.14	0.02	0.001	0.036	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0282

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	13	5.6	6.138	12.8	1.5	10.621	3.259	1.54	4.1	8.2	11.96
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	13	398.	378.385	473.	144.	6972.423	83.501	218.8	343.5	433.5	465.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12	13.3	13.575	18.6	9.9	6.188	2.487	10.26	11.85	14.575	18.24
00310	BOD, 5 DAY, 20 DEG C MG/L	13	1.	1.3	5.	0.5	1.462	1.209	0.5	0.75	1.	3.96
00340	COD, .25N K2CR2O7 MG/L	12	7.5	11.292	48.	2.5	143.203	11.967	3.55	6.	12.	37.5
00400	PH (STANDARD UNITS)	13	8.1	8.077	8.8	6.3	0.389	0.623	6.9	7.9	8.5	8.76
00400	CONVERTED PH (STANDARD UNITS)	13	8.1	7.342	8.8	6.3	0.974	0.987	6.9	7.9	8.5	8.76
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	13	0.008	0.046	0.501	0.002	0.019	0.137	0.002	0.003	0.013	0.307
00403	PH, LAB, STANDARD UNITS SU	13	8.1	8.146	8.9	7.5	0.141	0.376	7.58	7.85	8.45	8.74
00403	CONVERTED PH, LAB, STANDARD UNITS	13	8.1	8.007	8.9	7.5	0.162	0.403	7.58	7.85	8.45	8.74
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	13	0.008	0.01	0.032	0.001	0.	0.008	0.002	0.004	0.014	0.027
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	13	157.	160.923	216.	49.	2066.91	45.463	79.4	137.5	203.	214.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	13	4.	36.269	422.	1.5	13443.192	115.945	1.5	1.5	7.	258.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	13 ##	1.5	5.308	51.	1.	188.522	13.73	1.2	1.5	1.5	31.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	13	2.	31.692	372.	1.5	10462.939	102.289	1.5	1.5	6.	227.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	13 ##	0.02	0.048	0.29	0.02	0.006	0.077	0.02	0.02	0.02	0.218
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	13 ##	0.005	0.016	0.06	0.005	0.	0.018	0.005	0.005	0.02	0.056
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	13	2.7	2.352	4.53	0.02	1.493	1.222	0.224	1.36	3.075	3.958
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	13	0.3	0.446	2.2	0.2	0.286	0.535	0.2	0.2	0.4	1.52
00665	PHOSPHORUS, TOTAL (MG/L AS P)	13 ##	0.05	0.1	0.6	0.05	0.023	0.151	0.05	0.05	0.075	0.4
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	188.5	185.083	235.	69.	2236.992	47.297	93.3	163.25	226.	234.4
00940	CHLORIDE, TOTAL IN WATER MG/L	13	11.	10.692	16.	5.	6.897	2.626	6.2	9.	12.	14.8
00945	SULFATE, TOTAL (MG/L AS SO4)	13	17.	16.769	24.	11.	17.026	4.126	11.4	13.	19.5	23.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12 ##	75.	475.	4200.	50.	1402500.	1184.272	50.	50.	250.	3120.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0282

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12 ##	1.849	2.089	3.623	1.699	0.356	0.597	1.699	1.699	2.358	3.37
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			122.846								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	12	0.02	0.042	0.25	0.005	0.005	0.068	0.005	0.006	0.04	0.196

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0282

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	16.1	17.229	23.4	7.9	26.912	5.188	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	6	370.5	369.833	410.	334.	698.567	26.43	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	6	10.2	10.	12.8	5.8	5.36	2.315	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	6	1.	0.917	1.	0.5	0.042	0.204	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	6	10.	8.417	12.	2.5	14.242	3.774	**	**	**	**
00400	PH (STANDARD UNITS)	7	8.1	8.186	8.8	7.3	0.265	0.515	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	8.1	7.913	8.8	7.3	0.351	0.593	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.008	0.012	0.05	0.002	0.	0.017	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	6	8.3	8.25	8.7	7.6	0.135	0.367	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	6	8.289	8.1	8.7	7.6	0.162	0.403	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	6	0.005	0.008	0.025	0.002	0.	0.009	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	6	152.5	134.667	188.	2.	4571.067	67.61	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	6	3.	3.25	5.	1.5	1.375	1.173	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	6 ##	1.5	1.333	1.5	1.	0.067	0.258	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	6	2.5	2.5	4.	1.5	1.	1.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	6 ##	0.02	0.027	0.04	0.02	0.	0.01	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	6	0.01	0.014	0.03	0.005	0.	0.009	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	6	2.215	2.143	3.15	0.59	0.756	0.869	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	6	0.3	0.275	0.5	0.05	0.03	0.172	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	6 ##	0.05	0.083	0.2	0.05	0.004	0.061	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	6	169.	150.667	205.	16.	4666.667	68.313	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	6	9.	9.167	11.	8.	1.367	1.169	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	6	15.	14.833	18.	12.	4.567	2.137	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	6	400.	508.333	1500.	50.	278416.667	527.652	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	6	2.602	2.476	3.176	1.699	0.289	0.537	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			299.38								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	5	0.02	0.019	0.03	0.005	0.	0.009	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0283

NPS Station ID: SHEN0283
 Location: SWIFT RUN NEAR LYDIA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204022900.00
 Description:

LAT/LON: 38.346392/ -78.525559

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 1.06

Agency: 112WRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): 02032586
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 21.50
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0283

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/25/81-09/25/81	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/25/81-09/25/81	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/25/81-09/25/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/25/81-09/25/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/25/81-09/25/81	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/25/81-09/25/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/25/81-09/25/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/25/81-09/25/81	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/25/81-09/25/81	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/25/81-09/25/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/25/81-09/25/81	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/25/81-09/25/81	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/25/81-09/25/81	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/25/81-09/25/81	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/25/81-09/25/81	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	09/25/81-09/25/81	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/25/81-09/25/81	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/25/81-09/25/81	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/25/81-09/25/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/25/81-09/25/81	1	11.1	11.1	11.1	11.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0283

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00	0	0.00	0	0.00
	Other-Lo Lim.													6.5	1	0	0.00	1	0	0.00
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00	0	0.00	0	0.00
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00	0	0.00	0	0.00
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00	0	0.00	0	0.00
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00	0	0.00	0	0.00
		Drinking Water	250.	1	0	0.00	1	0	0.00	0	0.00	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00	0	0.00	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0284

NPS Station ID: SHEN0284
 Location: HAWKSBILL CREEK TRIB NEAR SWIFT RUN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005022000.00
 Description:

LAT/LON: 38.346392/ -78.576392

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 4.01

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628900
 Within Park Boundary: No

 Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 18.70
 Distance from RF3: 0.03

Date Created: 04/24/82

 On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0284

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/22/82	6	14.5	11.417	16.	2.5	32.442	5.696	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/22/82	6	0.6	0.717	2.	0.1	0.466	0.682	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/22/82	6	7.	7.067	7.6	6.6	0.119	0.344	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/22/82	6	7.	6.964	7.6	6.6	0.131	0.362	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/22/82	6	0.1	0.109	0.251	0.025	0.006	0.079	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/22/82	6	7.2	7.225	7.5	7.	0.031	0.176	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/22/82	6	7.2	7.221	7.5	7.	0.032	0.179	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/22/82	6	0.063	0.06	0.1	0.032	0.001	0.024	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/22/82	6 ##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/22/82	6	0.095	0.18	0.4	0.01	0.03	0.173	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/22/82	6	15.	14.167	23.	3.	41.767	6.463	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/22/82	6	4.05	4.55	6.1	3.3	1.427	1.195	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/22/82	6	1.35	1.5	1.9	1.2	0.1	0.316	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/22/82	6	2.15	2.367	3.1	1.7	0.311	0.557	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/22/82	6	0.2	0.233	0.3	0.2	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/22/82	6	22.5	22.333	23.	21.	0.667	0.816	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/22/82	6	0.25	0.25	0.3	0.2	0.003	0.055	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/22/82	6	1.	0.967	1.	0.8	0.007	0.082	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/22/82	6	4.	4.167	5.	4.	0.167	0.408	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/22/82	6	12.55	13.	15.6	11.	2.852	1.689	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-06/22/82	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0284

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0284

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0285

NPS Station ID: SHEN0285
 Location: Swift Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin: NORTH ATLANTIC
 Minor Basin: JAMES RIVER
 RF1 Index: 02080204
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.349060/ -78.534254

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_FISH_3F043
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Swift Run Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0285

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/98-06/22/98	1	15.7	15.7	15.7	15.7	0.	0.	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/22/98-06/22/98	1	78.	78.	78.	78.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/22/98-06/22/98	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/22/98-06/22/98	1	6.92	6.92	6.92	6.92	0.	0.	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/22/98-06/22/98	1	6.92	6.92	6.92	6.92	0.	0.	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/22/98-06/22/98	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/22/98-06/22/98	1	50.	50.	50.	50.	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/22/98-06/22/98	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**
83509	STREAM, WIDTH METER	06/22/98-06/22/98	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0285

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00						1	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	1	0	0.00						1	0	0.00			
		Other-Lo Lim.	6.5	1	0	0.00						1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0286

NPS Station ID: SHEN0286
 Location: SWIFT RUN NEAR BACON HOLLOW, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204022900.00
 Description:

LAT/LON: 38.349170/ -78.534726

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.51

Agency: 112WRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): 02032583
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 18.20
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0286

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/25/81-09/25/81	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/25/81-09/25/81	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/25/81-09/25/81	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/25/81-09/25/81	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/25/81-09/25/81	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/25/81-09/25/81	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/25/81-09/25/81	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/25/81-09/25/81	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/25/81-09/25/81	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/25/81-09/25/81	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/25/81-09/25/81	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/25/81-09/25/81	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/25/81-09/25/81	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/25/81-09/25/81	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/25/81-09/25/81	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	09/25/81-09/25/81	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/25/81-09/25/81	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/25/81-09/25/81	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/25/81-09/25/81	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/25/81-09/25/81	1	11.1	11.1	11.1	11.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0286

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00								
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00								
		Drinking Water	250.	1	0	0.00	1	0	0.00								
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0287

NPS Station ID: SHEN0287
 Location: RT. 649 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005003
 RF3 Index: 02070005000303.50
 Description:

LAT/LON: 38.353337/ -78.699726

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 12.710
 RF3 Mile Point: 3.77

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF092.69 /VA1B03-X0073/VA1B6X0073
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.06

On/Off RF1: OFF
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 03 TOPO MAP #: 0054 TOPO MAP NAME: MCGAYESVILLE, VA

Parameter Inventory for Station: SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	101	16.7	15.172	28.9	1.1	55.61	7.457	5	7.8	21.85	24.3
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	97	10.2	10.378	16.2	6.4	3.919	1.98	7.98	8.75	11.5	13.4
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-04/18/71	12	1.9	1.942	3.4	1.1	0.47	0.686	1.16	1.325	2.375	3.19
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	101	8.5	8.451	9.5	7	0.302	0.549	7.54	8	9	9
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	101	8.5	8.083	9.5	7	0.439	0.663	7.54	8	9	9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	101	0.003	0.008	0.1	0	0	0.014	0.001	0.001	0.01	0.029
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/17/70	8	7.8	7.813	8.2	7.4	0.093	0.304	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/17/70	8	7.789	7.723	8.2	7.4	0.102	0.319	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/17/70	8	0.016	0.019	0.04	0.006	0	0.012	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/17/70	8	111.5	107.25	133	75	427.071	20.666	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-05/29/70	7	193	228.429	419	162	8188.286	90.489	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-05/29/70	7	58	66	122	26	1141.667	33.789	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-05/29/70	7	145	163.857	335	85	6307.81	79.422	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-05/29/70	7	10	44.571	238	3	7348.952	85.726	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-05/29/70	7	4	5.857	19	1	38.81	6.23	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-05/29/70	7	8	38.714	219	2	6381.238	79.883	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	62 ##	0.05	0.065	0.2	0.05	0.001	0.03	0.05	0.05	0.078	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	61	0.01	0.018	0.09	0.005	0	0.017	0.005	0.005	0.02	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	53	1.289	1.25	1.989	0.18	0.142	0.376	0.78	1.099	1.479	1.699
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	61	0.3	0.325	0.8	0.05	0.021	0.145	0.2	0.2	0.4	0.5
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/28/78-03/01/79	8	1.6	1.639	2.2	1.2	0.123	0.35	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-03/01/79	28	6.5	6.857	12	2	8.868	2.978	3	4	9	12
01002	ARSENIC, TOTAL (UG/L AS AS)	04/18/71-08/28/78	10 ##	1.25	1.6	2.5	0.5	0.656	0.81	0.55	1	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/18/71-08/28/78	14 ##	5	5.036	10	0.5	3.479	1.865	2.75	5	5	7.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/28/78	22 ##	5	7.273	20	5	20.779	4.558	5	5	10	17
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/28/78	22 ##	5	9.773	60	5	146.374	12.099	5	5	10	20
01045	IRON, TOTAL (UG/L AS FE)	11/19/70-08/28/78	3	200	166.667	200	100	3333.333	57.735	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/19/70-08/28/78	19	5	10.684	68	1	232.45	15.246	1	5	10	30
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-04/07/70	1	20	20	20	20	0	0	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-08/28/78	13 ##	50	50	50	50	0	0	50	50	50	50
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-08/28/78	22	10	16.136	110	5	504.6	22.463	5	5	20	30
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/16/68-09/08/70	13	930	2131.538	9300	230	6107947.436	2471.426	310	580	2300	7420
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	07/16/68-09/08/70	13	2.968	3.114	3.968	2.362	0.203	0.45	2.47	2.748	3.362	3.846

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =		1298.694									
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	82 ##	50.	414.634	8000.	50.	1468486.902	1211.811	50.	50.	200.	770.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	82 ##	1.699	2.064	3.903	1.699	0.294	0.542	1.699	1.699	2.301	2.886
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		115.966									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	62	0.1	0.131	0.3	0.05	0.006	0.077	0.05	0.05	0.2	0.2
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	62	0.1	0.12	0.31	0.02	0.006	0.076	0.05	0.05	0.18	0.244
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-08/28/78	22 ##	0.25	1.03	17.5	0.15	13.533	3.679	0.25	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0287

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	97	0	0.00	31	0	0.00	43	0	0.00	23	0	0.00			
00400	PH	Fresh Chronic	9.	101	26	0.26	32	14	0.44	44	6	0.14	25	6	0.24			
		Other-Lo Lim.	6.5	101	0	0.00	32	0	0.00	44	0	0.00	25	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	8	0	0.00	1	0	0.00	4	0	0.00	3	0	0.00			
		Other-Lo Lim.	6.5	8	0	0.00	1	0	0.00	4	0	0.00	3	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	61	0	0.00	17	0	0.00	29	0	0.00	15	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	53	0	0.00	14	0	0.00	25	0	0.00	14	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	8	0	0.00	3	0	0.00	4	0	0.00	1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	10	0	0.00	5	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	50.	10	0	0.00	5	0	0.00	3	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	2 &	1	0.50	1	0	0.00				1	1	1.00			
		Drinking Water	5.	2 &	1	0.50	1	0	0.00				1	1	1.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	22	3	0.14	7	0	0.00	8	1	0.13	7	2	0.29			
		Drinking Water	1300.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	19	0	0.00	7	0	0.00	8	0	0.00	4	0	0.00			
		Drinking Water	15.	19	2	0.11	7	0	0.00	8	2	0.25	4	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	13	0	0.00	5	0	0.00	4	0	0.00	4	0	0.00			
		Drinking Water	100.	13	0	0.00	5	0	0.00	4	0	0.00	4	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
		Drinking Water	5000.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	13	6	0.46	7	3	0.43	2	2	1.00	4	1	0.25			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	82	26	0.32	23	7	0.30	39	15	0.38	20	4	0.20			
71900	MERCURY, TOTAL	Fresh Acute	2.4	22	1	0.05	8	1	0.13	8	0	0.00	6	0	0.00			
		Drinking Water	2.	22	1	0.05	8	1	0.13	8	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	4	24.45	21.4	28.9	7.8	89.98	9.486	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	4	10.	9.875	11.	8.5	1.229	1.109	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	4	8.7	8.85	9.5	8.5	0.203	0.451	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	4	8.689	8.723	9.5	8.5	0.225	0.474	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	4	0.002	0.002	0.003	0.	0.	0.001	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	3	20.	16.133	22.8	5.6	85.173	9.229	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	3	11.	10.6	13.6	7.2	10.36	3.219	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	3	8.3	8.333	8.7	8.	0.123	0.351	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	3	8.3	8.246	8.7	8.	0.135	0.367	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	3	0.005	0.006	0.01	0.002	0.	0.004	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	9	20.6	15.511	25.	5.6	70.169	8.377	5.6	6.7	22.8	25.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	9	11.2	10.289	12.2	8.2	2.631	1.622	8.2	8.3	11.5	12.2
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	9	8.7	8.689	9.3	7.8	0.266	0.516	7.8	8.35	9.25	9.3
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	9	8.7	8.422	9.3	7.8	0.346	0.588	7.8	8.35	9.25	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	9	0.002	0.004	0.016	0.001	0.	0.005	0.001	0.001	0.004	0.016
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	4	0.06	0.075	0.13	0.05	0.001	0.038	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	3	0.02	0.03	0.05	0.02	0.	0.017	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	3	0.4	0.643	1.349	0.18	0.386	0.621	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	4	0.4	0.363	0.4	0.25	0.006	0.075	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	3250.	3250.	6400.	100.	19845000.	4454.773	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	2.903	2.903	3.806	2.	1.631	1.277	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			800.								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	4	0.1	0.113	0.15	0.1	0.001	0.025	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	4	0.095	0.09	0.15	0.02	0.003	0.054	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	12	16.4	14.358	25.6	3.9	55.274	7.435	4.05	6.	20.	24.43
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	12	11.25	11.2	14.8	7.4	6.867	2.621	7.58	8.6	13.775	14.62
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	12	8.6	8.475	9.	7.4	0.246	0.496	7.52	8.15	8.8	9.
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	12	8.589	8.157	9.	7.4	0.356	0.597	7.52	8.15	8.8	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	12	0.003	0.007	0.04	0.001	0.	0.011	0.001	0.002	0.007	0.033
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	150.	1212.5	8000.	50.	5821875.	2412.856	50.	50.	950.	6800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.151	2.387	3.903	1.699	0.625	0.79	1.699	1.699	2.956	3.813
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			243.755								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	11	16.7	13.991	20.	5.6	31.829	5.642	5.7	9.4	19.4	20.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	11	10.	9.991	12.3	8.4	1.921	1.386	8.4	8.4	11.	12.24
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	11	8.	8.045	9.	7.	0.383	0.619	7.08	7.7	8.6	9.
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	11	8.	7.699	9.	7.	0.515	0.718	7.08	7.7	8.6	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	11	0.01	0.02	0.1	0.001	0.001	0.029	0.001	0.003	0.02	0.088
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	1	1.489	1.489	1.489	1.489	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	100.	490.909	2200.	50.	459909.091	678.166	50.	50.	700.	2000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11	2.	2.302	3.342	1.699	0.388	0.623	1.699	1.699	2.845	3.29
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			200.273								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	12	16.4	14.483	23.3	4.4	45.887	6.774	4.91	6.825	20.	22.97
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	11	10.2	10.418	14.	7.8	4.758	2.181	7.84	8.7	11.6	14.
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	12	8.6	8.533	9.2	7.5	0.295	0.543	7.56	8.125	9.	9.14
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	12	8.589	8.186	9.2	7.5	0.427	0.654	7.56	8.125	9.	9.14
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	12	0.003	0.007	0.032	0.001	0.	0.01	0.001	0.001	0.008	0.028
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11 ##	0.05	0.072	0.14	0.05	0.001	0.032	0.05	0.05	0.1	0.132
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.01	0.015	0.04	0.005	0.	0.01	0.005	0.01	0.02	0.036
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.289	1.353	1.879	0.9	0.063	0.252	0.946	1.229	1.489	1.809
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.4	0.427	0.6	0.3	0.012	0.11	0.3	0.5	0.6	0.6
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10 ##	75.	95.	200.	50.	3583.333	59.861	50.	50.	125.	200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10 ##	1.849	1.91	2.301	1.699	0.061	0.248	1.699	1.699	2.075	2.301
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			81.225								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11 ##	0.05	0.109	0.2	0.05	0.005	0.074	0.05	0.05	0.2	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.1	0.11	0.2	0.05	0.004	0.062	0.05	0.05	0.2	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	11	16.7	15.136	23.3	2.8	44.913	6.702	3.68	10.6	21.7	23.04
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	11	10.	10.018	12.2	7.6	2.224	1.491	7.78	8.7	11.4	12.12
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	11	8.5	8.291	9.	7.5	0.291	0.539	7.5	7.7	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	11	8.5	7.996	9.	7.5	0.387	0.622	7.5	7.7	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	11	0.003	0.01	0.032	0.001	0.	0.012	0.001	0.003	0.02	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11 ##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11 ##	0.005	0.01	0.02	0.005	0.	0.007	0.005	0.005	0.02	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.199	1.202	1.699	0.78	0.099	0.314	0.78	0.8	1.399	1.659
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.3	0.291	0.5	0.1	0.011	0.104	0.12	0.2	0.3	0.48
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	77.273	200.	50.	3681.818	60.678	50.	50.	50.	200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	1.808	2.301	1.699	0.059	0.244	1.699	1.699	1.699	2.301
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			64.333								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.1	0.141	0.3	0.05	0.012	0.111	0.05	0.05	0.3	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11 ##	0.05	0.127	0.3	0.05	0.011	0.103	0.05	0.05	0.2	0.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	13	14.4	15.108	23.9	4.4	59.949	7.743	4.64	7.4	23.3	23.9
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	13	10.1	10.3	13.4	6.4	3.993	1.998	6.68	9.65	11.45	13.32
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	13	8.2	8.292	9.	7.5	0.172	0.415	7.7	8.	8.6	8.92
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	13	8.2	8.114	9.	7.5	0.207	0.455	7.7	8.	8.6	8.92
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	13	0.006	0.008	0.032	0.001	0.	0.008	0.001	0.003	0.01	0.023
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11 ##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.02	0.017	0.04	0.005	0.	0.013	0.005	0.005	0.03	0.038
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.279	1.248	1.799	0.38	0.171	0.413	0.478	0.9	1.5	1.779
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	10	0.2	0.235	0.4	0.05	0.009	0.094	0.065	0.2	0.3	0.39
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12 ##	50.	250.	1200.	50.	140909.091	375.379	50.	50.	350.	1080.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12 ##	1.699	2.04	3.079	1.699	0.285	0.534	1.699	1.699	2.527	3.026
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			109.587								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.1	0.109	0.2	0.05	0.004	0.063	0.05	0.05	0.2	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.1	0.085	0.14	0.04	0.001	0.031	0.042	0.05	0.1	0.134

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	11	14.4	14.5	26.1	1.1	70.606	8.403	1.44	8.9	22.8	25.44
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	9	10.2	10.944	14.	8.6	3.378	1.838	8.6	9.6	12.7	14.
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	11	8.7	8.564	9.1	7.3	0.333	0.577	7.4	8.2	9.	9.08
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	11	8.7	8.115	9.1	7.3	0.554	0.745	7.4	8.2	9.	9.08
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	11	0.002	0.008	0.05	0.001	0.	0.015	0.001	0.001	0.006	0.043
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.02	0.022	0.08	0.005	0.	0.02	0.006	0.01	0.02	0.07
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.389	1.367	1.989	0.49	0.16	0.4	0.62	1.179	1.599	1.967
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.3	0.282	0.6	0.05	0.027	0.165	0.05	0.2	0.4	0.56
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	113.636	500.	50.	18545.455	136.182	50.	50.	100.	440.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	1.899	2.699	1.699	0.11	0.332	1.699	1.699	2.	2.619
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			79.313								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.1	0.132	0.2	0.05	0.003	0.056	0.06	0.1	0.2	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.09	0.11	0.28	0.05	0.005	0.067	0.05	0.07	0.12	0.26

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	6	11.15	12.517	24.4	1.4	93.002	9.644	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	6	10.95	11.6	16.2	8.5	7.276	2.697	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	6	8.6	8.483	9.	8.	0.166	0.407	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	6	8.589	8.329	9.	8.	0.194	0.441	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	6	0.003	0.005	0.01	0.001	0.	0.004	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	5 ##	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	5	0.01	0.019	0.04	0.005	0.	0.015	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	5	1.199	1.193	1.399	0.87	0.05	0.223	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	5	0.4	0.35	0.5	0.05	0.035	0.187	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5 ##	50.	60.	100.	50.	500.	22.361	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5 ##	1.699	1.759	2.	1.699	0.018	0.135	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			57.435								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	5	0.2	0.2	0.3	0.1	0.005	0.071	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	5	0.2	0.194	0.28	0.06	0.007	0.085	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	7	24.5	21.186	25.2	14.	24.231	4.923	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	7	9.2	8.729	10.4	7.	1.902	1.379	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	7	9.	9.043	9.2	8.7	0.033	0.181	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	7	9.	9.007	9.2	8.7	0.034	0.185	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	7	0.001	0.001	0.002	0.001	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	6##	0.05	0.067	0.1	0.05	0.001	0.026	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	6	0.01	0.032	0.09	0.01	0.001	0.035	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	6	0.3	0.383	0.8	0.3	0.042	0.204	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6##	50.	100.	200.	50.	6000.	77.46	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6##	1.699	1.9	2.301	1.699	0.097	0.311	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			79.37								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	6	0.15	0.158	0.3	0.05	0.008	0.092	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	6	0.185	0.195	0.31	0.12	0.005	0.068	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	2	6.5	6.5	8.	5.	4.5	2.121	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	1	10.6	10.6	10.6	10.6	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	2	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	2	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	2	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	2##	0.125	0.125	0.2	0.05	0.011	0.106	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	2##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	2	0.35	0.35	0.5	0.2	0.045	0.212	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	300.	300.	300.	300.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	2.477	2.477	2.477	2.477	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			300.								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	2##	0.125	0.125	0.2	0.05	0.011	0.106	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	2	0.085	0.085	0.13	0.04	0.004	0.064	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	32	22.8	22.541	28.9	12.8	9.009	3.001	19.05	20.275	24.475	25.95
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	31	9.	9.023	11.6	6.4	1.596	1.263	7.24	8.2	10.1	10.9
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	32	8.7	8.703	9.5	7.7	0.2	0.447	8.	8.5	9.	9.27
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	32	8.7	8.467	9.5	7.7	0.257	0.507	8.	8.5	9.	9.27
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	32	0.002	0.003	0.02	0.	0.	0.004	0.001	0.001	0.003	0.01
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	17 ##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	17	0.01	0.011	0.04	0.005	0.	0.008	0.005	0.005	0.01	0.024
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	14	1.429	1.471	1.989	1.199	0.039	0.197	1.239	1.364	1.525	1.844
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	16	0.3	0.353	0.6	0.05	0.018	0.134	0.155	0.3	0.475	0.53
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	23 ##	50.	267.391	2200.	50.	255365.613	505.337	50.	50.	200.	1040.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	23 ##	1.699	2.04	3.342	1.699	0.253	0.503	1.699	1.699	2.301	3.009
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				109.609								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	17	0.2	0.179	0.3	0.05	0.005	0.069	0.09	0.1	0.2	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	17	0.18	0.169	0.3	0.05	0.005	0.069	0.09	0.11	0.2	0.284

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	44	7.5	8.27	20.	1.1	18.693	4.324	3.35	5.15	10.975	15.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	43	11.6	11.665	16.2	7.2	3.492	1.869	9.14	10.4	13.2	14.
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	44	8.4	8.259	9.2	7.	0.312	0.559	7.5	7.8	8.7	9.
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	44	8.4	7.914	9.2	7.	0.434	0.659	7.5	7.8	8.7	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	44	0.004	0.012	0.1	0.001	0.	0.018	0.001	0.002	0.016	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	29 ##	0.05	0.074	0.2	0.05	0.001	0.037	0.05	0.05	0.1	0.13
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	29	0.01	0.02	0.09	0.005	0.	0.021	0.005	0.005	0.02	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	25	1.279	1.256	1.879	0.18	0.131	0.362	0.842	1.099	1.479	1.771
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	29	0.3	0.326	0.8	0.05	0.03	0.172	0.05	0.2	0.4	0.6
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	39	100.	373.077	6400.	50.	1058400.81	1028.786	50.	50.	300.	700.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	39	2.	2.115	3.806	1.699	0.274	0.524	1.699	1.699	2.477	2.845
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				130.17								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	29	0.1	0.131	0.3	0.05	0.007	0.084	0.05	0.05	0.2	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	29	0.1	0.118	0.31	0.03	0.006	0.079	0.04	0.06	0.155	0.28

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0287

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-03/01/79	25	18.3	17.888	25.1	5.6	19.177	4.379	10.9	16.15	20.6	22.88
00300	OXYGEN, DISSOLVED MG/L	07/16/68-03/01/79	23	10.	9.8	13.4	7.1	2.081	1.443	7.72	8.7	10.8	11.32
00400	PH (STANDARD UNITS)	07/16/68-03/01/79	25	8.6	8.468	9.2	7.3	0.288	0.537	7.62	8.	8.95	9.08
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-03/01/79	25	8.6	8.123	9.2	7.3	0.412	0.642	7.62	8.	8.95	9.08
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-03/01/79	25	0.003	0.008	0.05	0.001	0.	0.012	0.001	0.001	0.01	0.025
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	16 ##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	15	0.02	0.024	0.06	0.005	0.	0.014	0.005	0.02	0.03	0.048
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	14	1.104	1.019	1.799	0.38	0.176	0.42	0.39	0.708	1.309	1.599
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	16	0.3	0.294	0.5	0.2	0.009	0.093	0.2	0.2	0.375	0.43
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	20 ##	50.	665.	8000.	50.	3752131.579	1937.042	50.	50.	100.	3620.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	20 ##	1.699	1.995	3.903	1.699	0.402	0.634	1.699	1.699	2.	3.472
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				98.773								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	16	0.1	0.081	0.15	0.05	0.001	0.031	0.05	0.05	0.1	0.115
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	16 ##	0.05	0.074	0.18	0.02	0.002	0.044	0.041	0.05	0.1	0.159

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0288

NPS Station ID: SHEN0288
 Location: RT. 649 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.354726/ -78.696115

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF092.46
 Within Park Boundary: No

Date Created: 05/08/99

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: SOUTH FORK SHENANDOAH RIVER

AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 SECTION: 03 TOPO MAP #: 187C TOPO MAP NAME: MCGAHEYSVILLE, VA

Parameter Inventory for Station: SHEN0288

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0289

NPS Station ID: SHEN0289
 Location: WALLS RUN NEAR ROCKY BAR, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005022200.00
 Description:

LAT/LON: 38.356392/ -78.663060

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 1.76

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628750
 Within Park Boundary: No

Date Created: 04/09/83

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 9.60
 Distance from RF3: 0.56

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0289

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/10/82-06/22/82	2	16.	16.	17.	15.	2.	1.414	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	06/10/82-06/22/82	2 ##	0.103	0.103	0.2	0.005	0.019	0.138	**	**	**	**
00400	PH (STANDARD UNITS)	06/10/82-06/22/82	2	4.75	4.75	4.8	4.7	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	06/10/82-06/22/82	2	4.747	4.747	4.8	4.7	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/82-06/22/82	2	17.901	17.901	19.953	15.849	8.42	2.902	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	06/10/82-06/22/82	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	06/10/82-06/22/82	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/10/82-06/22/82	2	10.	10.	10.	10.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/10/82-06/22/82	2 ##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/10/82-06/22/82	2 ##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/10/82-06/22/82	2	4.	4.	4.	4.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	06/10/82-06/22/82	2	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	06/10/82-06/22/82	2	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	06/10/82-06/22/82	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00931	SODIUM ADSORPTION RATIO	06/10/82-06/22/82	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	06/10/82-06/22/82	2	17.5	17.5	18.	17.	0.5	0.707	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	06/10/82-06/22/82	2	0.6	0.6	0.7	0.5	0.02	0.141	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	06/10/82-06/22/82	2	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	06/10/82-06/22/82	2	4.	4.	4.	4.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/10/82-06/22/82	2	3.85	3.85	4.	3.7	0.045	0.212	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	06/10/82-06/10/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0289

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00							2	2	1.00			
00403	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00							2	2	1.00			
00631	Drinking Water	10.	2	0	0.00							2	0	0.00			
	Fresh Acute	860.	2	0	0.00							2	0	0.00			
00940	Drinking Water	250.	2	0	0.00							2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0289

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0290

NPS Station ID: SHEN0290
 Location: SWIFT RUN NEAR SWIFT RUN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080204
 Major Basin:
 Minor Basin:
 RF1 Index: 02080204
 RF3 Index: 02080204023700.00
 Description:

LAT/LON: 38.356670/ -78.536948

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.68

Agency: 112WRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): 02032580
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 2.40
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0290

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/25/81-09/25/81	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/25/81-09/25/81	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/25/81-09/25/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/25/81-09/25/81	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/25/81-09/25/81	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/25/81-09/25/81	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/25/81-09/25/81	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/25/81-09/25/81	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/25/81-09/25/81	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/25/81-09/25/81	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/25/81-09/25/81	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/25/81-09/25/81	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/25/81-09/25/81	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/25/81-09/25/81	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00931	SODIUM ADSORPTION RATIO	09/25/81-09/25/81	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	09/25/81-09/25/81	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/25/81-09/25/81	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/25/81-09/25/81	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/25/81-09/25/81	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/25/81-09/25/81	1	12.4	12.4	12.4	12.4	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0290

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00				
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00				
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00				
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00				
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00				
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00				
		Drinking Water	250.	1	0	0.00	1	0	0.00				
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0291

NPS Station ID: SHEN0291
 Location: VARK505R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.356892/ -78.601199

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_NURE_17 /4091586
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE SWIFT RUN GAP VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0291

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/12/77-01/12/77	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/12/77-01/12/77	1	168.	168.	168.	168.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/12/77-01/12/77	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/12/77-01/12/77	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/12/77-01/12/77	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/12/77-01/12/77	1	100.	100.	100.	100.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/12/77-01/12/77	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/12/77-01/12/77	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/12/77-01/12/77	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/12/77-01/12/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/12/77-01/12/77	1	26.	26.	26.	26.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/12/77-01/12/77	1	0.024	0.024	0.024	0.024	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	1	7300.	7300.	7300.	7300.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	1	55.	55.	55.	55.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/12/77-01/12/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0291

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
	Drinking Water	20.	1	0	0.00				1	0	0.00						
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0292

NPS Station ID: SHEN0292
 Location: S.F.SHEN.R. RTE 649 BR MCGAHYSVL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005003
 RF3 Index: 02070005000318.42
 Description:

LAT/LON: 38.362504/ -78.700005

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 11.990
 RF3 Mile Point: 18.63

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 018 /018 /SF SHEN S-11
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0292

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	9	24.	23.444	25.	21.	2.278	1.509	21.	22.	25.	25.
00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	10	7.65	7.84	9.6	6.7	1.152	1.073	6.71	6.875	8.9	9.59
00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	10	2.85	3.39	5.3	2.3	1.341	1.158	2.31	2.475	4.375	5.29
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	330.	436.	1300.	80.	246830.	496.82	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	2.519	2.436	3.114	1.903	0.216	0.465	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			273.02								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	50.	88.	270.	20.	10970.	104.738	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	1.699	1.727	2.431	1.301	0.223	0.472	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			53.345								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0292

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	4.	10	0	0.00							10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	1000.	5	1	0.20							5	1	0.20			
31615	FECAL COLIFORM, MPN	200.	5	1	0.20							5	1	0.20			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0293

NPS Station ID: SHEN0293
 Location: S.F.SHEN.R. RTE 649 BR MCGAHYSVL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005003
 RF3 Index: 02070005000318.42
 Description:

LAT/LON: 38.362504/ -78.700005

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 11.990
 RF3 Mile Point: 18.63

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 071 /071 /SFSHEN-S11
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0293

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	23.25	23.25	24.	22.5	1.125	1.061	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	35.	35.	45.	25.	200.	14.142	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	7.05	7.05	7.3	6.8	0.125	0.354	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	2.6	2.6	2.7	2.5	0.02	0.141	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.042	0.042	0.053	0.03	0.	0.016	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	0.726	0.726	0.729	0.724	0.	0.004	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.72	1.72	1.97	1.47	0.125	0.354	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	5950.	5950.	7000.	4900.	2205000.	1484.924	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	3.768	3.768	3.845	3.69	0.012	0.11	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			5856.62								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	1	3300.	3300.	3300.	3300.	0.	0.	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-07/28/69	1	3.519	3.519	3.519	3.519	0.	0.	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			3300.								
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	10.5	10.5	12.	9.	4.5	2.121	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.535	0.535	0.54	0.53	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0293

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	1	1	1.00	1	1	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0294

NPS Station ID: SHEN0294
 Location: WEST SWIFT RUN AT SWIFT RUN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005021700.00
 Description:

LAT/LON: 38.365281/ -78.579726

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.37

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01628910
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0294

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/21/82	6	14.	10.833	15.	32.267	5.68	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/21/82	6	0.35	0.477	1.	0.18	0.424	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/21/82	5	7.1	7.14	7.5	0.053	0.23	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/21/82	5	7.1	7.097	7.5	0.055	0.235	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/21/82	5	0.079	0.08	0.126	0.032	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/21/82	6	7.15	7.167	7.3	0.015	0.121	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/21/82	6	7.147	7.153	7.3	0.015	0.122	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/21/82	6	0.071	0.07	0.1	0.05	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/21/82	6##	0.005	0.006	0.01	0.005	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/21/82	6	0.2	0.183	0.3	0.1	0.006	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/21/82	6	18.	18.333	21.	16.	3.467	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/21/82	6	4.15	4.233	5.2	3.4	0.435	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/21/82	6	1.9	1.883	2.	1.7	0.018	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/21/82	6	4.	4.	5.5	2.6	1.772	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/21/82	6	0.4	0.4	0.5	0.3	0.012	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/21/82	6	30.5	31.	37.	26.	30.4	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/21/82	6	0.4	0.383	0.5	0.3	0.006	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/21/82	6	5.5	5.5	10.	1.	15.5	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/21/82	6	2.5	2.667	4.	2.	0.667	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/21/82	6	14.75	15.167	17.3	13.4	2.227	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/21/82-05/21/82	1	0.01	0.01	0.01	0.01	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0294

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0294

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0295

NPS Station ID: SHEN0295
 Location: SOUTH RIVER NEAR MCMULLEN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103030702.92
 Description:

LAT/LON: 38.366948/ -78.460560

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 18.24

Agency: 112WRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): 01665440
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 26.40
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0295

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/22/82	6	14.	11.833	17.5	2.5	28.267	5.317	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/22/82	6	3.5	5.417	14.	0.6	29.226	5.406	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/22/82	6	6.75	6.733	7.	6.4	0.063	0.25	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/22/82	6	6.747	6.674	7.	6.4	0.067	0.259	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/22/82	6	0.179	0.212	0.398	0.1	0.015	0.121	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/22/82	6	7.05	7.017	7.1	6.9	0.01	0.098	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/22/82	6	7.047	7.007	7.1	6.9	0.01	0.099	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/22/82	6	0.09	0.098	0.126	0.079	0.001	0.023	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/22/82	6 ##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/22/82	6	0.2	0.3	0.5	0.2	0.024	0.155	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/22/82	6	10.5	10.833	13.	9.	2.167	1.472	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/22/82	6	2.55	2.567	2.9	2.3	0.063	0.25	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/22/82	6	1.	1.083	1.3	0.9	0.03	0.172	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/22/82	6	1.55	1.5	1.8	1.2	0.048	0.219	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/22/82	6	0.2	0.2	0.2	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/22/82	6	23.	22.833	24.	21.	1.367	1.169	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/22/82	6	0.2	0.183	0.2	0.1	0.002	0.041	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/22/82	6	1.	0.933	1.	0.8	0.011	0.103	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/22/82	6	3.	3.333	4.	3.	0.267	0.516	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/22/82	6	9.65	9.683	11.3	8.6	0.958	0.979	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0295

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	2	0.33	2	1	0.50	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0295

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0296

NPS Station ID: SHEN0296
 Location: RT. 613
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.368059/ -78.429726

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 3-CON005.57
 Within Park Boundary: No

Date Created: 05/18/98

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANOCK REGION: 3 NORTHERN
 RIVER: CONWAY RIVER SECTION: 04 TOPO MAP #: 186C TOPO MAP NAME: STANARDSVILLE

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0296

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0297

NPS Station ID: SHEN0297
 Location: RT. 662 BRIDGE MADISON/GREEN COUNTIES
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103041
 RF3 Index: 02080103004010.25

LAT/LON: 38.370560/ -78.365003

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 6.820
 RF3 Mile Point: 15.91

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN VIRGINIA
 RIVER: RAPIDAN RIVER SECTION: 04 TOPO MAP #: 0011 TOPO MAP NAME: ROCHELLE, VA

Agency: 21VASWCB
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 3-RAP077.28 /VA3-04-X0028/VA3-3X0028
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	65	11.5	13.123	26.1	0.1	42.932	6.552	4.78	7.65	18.9	22.98
00070	TURBIDITY, (JACKSON CANDLE UNITS)	09/26/90-04/15/92	19	1.4	2.1	8.7	0.6	3.569	1.889	0.7	0.9	2.8	4.1
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/21/94-11/05/98	17	2.	6.794	47.	0.4	147.322	12.138	0.48	0.65	5.7	27.8
00080	COLOR (PLATINUM-COBALT UNITS)	02/27/91-11/24/92	21	10.	11.524	35.	3.	49.862	7.061	3.6	7.5	13.5	21.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	11/19/91-11/05/98	46	38.	38.304	52.	28.	27.061	5.202	31.4	35.	41.25	46.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	57	33.	35.368	85.	26.	103.13	10.155	28.8	30.	36.	43.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11/19/91-11/05/98	45	10.4	10.46	13.4	8.3	1.713	1.309	8.86	9.25	11.5	12.1
00300	OXYGEN, DISSOLVED MG/L	10/22/74-10/21/91	20	11.1	10.9	14.1	8.2	2.423	1.557	8.22	9.975	11.8	13.08
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	59	1.	0.995	2.	0.5	0.186	0.432	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	56	4.5	5.214	34.	0.5	24.035	4.903	1.	2.5	6.75	9.3
00400	PH (STANDARD UNITS)	10/22/74-11/05/98	63	7.2	7.181	8.5	6.2	0.186	0.431	6.64	6.9	7.4	7.7
00400	CONVERTED PH (STANDARD UNITS)	10/22/74-11/05/98	63	7.2	6.978	8.5	6.2	0.228	0.477	6.64	6.9	7.4	7.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/22/74-11/05/98	63	0.063	0.105	0.631	0.003	0.014	0.12	0.02	0.04	0.126	0.231
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	58	6.5	6.564	7.4	6.	0.087	0.295	6.2	6.375	6.8	7.
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	58	6.5	6.475	7.4	6.	0.095	0.309	6.2	6.375	6.8	7.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	58	0.316	0.335	1.	0.04	0.044	0.209	0.1	0.158	0.424	0.631
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	59	9.	9.136	28.	5.	16.878	4.108	6.	7.	10.	13.
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	58	31.	33.181	103.	2.5	237.603	15.414	19.9	25.75	36.25	51.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	58	8.	9.784	45.	0.	62.159	7.884	2.45	5.	13.25	20.2
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	58	22.	23.586	60.	0.5	156.343	12.504	11.5	16.75	28.25	36.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	59###	2.	5.203	90.	0.5	160.949	12.687	1.5	1.5	3.	8.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	59###	1.5	1.551	10.	0.	1.609	1.269	1.	1.	1.5	2.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	59###	1.5	4.449	80.	0.5	127.678	11.299	1.	1.5	3.	7.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	68###	0.02	0.026	0.07	0.02	0.	0.013	0.02	0.02	0.02	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	68###	0.005	0.007	0.03	0.005	0.	0.006	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	68	0.245	0.234	0.5	0.02	0.02	0.141	0.02	0.133	0.34	0.44
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	68	0.1	0.15	0.9	0.05	0.015	0.124	0.05	0.05	0.2	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	60###	0.05	0.08	0.6	0.05	0.006	0.076	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/16/90-04/15/92	20	0.01	0.019	0.13	0.005	0.001	0.027	0.005	0.01	0.02	0.038
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/26/90-07/29/96	51	1.5	2.061	12.6	0.5	4.433	2.105	0.52	1.1	2.2	4.04
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	56	10.	11.839	32.	6.	30.137	5.49	7.	8.	13.75	18.9
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	57	1.	1.395	2.5	1.	0.337	0.58	1.	1.	2.	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	57	3.	4.047	44.	0.2	32.956	5.741	2.5	3.	3.	4.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00951	FLUORIDE, TOTAL (MG/L AS F)	09/26/90-12/29/92	24 ##	0.1	0.1	0.25	0.025	0.004	0.061	0.05	0.05	0.143	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/16/90-12/29/92	29	9.	9.472	12.5	5.4	2.674	1.635	7.9	8.55	10.9	11.8
01000	ARSENIC, DISSOLVED (UG/L AS AS)	05/20/97-05/20/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	06/20/91-07/21/94	3 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	10/21/91-06/16/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	06/20/91-03/25/93	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	10/21/91-06/16/97	1 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	05/20/97-05/20/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	06/20/91-07/21/94	3 ##	5.	3.833	5.	1.5	4.083	2.021	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/21/91-06/16/97	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/21/91-06/16/97	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	05/20/97-05/20/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	06/20/91-07/21/94	3 ##	5.	11.667	25.	5.	133.333	11.547	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	05/20/97-05/20/97	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	06/20/91-07/21/94	3 ##	5.	11.667	25.	5.	133.333	11.547	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	10/21/91-06/16/97	1	15.	15.	15.	15.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	06/20/91-07/21/94	3	212.	202.	220.	174.	604.	24.576	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/20/97-05/20/97	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	05/20/97-05/20/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/20/91-07/21/94	3 ##	5.	4.167	5.	2.5	2.083	1.443	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	10/21/91-06/16/97	1	236.	236.	236.	236.	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	10/21/91-06/16/97	1	192.	192.	192.	192.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	06/20/91-07/21/94	2 ##	17.5	17.5	25.	10.	112.5	10.607	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	05/20/97-05/20/97	1	13.8	13.8	13.8	13.8	0.	0.	**	**	**	**
01059	THALLIUM, TOTAL (UG/L AS TL)	06/20/91-03/25/93	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/20/97-05/20/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	06/20/91-07/21/94	3 ##	5.	11.667	25.	5.	133.333	11.547	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	10/21/91-06/16/97	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	05/20/97-05/20/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	05/20/97-05/20/97	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	06/20/91-07/21/94	3 ##	5.	11.667	25.	5.	133.333	11.547	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	10/21/91-06/16/97	1	95.	95.	95.	95.	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	05/20/97-05/20/97	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	05/20/97-05/20/97	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	05/20/97-05/20/97	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	06/20/91-07/21/94	3 ##	10.	8.333	10.	5.	8.333	2.887	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	10/21/91-06/16/97	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/22/74-11/05/98	56	50.	294.054	6700.	9.	822253.361	906.782	50.	50.	200.	500.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	10/22/74-11/05/98	56	1.699	2.017	3.826	0.954	0.257	0.507	1.699	1.699	2.301	2.699
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			103.918								
32240	TANNIN AND LIGNIN (MG/L)	05/14/92-09/29/92	2	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34480	THALLIUM DRY WGTBOTMG/KG	10/21/91-06/16/97	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
34671	PCB - 1016 TOTWUG/L	07/29/93-07/29/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
38745	2,4-DB WATER, TOTUG/L	07/29/93-07/29/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	07/29/93-07/29/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	10/21/91-10/21/91	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	10/21/91-10/21/91	1 ##	250.	250.	250.	250.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/21/91-10/21/91	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/21/91-10/21/91	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	10/21/91-10/21/91	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	07/29/93-07/29/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39383	DIELDRLN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39390	ENDRLN IN WHOLE WATER SAMPLE (UG/L)	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
39393	ENDRLN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39526	PCBS TOTAL IN SEDIMENT, DRY (ISOMER ANALYSES) UG/KG	1 ##	250.	250.	250.	250.	0.	0.	**	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	2	10.	10.	11.	9.	2.	1.414	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	8 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	48	0.02	0.022	0.09	0.005	0.	0.016	0.01	0.01	0.03	0.05
71890	MERCURY, DISSOLVED (UG/L AS HG)	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	2 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
77825	ALACHLOR WHOLE WATER, UG/L	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82036	CALCIUM-DISSOLVED UG/L (AS CA)	1	2600.	2600.	2600.	2600.	0.	0.	**	**	**	**
82037	MAGNESIUM - DISSOLVED UG/L (AS MG)	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	23	1.2	2.309	9.6	0.2	5.755	2.399	0.54	0.9	3.8	6.42

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0297

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----						
						Obs	Exceed	Obs	Exceed	Obs	Exceed	Obs	Exceed	Prop.				
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	19	0	0.00	3	0	0.00	11	0	0.00	5	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	45	0	0.00	12	0	0.00	19	0	0.00	14	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	20	0	0.00	3	0	0.00	11	0	0.00	6	0	0.00			
00400	PH	Fresh Chronic	9.	63	0	0.00	15	0	0.00	29	0	0.00	19	0	0.00			
		Other-Lo Lim.	6.5	63	4	0.06	15	0	0.00	29	3	0.10	19	1	0.05			
00403	PH, LAB	Fresh Chronic	9.	58	0	0.00	15	0	0.00	24	0	0.00	19	0	0.00			
		Other-Lo Lim.	6.5	58	33	0.57	15	7	0.47	24	14	0.58	19	12	0.63			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	68	0	0.00	17	0	0.00	29	0	0.00	22	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	68	0	0.00	17	0	0.00	29	0	0.00	22	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	57	0	0.00	15	0	0.00	25	0	0.00	17	0	0.00			
		Drinking Water	250.	57	0	0.00	15	0	0.00	25	0	0.00	17	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	57	0	0.00	15	0	0.00	25	0	0.00	17	0	0.00			
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	24	0	0.00	6	0	0.00	13	0	0.00	5	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	1	0	0.00							1	0	0.00			
		Drinking Water	50.	1	0	0.00							1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	50.	3	0	0.00	1	0	0.00				2	0	0.00			
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	2	0	0.00							2	0	0.00			
		Drinking Water	4.	0 &	0	0.00							1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
		Drinking Water	5.	1	0	0.00							1	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00									
		Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0297

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Standard	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01034 CHROMIUM, TOTAL	Drinking Water	100.	3	0	0	0.00	1	0	0.00				2	0	0.00			
01040 COPPER, DISSOLVED	Fresh Acute	18.	1	0	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	2 &	0	0	0.00							2	0	0.00			
	Drinking Water	1300.	3	0	0	0.00	1	0	0.00				2	0	0.00			
01049 LEAD, DISSOLVED	Fresh Acute	82.	1	0	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	3	0	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	15.	3	0	0	0.00	1	0	0.00				2	0	0.00			
01059 THALLIUM, TOTAL	Fresh Acute	1400.	2	0	0	0.00							2	0	0.00			
	Drinking Water	2.	0 &	0	0	0.00												
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	1	0	0	0.00							1	0	0.00			
	Drinking Water	100.	1	0	0	0.00							1	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	3	0	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	100.	3	0	0	0.00	1	0	0.00				2	0	0.00			
01075 SILVER, DISSOLVED	Fresh Acute	4.1	1	0	0	0.00							1	0	0.00			
	Drinking Water	100.	1	0	0	0.00							1	0	0.00			
01090 ZINC, DISSOLVED	Fresh Acute	120.	1	0	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	3	0	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	5000.	3	0	0	0.00	1	0	0.00				2	0	0.00			
01095 ANTIMONY, DISSOLVED	Fresh Acute	88.	1	0	0	0.00							1	0	0.00			
	Drinking Water	6.	1	0	0	0.00							1	0	0.00			
01145 SELENIUM, DISSOLVED	Fresh Acute	20.	1	0	0	0.00							1	0	0.00			
	Drinking Water	50.	1	0	0	0.00							1	0	0.00			
01147 SELENIUM, TOTAL	Fresh Acute	20.	3	0	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	50.	3	0	0	0.00	1	0	0.00				2	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	56	17	0	0.30	14	6	0.43	23	4	0.17	19	7	0.37			
34356 ENDOSULFAN, BETA, TOTAL	Fresh Acute	0.22	1	0	0	0.00	1	0	0.00									
34361 ENDOSULFAN, ALPHA, TOTAL	Fresh Acute	0.22	1	0	0	0.00	1	0	0.00									
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	1	0	0	0.00	1	0	0.00									
	Drinking Water	1.	1	0	0	0.00	1	0	0.00									
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	1	0	0	0.00	1	0	0.00									
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	1	0	0	0.00	1	0	0.00									
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	1	0	0	0.00	1	0	0.00									
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	1	0	0	0.00	1	0	0.00									
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0	0.00	1	0	0.00									
	Drinking Water	0.2	1	0	0	0.00	1	0	0.00									
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1	0	0	0.00	1	0	0.00									
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1	0	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0	0.00	1	0	0.00									
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0	0.00	1	0	0.00									
	Drinking Water	3.	1	0	0	0.00	1	0	0.00									
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0	0.00	1	0	0.00									
	Drinking Water	0.4	1	0	0	0.00	1	0	0.00									
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0	0.00	1	0	0.00									
	Drinking Water	0.2	1	0	0	0.00	1	0	0.00									
39730 2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0	0.00	1	0	0.00									
39760 SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0	0.00	1	0	0.00									
71890 MERCURY, DISSOLVED	Fresh Acute	2.4	1	0	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	2.	2	0	0	0.00	1	0	0.00				1	0	0.00			
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	23	0	0	0.00	6	0	0.00	7	0	0.00	10	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1974 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	2	9.45	9.45	11.1	7.8	5.445	2.333	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	2	0.325	0.325	0.5	0.15	0.061	0.247	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	5	12.2	14.98	26.1	6.1	84.997	9.219	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	4 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	4	0.175	0.183	0.26	0.12	0.003	0.059	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	4 ##	0.075	0.1	0.2	0.05	0.005	0.071	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	2	13.05	13.05	15.	11.1	7.605	2.758	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	2	0.265	0.265	0.27	0.26	0.	0.007	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	4	10.25	10.575	15.4	6.4	13.683	3.699	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	4	29.5	29.5	30.	29.	0.333	0.577	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	4 ##	0.75	0.75	1.	0.5	0.083	0.289	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	4	2.	2.375	5.	0.5	4.229	2.056	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	4	6.4	6.4	6.5	6.3	0.007	0.082	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	4	6.4	6.394	6.5	6.3	0.007	0.082	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	4	0.398	0.403	0.501	0.316	0.006	0.076	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	4	8.5	13.	28.	7.	100.667	10.033	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	4	29.	45.	103.	19.	1523.333	39.03	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	4	13.	19.25	45.	6.	329.583	18.154	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	4	22.5	25.875	58.	0.5	574.396	23.967	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	4	1.5	1.625	3.	0.5	1.229	1.109	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	4 ##	0.5	0.875	2.	0.5	0.563	0.75	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	4 ##	0.75	1.25	3.	0.5	1.417	1.19	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	4 ##	0.02	0.03	0.06	0.02	0.	0.02	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	4 ##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	4	0.24	0.255	0.38	0.16	0.012	0.108	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	4 ##	0.05	0.063	0.1	0.05	0.001	0.025	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	4 ##	0.05	0.063	0.1	0.05	0.001	0.025	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/26/90-07/29/96	4	1.05	0.975	1.2	0.6	0.069	0.263	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	4	9.	14.	32.	6.	146.667	12.111	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	4	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	4	3.	3.	3.	3.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	9	9.2	10.744	23.1	3.3	51.633	7.186	3.3	4.25	17.05	23.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	11	33.	32.818	37.	29.	7.964	2.822	29.	30.	35.	36.8
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	11	1.	1.136	2.	0.5	0.205	0.452	0.6	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	11	3.	3.182	7.	0.5	5.114	2.261	0.5	1.	6.	6.8
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	10	6.65	6.63	7.	6.3	0.038	0.195	6.32	6.5	6.725	6.98
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	10	6.647	6.592	7.	6.3	0.039	0.199	6.32	6.5	6.725	6.98
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	10	0.225	0.256	0.501	0.1	0.013	0.113	0.106	0.189	0.316	0.483
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	11	8.	7.818	10.	5.	2.964	1.722	5.2	6.	9.	10.
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	11	33.	30.182	40.	20.	52.364	7.236	20.	20.	36.	39.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	11	9.	10.091	18.	3.	29.891	5.467	3.4	5.	17.	17.8
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	11	20.	20.091	33.	3.	71.091	8.432	5.2	15.	25.	32.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	11 ##	2.5	2.318	4.	1.5	0.764	0.874	1.5	1.5	3.	3.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	11 ##	1.5	1.455	2.5	0.5	0.373	0.611	0.6	1.	1.5	2.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	11 ##	1.5	1.864	3.	0.5	0.555	0.745	0.7	1.5	2.5	3.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	12 ##	0.02	0.026	0.07	0.02	0.	0.015	0.02	0.02	0.02	0.061
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	12 ##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	12	0.285	0.238	0.44	0.02	0.02	0.141	0.02	0.103	0.353	0.419
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	12	0.1	0.138	0.3	0.05	0.006	0.08	0.05	0.063	0.2	0.27
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	12 ##	0.05	0.062	0.1	0.05	0.001	0.023	0.05	0.05	0.088	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/26/90-07/29/96	10	1.25	1.21	1.7	0.7	0.092	0.303	0.71	1.025	1.425	1.68
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	11	8.	9.636	22.	6.	20.655	4.545	6.	6.	10.	20.
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	11	1.	1.091	2.	1.	0.091	0.302	1.	1.	1.	1.8
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	11	3.	3.109	5.	0.2	1.571	1.253	0.76	3.	3.	5.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	11	12.2	13.445	22.4	5.6	32.179	5.673	5.98	7.9	17.4	22.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	12	30.	32.333	54.	28.	52.242	7.228	28.	28.25	33.75	48.3
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	12	1.	1.125	2.	0.5	0.188	0.433	0.65	1.	1.	2.
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	12	5.	7.917	34.	1.	76.447	8.743	1.6	3.25	9.75	27.1
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	12	6.75	6.767	7.1	6.5	0.052	0.227	6.5	6.525	7.	7.07
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	12	6.747	6.715	7.1	6.5	0.054	0.233	6.5	6.525	7.	7.07
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	12	0.179	0.193	0.316	0.079	0.009	0.094	0.086	0.1	0.3	0.316
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	12	7.	7.083	9.	5.	2.083	1.443	5.	6.	8.75	9.
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	12	28.5	26.458	41.	2.5	91.521	9.567	6.85	23.	31.5	38.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	12	6.5	7.458	24.	0.	37.794	6.148	0.75	3.25	9.75	20.1
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	12	22.	19.208	35.	2.5	105.339	10.263	3.55	8.5	24.	34.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	12	2.5	3.583	10.	1.5	6.765	2.601	1.5	2.	4.75	9.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	12	1.	1.083	2.	0.	0.22	0.469	0.3	1.	1.375	1.85
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	12	2.	2.75	8.	1.	4.886	2.211	1.	1.125	3.75	7.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	12 ##	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.034
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	12 ##	0.005	0.009	0.03	0.005	0.	0.008	0.005	0.005	0.009	0.027
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	12	0.285	0.311	0.47	0.05	0.018	0.135	0.089	0.218	0.44	0.467

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	12	0.15	0.15	0.2	0.1	0.003	0.052	0.1	0.1	0.2	0.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	12 ##	0.075	0.075	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/26/90-07/29/96	12	2.	3.617	12.6	0.5	14.127	3.759	0.5	1.1	5.475	11.43
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	12	12.	11.583	16.	8.	7.538	2.746	8.	9.25	13.5	16.
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	11	1.	1.091	2.	1.	0.091	1.302	1.	1.	1.	1.8
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	11	3.	3.	4.	2.	0.4	0.632	2.	3.	3.	4.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	10	15.45	15.09	25.	4.6	56.274	7.502	4.86	8.025	22.9	24.94
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	9	34.	33.889	39.	28.	15.361	3.919	28.	30.	37.5	39.
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	10	1.	0.85	1.	0.5	0.058	0.242	0.5	0.5	1.	1.
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	9	2.5	4.222	7.	2.	4.819	2.195	2.	2.5	6.5	7.
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	10	6.6	6.61	7.4	6.	0.172	0.415	6.02	6.275	6.85	7.36
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	10	6.589	6.456	7.4	6.	0.199	0.446	6.02	6.275	6.85	7.36
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	10	0.258	0.35	1.	0.04	0.087	0.295	0.046	0.144	0.534	0.963
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	10	9.	10.1	25.	5.	31.656	5.626	5.1	6.75	10.5	23.7
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	9	32.	30.556	51.	16.	95.278	9.761	16.	23.5	34.	51.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	9	3.	5.111	13.	0.	20.361	4.512	0.	1.5	9.	13.
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	9	22.	26.111	51.	14.	121.361	11.016	14.	19.	31.5	51.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	10 ##	1.5	2.45	7.	1.5	3.303	1.817	1.5	1.5	3.25	6.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	10 ##	1.5	1.35	1.5	1.	0.058	0.242	1.	1.	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	10 ##	1.5	2.15	6.	1.5	2.058	1.435	1.5	1.5	2.25	5.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	10 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	10 ##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	10	0.225	0.212	0.5	0.02	0.03	0.172	0.02	0.02	0.355	0.49
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	10	0.2	0.22	0.9	0.05	0.061	0.247	0.05	0.088	0.2	0.83
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	10 ##	0.05	0.11	0.6	0.05	0.03	0.173	0.05	0.05	0.063	0.55
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/26/90-07/29/96	9	1.6	1.667	4.1	0.5	1.463	1.209	0.5	0.5	2.35	4.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	9	12.	13.333	24.	8.	25.	5.	8.	9.	16.	24.
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	9	1.	1.111	2.	1.	0.111	0.333	1.	1.	1.	2.
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	9	3.	3.333	4.	3.	0.25	0.5	3.	3.	4.	4.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	10	15.9	16.08	24.3	7.5	31.773	5.637	7.87	11.425	20.425	24.16
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	10	32.5	36.3	75.	26.	193.122	13.897	26.4	30.	35.25	71.1
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	10 ##	0.5	0.8	1.6	0.5	0.171	0.414	0.5	0.5	1.2	1.56
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	10	5.	5.15	9.	2.5	5.503	2.346	2.5	2.5	7.25	8.9
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	10	6.3	6.32	6.5	6.	0.022	0.148	6.02	6.275	6.425	6.5
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	10	6.3	6.295	6.5	6.	0.022	0.15	6.02	6.275	6.425	6.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	10	0.501	0.506	1.	0.316	0.039	0.199	0.316	0.378	0.534	0.963
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	10	8.5	8.7	12.	6.	4.011	2.003	6.1	7.	10.25	11.9
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	10	32.	32.5	45.	20.	57.389	7.576	20.5	26.5	39.5	44.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	10	10.5	12.1	28.	5.	46.322	6.806	5.	7.25	15.25	26.8
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	10	21.	20.4	29.	12.	32.044	5.661	12.1	16.	24.75	28.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	10 ##	1.5	2.7	12.	1.5	10.9	3.302	1.5	1.5	1.875	11.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	10 ##	1.5	1.5	2.	1.	0.056	0.236	1.05	1.5	1.5	1.95
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	10 ##	1.5	2.4	10.	1.5	7.156	2.675	1.5	1.5	1.625	9.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10	0.005	0.01	0.03	0.005	0.	0.011	0.005	0.005	0.011	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10	0.165	0.147	0.34	0.02	0.009	0.097	0.02	0.073	0.195	0.327
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10	0.15	0.165	0.3	0.05	0.008	0.088	0.055	0.1	0.225	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10	1.5	1.63	2.7	1.	0.331	0.576	1.01	1.175	2.05	2.68
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	10	8.	8.7	11.	7.	2.233	1.494	7.	7.75	10.25	11.
00940	CHLORIDE, TOTAL IN WATER MG/L	10	1.	1.4	2.	1.	0.267	0.516	1.	1.	2.	2.
00945	SULFATE, TOTAL (MG/L AS SO4)	10	3.	3.1	4.	2.	0.322	0.568	2.1	3.	3.25	4.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	4	10.4	10.85	22.5	0.1	84.063	9.169	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	3	44.	42.	49.	33.	67.	8.185	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	4	1.05	1.05	1.6	0.5	0.203	0.451	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	4	7.5	7.625	13.	2.5	19.896	4.46	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	4	6.5	6.625	7.1	6.4	0.109	0.33	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	4	6.489	6.55	7.1	6.4	0.117	0.342	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.325	0.282	0.398	0.079	0.023	0.152	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	4	10.	10.25	15.	6.	19.583	4.425	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	4	35.	41.	67.	27.	347.333	18.637	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	4	6.25	6.5	12.	1.5	27.833	5.276	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	4	30.	35.	55.	25.	186.	13.638	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	4	5.5	12.375	37.	1.5	277.229	16.65	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	4	1.5	2.125	4.	1.5	1.563	1.25	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	4	4.25	10.75	33.	1.5	226.75	15.058	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	4	0.008	0.01	0.02	0.005	0.	0.007	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	4	0.275	0.293	0.48	0.14	0.02	0.14	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	4	0.15	0.175	0.3	0.1	0.009	0.096	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	4	0.1	0.113	0.2	0.05	0.004	0.063	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	4	2.65	2.55	3.8	1.1	1.71	1.308	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	4	14.5	17.25	30.	10.	84.917	9.215	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	4	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	4	3.	13.25	44.	3.	420.25	20.5	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	2	14.4	14.4	19.5	9.3	52.02	7.212	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	2	39.5	39.5	43.	36.	24.5	4.95	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	2	1.25	1.25	2.	0.5	1.125	1.061	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	2	9.	9.	12.	6.	18.	4.243	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	2	6.75	6.75	6.9	6.6	0.045	0.212	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	2	6.725	6.725	6.9	6.6	0.046	0.215	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	2	0.189	0.189	0.251	0.126	0.008	0.089	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	2	11.5	11.5	13.	10.	4.5	2.121	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	2	70.	70.	73.	67.	18.	4.243	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	2	14.5	14.5	22.	7.	112.5	10.607	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	2	55.5	55.5	60.	51.	40.5	6.364	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	2	59.	59.	90.	28.	1922.	43.841	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	2	6.5	6.5	10.	3.	24.5	4.95	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	2	52.5	52.5	80.	25.	1512.5	38.891	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	2 ##	0.04	0.04	0.06	0.02	0.001	0.028	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	2	0.38	0.38	0.4	0.36	0.001	0.028	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/26/90-07/29/96	2	2.1	2.1	2.4	1.8	0.18	0.424	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	2	19.5	19.5	21.	18.	4.5	2.121	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	2 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	3	6.2	7.933	14.7	2.9	37.063	6.088	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	3	39.	52.333	85.	33.	809.333	28.449	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	3 ##	1.	1.167	2.	0.5	0.583	0.764	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	3 ##	2.5	4.	7.	2.5	6.75	2.598	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	3	6.2	6.4	6.9	6.1	0.19	0.436	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	3	6.2	6.286	6.9	6.1	0.209	0.458	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	3	0.631	0.517	0.794	0.126	0.121	0.348	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	3	9.	8.667	12.	5.	12.333	3.512	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	3	38.	37.	55.	18.	343.	18.52	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	3	20.	15.667	22.	5.	86.333	9.292	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	3	16.	21.333	35.	13.	142.333	11.93	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	3	3.	2.833	4.	1.5	1.583	1.258	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	3 ##	1.5	2.	3.	1.5	0.75	0.866	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	3 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	3	0.28	0.263	0.38	0.13	0.016	0.126	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	3	0.1	0.083	0.1	0.05	0.001	0.029	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	3	10.	10.667	13.	9.	4.333	2.082	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	3 ##	2.5	2.333	2.5	2.	0.083	0.289	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	3	3.	7.5	17.	2.5	67.75	8.231	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	3	16.5	12.833	17.1	4.9	47.293	6.877	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	3	42.	39.667	43.	34.	24.333	4.933	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	3	6.4	6.367	6.4	6.3	0.003	0.058	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	3	6.4	6.364	6.4	6.3	0.003	0.058	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	3	0.398	0.432	0.501	0.398	0.004	0.06	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	3	14.	12.667	15.	9.	10.333	3.215	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	3	27.	26.667	30.	23.	12.333	3.512	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	3	7.	7.	8.	6.	1.	1.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	3	20.	19.667	22.	17.	6.333	2.517	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	3 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	3 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	3 ##	0.02	0.037	0.07	0.02	0.001	0.029	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	3	0.2	0.15	0.2	0.05	0.008	0.087	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER (MG/L)	09/26/90-11/05/98	3 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	3 ##	2.5	3.333	5.	2.5	2.083	1.443	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	15	20.9	20.44	25.	14.4	11.09	3.33	15.	17.1	23.1	24.64
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12	41.	40.667	52.	29.	39.152	6.257	30.8	35.25	45.25	50.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	15	36.	36.267	49.	28.	29.924	5.47	28.6	33.	39.	45.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12	9.	9.142	10.3	8.3	0.392	0.626	8.33	8.825	9.375	10.3
00300	OXYGEN, DISSOLVED MG/L	3	8.2	9.267	11.4	8.2	3.413	1.848	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	15	1.	0.807	1.1	0.5	0.068	0.26	0.5	0.5	1.	1.04
00340	COD, .25N K2CR2O7 MG/L	14	6.5	8.036	34.	2.5	65.21	8.075	2.5	2.875	8.5	23.5
00400	PH (STANDARD UNITS)	15	7.3	7.273	7.8	6.6	0.104	0.322	6.84	7.	7.6	7.74
00400	CONVERTED PH (STANDARD UNITS)	15	7.3	7.159	7.8	6.6	0.117	0.343	6.84	7.	7.6	7.74
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	15	0.05	0.069	0.251	0.016	0.003	0.058	0.018	0.025	0.1	0.16
00403	PH, LAB, STANDARD UNITS SU	15	6.6	6.587	7.	6.2	0.063	0.25	6.26	6.3	6.8	6.94
00403	CONVERTED PH, LAB, STANDARD UNITS	15	6.6	6.521	7.	6.2	0.067	0.259	6.26	6.3	6.8	6.94
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	15	0.251	0.301	0.631	0.1	0.028	0.168	0.116	0.158	0.501	0.553
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	15	10.	11.4	25.	7.	20.4	4.517	7.	9.	13.	19.
00500	RESIDUE, TOTAL (MG/L)	15	30.	33.2	67.	20.	144.457	12.019	20.	24.	39.	53.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	15	7.	9.133	24.	0.	38.267	6.186	1.8	6.	12.	19.8
00510	RESIDUE, TOTAL FIXED (MG/L)	15	23.	24.067	60.	3.	179.638	13.403	4.8	18.	31.	43.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	15###	1.5	4.133	28.	1.5	46.552	6.823	1.5	1.5	3.	16.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	15###	1.5	1.333	3.	0.	0.417	0.645	0.3	1.	1.5	2.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	15###	1.5	3.667	25.	1.	36.952	6.079	1.3	1.5	3.	14.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	17###	0.02	0.025	0.07	0.02	0.	0.014	0.02	0.02	0.02	0.054
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	17###	0.005	0.007	0.03	0.005	0.	0.006	0.005	0.005	0.008	0.014
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	17	0.18	0.173	0.4	0.02	0.01	0.1	0.02	0.09	0.23	0.336
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	17	0.2	0.174	0.3	0.05	0.008	0.092	0.05	0.1	0.25	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	16###	0.05	0.066	0.1	0.05	0.001	0.024	0.05	0.05	0.1	0.1
00900	HARDNESS, TOTAL (MG/L AS CACO3)	14	11.5	14.786	32.	8.	66.181	8.135	8.	9.5	19.5	31.
00940	CHLORIDE, TOTAL IN WATER MG/L	15	1.	1.333	2.5	1.	0.345	0.588	1.	1.	2.	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	15	3.	3.167	5.	2.5	0.345	0.588	2.8	3.	3.	4.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	14	100.	323.429	1300.	50.	167238.418	408.948	50.	50.	500.	1200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	14	2.	2.203	3.114	1.699	0.28	0.529	1.699	1.699	2.699	3.078
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C											
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	13	0.02	0.021	0.05	0.005	0.	0.011	0.007	0.015	0.025	0.042

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	30	7.65	8.087	18.8	0.1	13.955	3.736	3.39	5.425	11.1	12.1
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	19	39.	39.947	47.	35.	13.942	3.734	35.	37.	43.	46.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	25	33.	35.84	85.	28.	138.807	11.782	29.	30.	35.5	48.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	19	11.3	11.316	13.4	9.2	1.205	1.098	10.1	10.4	12.1	13.3
00300	OXYGEN, DISSOLVED MG/L	11	11.7	11.764	14.1	10.5	1.149	1.072	10.52	11.1	12.	13.92
00310	BOD, 5 DAY, 20 DEG C MG/L	25	1.	1.024	2.	0.5	0.202	0.449	0.5	0.75	1.	2.
00340	COD, .25N K2CR2O7 MG/L	25	3.	4.	11.	0.5	7.75	2.784	0.5	1.75	6.	7.8
00400	PH (STANDARD UNITS)	29	7.2	7.162	8.5	6.3	0.237	0.487	6.5	6.75	7.45	7.7
00400	CONVERTED PH (STANDARD UNITS)	29	7.2	6.926	8.5	6.3	0.295	0.543	6.5	6.75	7.45	7.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	29	0.063	0.119	0.501	0.003	0.017	0.132	0.02	0.036	0.179	0.316
00403	PH, LAB, STANDARD UNITS SU	24	6.4	6.554	7.4	6.	0.129	0.359	6.15	6.3	6.85	7.1
00403	CONVERTED PH, LAB, STANDARD UNITS	24	6.4	6.439	7.4	6.	0.143	0.378	6.15	6.3	6.85	7.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	24	0.398	0.364	1.	0.04	0.058	0.24	0.079	0.144	0.501	0.713
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	25	7.	8.64	28.	5.	21.907	4.68	5.	6.	10.	13.4
00500	RESIDUE, TOTAL (MG/L)	25	30.	32.9	103.	2.5	357.25	18.901	18.6	25.5	33.	59.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	25	7.	10.24	45.	1.	95.628	9.779	2.1	4.5	13.5	23.2
00510	RESIDUE, TOTAL FIXED (MG/L)	25	21.	23.	58.	0.5	171.896	13.111	8.8	14.5	28.5	43.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	25###	1.5	3.66	37.	0.5	51.765	7.195	1.3	1.5	2.75	7.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	25###	1.5	1.58	4.	0.5	0.473	0.687	0.8	1.5	1.5	2.5

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	25 ##	1.5	3.12	33.	0.5	40.923	6.397	0.5	1.5	2.	5.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	29 ##	0.02	0.026	0.06	0.02	0.	0.013	0.02	0.02	0.02	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	29 ##	0.005	0.007	0.03	0.005	0.	0.006	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	29	0.31	0.265	0.5	0.02	0.031	0.175	0.02	0.035	0.43	0.47
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	29	0.1	0.128	0.9	0.05	0.025	0.157	0.05	0.05	0.1	0.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	25 ##	0.05	0.094	0.6	0.05	0.012	0.111	0.05	0.05	0.1	0.14
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	25	10.	10.28	18.	6.	10.96	3.311	6.	8.	12.	16.
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	25	1.	1.38	2.5	1.	0.339	0.582	1.	1.	2.	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	25	3.	5.4	44.	2.	72.729	8.528	2.5	3.	4.	9.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-11/05/98	23 ##	50.	91.043	320.	9.	7011.862	83.737	30.	50.	100.	260.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-11/05/98	23 ##	1.699	1.821	2.505	0.954	0.123	0.351	1.442	1.699	2.	2.407
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/22/74-11/05/98	18	0.01	0.019	0.05	0.005	0.	0.015	0.005	0.01	0.03	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0297

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-11/05/98	20	14.85	15.19	26.1	7.2	28.328	5.322	9.21	10.3	18.6	24.11
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	11/19/91-11/05/98	15	35.	34.333	40.	28.	12.952	3.599	28.	32.	37.	38.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/26/90-11/05/98	17	30.	33.882	75.	26.	123.11	11.096	27.6	29.	34.5	46.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11/19/91-11/05/98	14	10.4	10.429	12.1	8.5	1.122	1.059	8.85	9.525	11.25	11.95
00300	OXYGEN, DISSOLVED MG/L	10/22/74-10/21/91	6	10.05	10.133	12.	8.4	1.599	1.264	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/26/90-11/05/98	19	1.	1.105	2.	0.5	0.235	0.485	0.5	1.	1.2	2.
00340	COD, .25N K2CR2O7 MG/L	09/26/90-11/05/98	17	3.	4.676	12.	2.	8.436	2.904	2.	2.5	6.	9.6
00400	PH (STANDARD UNITS)	10/22/74-11/05/98	19	7.1	7.137	8.2	6.2	0.181	0.426	6.7	6.9	7.3	7.6
00400	CONVERTED PH (STANDARD UNITS)	10/22/74-11/05/98	19	7.1	6.947	8.2	6.2	0.22	0.469	6.7	6.9	7.3	7.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/22/74-11/05/98	19	0.079	0.113	0.631	0.006	0.019	0.136	0.025	0.05	0.126	0.2
00403	PH, LAB, STANDARD UNITS SU	09/26/90-11/05/98	19	6.5	6.558	7.	6.	0.063	0.25	6.3	6.4	6.7	7.
00403	CONVERTED PH, LAB, STANDARD UNITS	09/26/90-11/05/98	19	6.5	6.49	7.	6.	0.067	0.26	6.3	6.4	6.7	7.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/26/90-11/05/98	19	0.316	0.324	1.	0.1	0.041	0.202	0.1	0.2	0.398	0.501
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	19	8.	8.	12.	5.	3.333	1.826	6.	7.	9.	11.
00500	RESIDUE, TOTAL (MG/L)	09/26/90-11/05/98	18	32.5	33.556	73.	16.	173.085	13.156	16.9	26.	38.5	53.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	09/26/90-11/05/98	18	9.	9.694	22.	0.	41.21	6.419	1.8	5.	14.	22.
00510	RESIDUE, TOTAL FIXED (MG/L)	09/26/90-11/05/98	18	22.	24.	51.	7.	132.706	11.52	13.3	16.75	25.	51.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	09/26/90-11/05/98	19	3.	8.079	90.	1.5	400.396	20.01	1.5	1.5	4.	12.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	09/26/90-11/05/98	19	1.	1.684	10.	0.5	4.173	2.043	1.	1.	1.5	2.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	09/26/90-11/05/98	19	2.	6.816	80.	1.	319.228	17.867	1.	1.5	3.	10.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-11/05/98	22 ##	0.02	0.028	0.06	0.02	0.	0.013	0.02	0.02	0.04	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	22 ##	0.005	0.007	0.02	0.005	0.	0.004	0.005	0.005	0.005	0.017
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-11/05/98	22	0.255	0.241	0.5	0.07	0.01	0.102	0.099	0.158	0.295	0.36
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-11/05/98	22	0.2	0.161	0.4	0.05	0.008	0.09	0.05	0.088	0.2	0.27
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/16/90-11/05/98	19 ##	0.05	0.074	0.2	0.05	0.001	0.039	0.05	0.05	0.1	0.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/26/90-11/05/98	17	11.	11.706	22.	6.	21.971	4.687	6.8	8.	14.5	21.2
00940	CHLORIDE, TOTAL IN WATER MG/L	09/26/90-11/05/98	17	1.	1.471	2.5	1.	0.358	0.599	1.	1.	2.	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	09/26/90-11/05/98	17	3.	2.835	4.	0.2	0.805	0.897	1.64	2.5	3.	4.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-11/05/98	19	50.	518.158	6700.	45.	2276742.251	1508.888	50.	50.	400.	640.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-11/05/98	19	1.699	2.116	3.826	1.653	0.344	0.587	1.699	1.699	2.602	2.806
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/22/74-11/05/98	17	0.02	0.025	0.09	0.01	0.	0.021	0.01	0.01	0.03	0.058

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0298

NPS Station ID: SHEN0298
 Location: SOUTH RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.377809/ -78.495309

Depth of Water: 0
 Elevation: 1760
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_VTSSS_GR07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION GR07 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE SOUTH RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.81 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0298

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.08	1.08	1.08	1.08	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0298

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0298

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0299

NPS Station ID: SHEN0299
 Location: South River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.378115/ -78.495532

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_FISH_2F069
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0299

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/95-08/17/95	1	19.5	19.5	19.5	19.5	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/17/95-08/17/95	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/17/95-08/17/95	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/17/95-08/17/95	1	6.83	6.83	6.83	6.83	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/17/95-08/17/95	1	6.83	6.83	6.83	6.83	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/95-08/17/95	1	0.148	0.148	0.148	0.148	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/17/95-08/17/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0299

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
			Obs	Exceed Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00					
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0300

NPS Station ID: SHEN0300
 Location: ENTRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.379698/ -78.464698

Depth of Water: 0
 Elevation: 1240
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_VTSSS_GR06
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION GR06 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT ENTRY RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.27 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0300

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.03	7.03	7.03	7.03	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.03	7.03	7.03	7.03	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.093	0.093	0.093	0.093	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.68	1.68	1.68	1.68	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0300

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00					1	0	0.00	
	Other-Lo Lim.	6.5	1	0	0.00					1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0300

Parameter	Std. Type	Std. Value	Total			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0301

NPS Station ID: SHEN0301
 Location: S FORK SHEN 2 MI SW OF ELKTON
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005003
 RF3 Index: 02070005000400.00
 Description:

LAT/LON: 38.387504/ -78.660281

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 8.990
 RF3 Mile Point: 0.88

Agency: 1112A9WQ
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): UP-POT-078 /SHEN-078 /078 /S FORK 078
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0301

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	4	15.25	13.875	21.	4.	54.063	7.353	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	4	10.05	10.3	13.2	7.9	5.807	2.41	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	4	2.25	2.7	5.	1.3	2.567	1.602	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.6	7.6	8.	7.2	0.32	0.566	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.437	7.437	8.	7.2	0.373	0.611	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/13/73	2	0.037	0.037	0.063	0.01	0.001	0.038	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	65.	65.	65.	65.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	10.	10.	10.	10.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	0.14	0.15	0.265	0.055	0.011	0.106	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	0.604	0.66	0.926	0.506	0.036	0.191	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	1.19	1.225	1.8	0.72	0.215	0.464	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	0.18	0.22	0.4	0.12	0.016	0.128	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	3	3.1	2.5	4.	0.4	3.51	1.873	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	3	25.8	26.033	37.4	14.9	126.603	11.252	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-04/16/73	2##	10.5	10.5	11.	10.	0.5	0.707	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	2##	2.25	2.25	2.5	2.	0.125	0.354	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-04/16/73	3	50.	40.267	70.	0.8	1268.213	35.612	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	640.	640.	790.	490.	45000.	212.132	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	2.794	2.794	2.898	2.69	0.022	0.147	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)				622.174							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	410.	410.	490.	330.	12800.	113.137	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	2.604	2.604	2.69	2.519	0.015	0.121	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				402.119							
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	3	1.	1.	1.	1.	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	0.31	0.36	0.64	0.18	0.048	0.22	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-02/13/73	2##	0.001	0.001	0.001	0.	0.	0.001	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0301

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED																	
	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00				
00400	PH																	
	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00				
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.																	
	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00				
00945	SULFATE, TOTAL (AS SO4)																	
	Drinking Water	250.	2	0	0.00							2	0	0.00				
01027	CADMIUM, TOTAL																	
	Fresh Acute	3.9	1	0	0.00							1	0	0.00				
	Drinking Water	5.	1	0	0.00							1	0	0.00				
01034	CHROMIUM, TOTAL																	
	Drinking Water	100.	2	0	0.00	1	0	0.00	1	0	0.00							
01042	COPPER, TOTAL																	
	Fresh Acute	18.	1	0	0.00							1	0	0.00				
	Drinking Water	1300.	1	0	0.00							1	0	0.00				
01051	LEAD, TOTAL																	
	Fresh Acute	82.	1	0	0.00							1	0	0.00				
	Drinking Water	15.	1	0	0.00							1	0	0.00				
01092	ZINC, TOTAL																	
	Fresh Acute	120.	1	0	0.00							1	0	0.00				
	Drinking Water	5000.	1	0	0.00							1	0	0.00				
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C																	
	Other-Hi Lim.	1000.	2	0	0.00				1	0	0.00	1	0	0.00				
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH																	
	Other-Hi Lim.	200.	2	2	1.00				1	1	1.00	1	1	1.00				
71900	MERCURY, TOTAL																	
	Fresh Acute	2.4	2	0	0.00				1	0	0.00	1	0	0.00				
	Drinking Water	2.	2	0	0.00				1	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0302

NPS Station ID: SHEN0302
 Location: VARK501R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.388892/ -78.723698

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_NURE_22 /4091582
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE ELKTON WEST VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0302

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/12/77-01/12/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/12/77-01/12/77	1	58.	58.	58.	58.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/12/77-01/12/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/12/77-01/12/77	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/12/77-01/12/77	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/12/77-01/12/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/12/77-01/12/77	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/12/77-01/12/77	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/12/77-01/12/77	1	32.	32.	32.	32.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/12/77-01/12/77	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/12/77-01/12/77	1	61.	61.	61.	61.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/12/77-01/12/77	1	0.037	0.037	0.037	0.037	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	1	9100.	9100.	9100.	9100.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	1	61.	61.	61.	61.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/12/77-01/12/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0302

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0303

NPS Station ID: SHEN0303
 Location: VAMA501R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.394392/ -78.362310

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_NURE_03 /4090593
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE MADISON VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0303

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/18/77-01/18/77	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-01/18/77	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/18/77-01/18/77	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/18/77-01/18/77	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/18/77-01/18/77	1	0.631	0.631	0.631	0.631	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/18/77-01/18/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-01/18/77	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-01/18/77	1	2.33	2.33	2.33	2.33	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/18/77-01/18/77	1	7.	7.	7.	7.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/18/77-01/18/77	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/18/77-01/18/77	1	26.	26.	26.	26.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/18/77-01/18/77	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	1	4800.	4800.	4800.	4800.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	1	88.	88.	88.	88.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/18/77-01/18/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0303

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0304

NPS Station ID: SHEN0304
 Location: VARK503R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.395503/ -78.554504

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_NURE_25 /4091584
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

THE STATION IS LOCATED ON THE ELKTON EAST VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0304

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/12/77-01/12/77	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/12/77-01/12/77	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	01/12/77-01/12/77	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	01/12/77-01/12/77	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/12/77-01/12/77	1	1.585	1.585	1.585	1.585	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	01/12/77-01/12/77	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01056 MANGANESE, DISSOLVED (UG/L AS MN)	01/12/77-01/12/77	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01085 VANADIUM, DISSOLVED (UG/L AS V)	01/12/77-01/12/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106 ALUMINUM, DISSOLVED (UG/L AS AL)	01/12/77-01/12/77	1	62.	62.	62.	62.	0.	0.	**	**	**	**
22703 URANIUM, NATURAL, DISSOLVED	01/12/77-01/12/77	1	0.042	0.042	0.042	0.042	0.	0.	**	**	**	**
50761 BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/12/77-01/12/77	1	58.	58.	58.	58.	0.	0.	**	**	**	**
82331 DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/12/77-01/12/77	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0304

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0305

NPS Station ID: SHEN0305
 Location: STP ELKTON ON RT 33
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005003
 RF3 Index: 02070005034600.00
 Description:

LAT/LON: 38.400837/ -78.616670

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 6.490
 RF3 Mile Point: 4.76

Agency: 1112A9WQ
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): UP-POT-124 /SHEN-STP 124/124 /STP-124
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 13.80
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0305

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	3	15.	14.167	18.	9.5	18.583	4.311	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	4	44.9	50.9	94.6	19.2	1249.027	35.342	**	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/14/73	2	7.3	7.3	8.	6.6	0.98	0.99	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/14/73	2	6.884	6.884	8.	6.6	1.326	1.152	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/14/73	2	0.131	0.131	0.251	0.01	0.029	0.171	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	219.	219.	219.	219.	0.	0.	**	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	16.175	15.994	22.	9.625	28.438	5.333	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	18.5	18.653	21.	16.61	3.25	1.803	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	0.52	0.463	0.78	0.03	0.098	0.313	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	14.8	12.225	17.5	1.8	53.149	7.29	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-09/19/72	2	49.	49.	57.8	40.2	154.88	12.445	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-09/19/72	2	92.75	92.75	96.	89.5	21.125	4.596	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	30.335	27.188	33.88	14.2	81.394	9.022	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0305

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Drinking Water	5.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0305

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0306

NPS Station ID: SHEN0306
 Location: S FORK SHEN RT 33 ELKTON
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005003
 RF3 Index: 02070005000307.77
 Description:

LAT/LON: 38.401115/ -78.635837

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 6.200
 RF3 Mile Point: 7.77

Agency: 1112A9WQ
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): UP-POT-079 /SHEN-079 /079 /S FORK 079
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0306

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	4	15.25	14.	22.	3.5	64.167	8.01	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	4	9.55	9.8	13.1	7.	6.66	2.581	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	4	2.15	2.3	2.8	2.1	0.113	0.337	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.85	7.85	7.9	7.8	0.005	0.071	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.847	7.847	7.9	7.8	0.005	0.071	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/13/73	2	0.014	0.014	0.016	0.013	0.	0.002	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	66.	66.	66.	66.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	7.	7.	7.	7.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	0.328	0.396	0.645	0.285	0.028	0.167	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	0.815	0.946	1.58	0.575	0.193	0.44	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	1.2	1.283	2.	0.73	0.291	0.539	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	0.255	0.33	0.64	0.17	0.048	0.219	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	3	3.6	2.967	3.9	1.4	1.863	1.365	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	3	25.6	25.867	37.2	14.8	125.493	11.202	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-04/16/73	2 ##	12.5	12.5	15.	10.	12.5	3.536	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-04/16/73	3	50.	53.933	111.	0.8	3047.613	55.205	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	515.	515.	700.	330.	68450.	261.63	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	2.682	2.682	2.845	2.519	0.053	0.231	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)				480.625							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2 ##	15.	15.	20.	10.	50.	7.071	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2 ##	1.151	1.151	1.301	1.	0.045	0.213	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				14.142							
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	3	1.	1.	1.	1.	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	0.39	0.478	0.91	0.22	0.091	0.301	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-02/13/73	2 ##	0.001	0.001	0.001	0.	0.	0.001	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0306

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED																	
	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00				
00400	PH																	
	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00				
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.																	
	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00				
00945	SULFATE, TOTAL (AS SO4)																	
	Drinking Water	250.	2	0	0.00							2	0	0.00				
01027	CADMIUM, TOTAL																	
	Fresh Acute	3.9	1	0	0.00							1	0	0.00				
	Drinking Water	5.	1	0	0.00							1	0	0.00				
01034	CHROMIUM, TOTAL																	
	Drinking Water	100.	2	0	0.00	1	0	0.00	1	0	0.00							
01042	COPPER, TOTAL																	
	Fresh Acute	18.	1	0	0.00							1	0	0.00				
	Drinking Water	1300.	1	0	0.00							1	0	0.00				
01051	LEAD, TOTAL																	
	Fresh Acute	82.	1	0	0.00							1	0	0.00				
	Drinking Water	15.	1	0	0.00							1	0	0.00				
01092	ZINC, TOTAL																	
	Fresh Acute	120.	1	0	0.00							1	0	0.00				
	Drinking Water	5000.	1	0	0.00							1	0	0.00				
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C																	
	Other-Hi Lim.	1000.	2	0	0.00						1	0	0.00	1	0	0.00		
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH																	
	Other-Hi Lim.	200.	2	0	0.00						1	0	0.00	1	0	0.00		
71900	MERCURY, TOTAL																	
	Fresh Acute	2.4	2	0	0.00							1	0	0.00	1	0	0.00	
	Drinking Water	2.	2	0	0.00							1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0307

NPS Station ID: SHEN0307
 Location: 100 YDS DOWN FROM ELKTON STP
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC S FORK SHEN R
 RF1 Index: 02070005003
 RF3 Index: 02070005000302.90
 Description:

LAT/LON: 38.401392/ -78.635559

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 6.200
 RF3 Mile Point: 3.48

Agency: 1112A9WQ
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): UP-POT-080 /HEN-080 /080 /S FORD 080
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.23

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0307

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	4	14.5	13.5	22.	3.	63.	7.937	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	4	9.75	9.925	13.1	7.1	6.323	2.514	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	4	2.2	2.425	3.7	1.6	0.909	0.954	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.45	7.45	7.6	7.3	0.045	0.212	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.425	7.425	7.6	7.3	0.046	0.215	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/13/73	2	0.038	0.038	0.05	0.025	0.	0.018	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	66.	66.	66.	66.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	8.	8.	8.	8.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	0.343	0.401	0.835	0.085	0.099	0.314	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	0.713	0.888	1.495	0.63	0.167	0.409	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	1.255	1.268	1.82	0.74	0.207	0.455	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	0.275	0.408	0.91	0.17	0.117	0.342	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	3	4.1	4.133	6.1	2.2	3.803	1.95	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	3	25.2	26.733	37.7	17.3	105.803	10.286	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	1	13.	13.	13.	13.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	434.	434.	790.	78.	253472.	503.46	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	2.395	2.395	2.898	1.892	0.506	0.711	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			248.234							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	32.5	32.5	45.	20.	312.5	17.678	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	1.477	1.477	1.653	1.301	0.062	0.249	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			30.							
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	0.345	0.518	1.1	0.28	0.155	0.393	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0307

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	0	0.00				1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	0	0.00				1	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0308

NPS Station ID: SHEN0308
 Location: DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.403115/ -78.533309

Depth of Water: 0
 Elevation: 1740

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH42
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION RH42 IS LOCATED ON THE ELKTON EAST VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.60 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0308

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	05/02/87-05/02/87	1	7.08	7.08	7.08	7.08	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	05/02/87-05/02/87	1	7.08	7.08	7.08	7.08	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/02/87-05/02/87	1	0.083	0.083	0.083	0.083	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	05/02/87-05/02/87	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	05/02/87-05/02/87	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	05/02/87-05/02/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	05/02/87-05/02/87	1	1.54	1.54	1.54	1.54	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	05/02/87-05/02/87	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	05/02/87-05/02/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	05/02/87-05/02/87	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/02/87-05/02/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0308

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00					1	0	0.00	
	Other-Lo Lim.	6.5	1	0	0.00					1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0308

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0309

NPS Station ID: SHEN0309
 Location: POCOSIN HOLLOW
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.404198/ -78.440309

Depth of Water: 0
 Elevation: 1520
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_VTSSS_GR05
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION GR05 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT POCOSIN HOLLOW OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.38 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0309

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	05/02/87-05/02/87	1	7.11	7.11	7.11	7.11	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	05/02/87-05/02/87	1	7.11	7.11	7.11	7.11	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/02/87-05/02/87	1	0.078	0.078	0.078	0.078	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	05/02/87-05/02/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	05/02/87-05/02/87	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	05/02/87-05/02/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	05/02/87-05/02/87	1	1.56	1.56	1.56	1.56	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	05/02/87-05/02/87	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	05/02/87-05/02/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	05/02/87-05/02/87	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	05/02/87-05/02/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0309

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0309

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0310

NPS Station ID: SHEN0310 LAT/LON: 38.404448/ -78.439448
 Location: CONWAY RIVER TRIB NEAR KINDERHOOK, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02080103030708.52 RF3 Mile Point: 10.62
 Description:

Agency: 112WRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): 01665343
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0310

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/22/82	6	13.	11.333	17.	3.	25.167	5.017	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/22/82	6	4.5	4.667	9.	1.	11.467	3.386	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/22/82	6	6.75	6.717	6.9	6.4	0.038	0.194	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/22/82	6	6.747	6.678	6.9	6.4	0.039	0.199	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/22/82	6	0.179	0.21	0.398	0.126	0.011	0.104	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/22/82	6	7.05	7.	7.1	6.8	0.016	0.126	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/22/82	6	7.047	6.984	7.1	6.8	0.016	0.128	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/22/82	6	0.09	0.104	0.158	0.079	0.001	0.032	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/22/82	6 ##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/22/82	6	0.095	0.114	0.2	0.005	0.006	0.075	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/22/82	6	7.	7.167	8.	7.	0.167	0.408	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/22/82	6	1.9	1.9	2.	1.8	0.008	0.089	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/22/82	6	0.6	0.633	0.7	0.6	0.003	0.052	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/22/82	6	1.8	1.767	1.9	1.6	0.011	0.103	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/22/82	6	0.3	0.3	0.3	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/22/82	6	33.	33.333	34.	33.	0.267	0.516	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/22/82	6	0.25	0.25	0.3	0.2	0.003	0.055	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/22/82	6	0.9	0.9	1.	0.8	0.004	0.063	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/22/82	6	3.	3.167	4.	3.	0.167	0.408	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/22/82	6	9.65	9.867	11.3	9.1	0.611	0.781	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0310

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	0	0.00	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0310

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0311

NPS Station ID: SHEN0311
 Location: ROUTE 646 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070006
 RF3 Index: 02070007017606.86

LAT/LON: 38.405560/ -78.700559

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: QUAIL RUN SECTION: 02D TOPO MAP #: 0050 TOPO MAP NAME: ELKTON WEST, VA

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BQAL004.30
 Within Park Boundary: No

Date Created: 04/12/97

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0311

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	13.5	12.971	22.7	3.3	64.419	8.026	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	7	4.7	4.443	7.3	0.7	4.873	2.207	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	7	429.	421.571	661.	240.	25382.952	159.32	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	6	12.05	11.233	13.5	8.	5.959	2.441	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	7	3.	3.929	9.	0.5	10.202	3.194	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	7	16.	16.571	33.	8.	74.619	8.638	**	**	**	**
00400	PH (STANDARD UNITS)	7	7.9	7.814	8.3	7.4	0.128	0.358	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	7.9	7.7	8.3	7.4	0.143	0.378	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.013	0.02	0.04	0.005	0.	0.014	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	7	7.8	7.7	8.2	6.9	0.21	0.458	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	7	7.8	7.467	8.2	6.9	0.273	0.523	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.016	0.034	0.126	0.006	0.002	0.043	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	7	109.	108.714	155.	70.	906.905	30.115	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	7	4.	5.071	10.	1.5	15.286	3.91	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	7##	1.5	2.929	7.	1.5	6.036	2.457	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	7##	1.5	2.714	6.	1.5	3.071	1.753	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7	0.29	0.439	1.16	0.02	0.241	0.491	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	7	0.03	0.114	0.44	0.005	0.025	0.159	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	7	1.74	2.907	9.84	0.04	12.146	3.485	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	7	1.6	1.514	3.	0.3	1.115	1.056	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	7	0.6	1.086	2.9	0.05	1.284	1.133	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	7	152.	140.714	197.	84.	1799.571	42.421	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	7	17.	31.286	70.	13.	527.905	22.976	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	7	35.	36.571	73.	18.	439.619	20.967	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	7##	50.	271.429	1200.	50.	184047.619	429.008	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	7##	1.699	2.068	3.079	1.699	0.31	0.556	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			116.993								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	7	0.43	0.906	2.42	0.02	0.947	0.973	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0311

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00076	TURBIDITY, HACH TURBIDIMETER	50.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
00400	PH	9.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
	Fresh Chronic	6.5	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
00403	PH, LAB	9.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
	Fresh Acute	250.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
	Drinking Water	250.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	7	0	0.00	2	0	0.00	3	0	0.00	2	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	7	2	0.29	2	2	1.00	3	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0312

NPS Station ID: SHEN0312
 Location: Pocosin Hollow
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.406448/ -78.458504

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_FISH_2F047
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0312

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/08/95-08/08/95	1	17.1	17.1	17.1	17.1	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/08/95-08/08/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/08/95-08/08/95	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/08/95-08/08/95	1	6.53	6.53	6.53	6.53	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/08/95-08/08/95	1	6.53	6.53	6.53	6.53	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/08/95-08/08/95	1	0.295	0.295	0.295	0.295	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/08/95-08/08/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0312

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding		-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
			Obs	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0313

NPS Station ID: SHEN0313
 Location: MERCK&CO,INC. ELKTON EFFLUENT
 Station Type: /TYPA/IND/TREATD/OUTFL/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005003
 RF3 Index: 02070006008600.00
 Description:

LAT/LON: 38.408337/ -78.634726

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 5.600
 RF3 Mile Point: 0.00

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 063 /063 /MERCK 01 /140-01
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.05

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0313

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0314

NPS Station ID: SHEN0314
 Location: S.F.SHEN.R. RTE 33 BR ELKTON
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005003
 RF3 Index: 02070005000310.60
 Description:

LAT/LON: 38.409170/ -78.636116

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 5.500
 RF3 Mile Point: 11.60

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 019 /019 /SF SHEN S-12
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.34

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0314

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	9	24.	24.444	27.	22.	3.215	1.793	22.	22.75	26.25	27.
00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	10	6.1	7.57	15.9	4.5	12.896	3.591	4.54	5.2	10.2	15.36
00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	9	10.7	10.778	16.2	5.8	19.427	4.408	5.8	6.4	15.85	16.2
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	2400.	16880.	54200.	1400.	525612000.	22926.23	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	3.38	3.804	4.734	3.146	0.497	0.705	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			6370.187								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	790.	2032.	5400.	490.	4399370.	2097.468	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	2.898	3.122	3.732	2.69	0.197	0.444	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			1323.951								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0314

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	10	0	0.00						10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	5	1.00						5	5	1.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	5	1.00						5	5	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0315

NPS Station ID: SHEN0315
 Location: S.F.SHEN.R. US 33 BR W ELKTON
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005003
 RF3 Index: 02070005000310.60
 Description:

LAT/LON: 38.409170/ -78.636116

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 5.500
 RF3 Mile Point: 11.60

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 072 /072 /SFSHEN-S12
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.34

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0315

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	23.25	23.25	23.5	23.	0.125	0.354	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	42.5	42.5	50.	35.	112.5	10.607	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	5.55	5.55	6.1	5.	0.605	0.778	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	5.05	5.05	5.8	4.3	1.125	1.061	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.401	0.401	0.443	0.359	0.004	0.059	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	1.301	1.301	1.446	1.156	0.042	0.205	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.735	1.735	1.94	1.53	0.084	0.29	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	29400.	29400.	34800.	24000.	58320000.	7636.753	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	4.461	4.461	4.542	4.38	0.013	0.114	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			28899.827								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	23900.	23900.	34800.	13000.	237620000.	15414.928	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	4.328	4.328	4.542	4.114	0.091	0.302	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			21269.697								
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	10.5	10.5	15.	6.	40.5	6.364	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.93	0.93	1.02	0.84	0.016	0.127	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0315

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	1	0.50	2	1	0.50							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0316

NPS Station ID: SHEN0316
 Location: RT. 33 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005003
 RF3 Index: 02070005000226.76
 Description:

LAT/LON: 38.409420/ -78.635366

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 5.500
 RF3 Mile Point: 26.86

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSS085.08 /VA1B03-X0072/VA1B6X0072
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 03 TOPO MAP #: 0050 TOPO MAP NAME: ELKTON WEST, VA

Parameter Inventory for Station: SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	100	15.85	14.976	30.	1.1	57.513	7.584	4.46	7.85	21.55	24.4
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/18/71-07/20/71	4	7.05	22.775	75.	2.	1223.669	34.981	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	99	9.4	9.513	17.	4.2	5.617	2.37	6.4	7.8	11.4	12.4
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	41	2.2	2.724	7.6	1.	1.562	1.25	2.	2.	3.	4.
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	101	8.5	8.366	9.4	7.	0.295	0.543	7.5	8.	8.8	9.
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	101	8.5	8.009	9.4	7.	0.424	0.651	7.5	8.	8.8	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	101	0.003	0.01	0.1	0.	0.	0.017	0.001	0.002	0.01	0.032
00403	PH, LAB, STANDARD UNITS SU	09/20/67-06/28/70	11	7.9	7.855	8.6	7.2	0.213	0.461	7.22	7.4	8.2	8.56
00403	CONVERTED PH, LAB, STANDARD UNITS	09/20/67-06/28/70	11	7.9	7.654	8.6	7.2	0.257	0.507	7.22	7.4	8.2	8.56
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-06/28/70	11	0.013	0.022	0.063	0.003	0.	0.021	0.003	0.006	0.04	0.061
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/20/67-06/28/70	10	115.	113.2	145.	70.	645.733	25.411	70.6	97.	137.75	144.8
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	02/25/68-06/28/70	2	3.	3.	4.	2.	2.	1.414	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-06/28/70	8	237.	533.	2499.	179.	638629.143	799.143	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-06/28/70	8	84.	98.75	246.	38.	3962.5	62.948	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-06/28/70	8	170.	434.25	2253.	104.	546455.643	739.226	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-10/26/78	9	14.	43.111	232.	1.	5321.111	72.946	1.	6.5	43.5	232.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-10/26/78	9	8.	12.278	48.	0.5	225.944	15.031	0.5	2.	17.	48.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-10/26/78	9	5.	30.833	209.	0.5	4518.875	67.223	0.5	4.	20.5	209.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	61	0.3	0.407	2.399	0.05	0.179	0.423	0.05	0.15	0.5	0.88
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	62	0.02	0.039	0.12	0.005	0.001	0.035	0.005	0.01	0.07	0.1
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	54	1.344	1.26	2.069	0.11	0.179	0.423	0.685	0.995	1.547	1.689
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	62	0.7	0.868	3.399	0.1	0.401	0.633	0.23	0.5	1.025	1.669
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	06/28/78-03/01/79	8	1.4	1.043	2.1	0.025	0.769	0.877	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/10/75-03/01/79	29	6.	8.207	28.	3.	25.384	5.038	4.	5.	10.	13.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/20/67-04/25/68	3	166.	164.	170.	156.	52.	7.211	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/14/71-03/01/79	17 ##	1.	1.353	2.5	0.5	0.618	0.786	0.5	1.	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/14/71-03/01/79	19 ##	5.	4.763	5.	0.5	1.066	1.032	5.	5.	5.	5.
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-03/01/79	30 ##	5.	8.	50.	5.	73.448	8.57	5.	5.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-03/01/79	29 ##	5.	10.69	60.	5.	145.936	12.08	5.	5.	10.	30.
01045	IRON, TOTAL (UG/L AS FE)	06/28/70-03/01/79	7	200.	210.	400.	50.	18466.667	135.892	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/28/70-03/01/79	27	5.	11.944	150.	1.	770.737	27.762	2.7	5.	10.	11.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-03/01/79	5	40.	41.	60.	5.	505.	22.472	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/25/73-03/01/79	17 ##	50.	44.706	50.	5.	223.346	14.945	5.	50.	50.	50.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-03/01/79	33	10.	26.515	250.	5.	2466.383	49.663	5.	5.	30.	40.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/20/67-09/08/70	15	2300.	4198.733	23000.	91.	34559239.781	5878.711	162.4	750.	4300.	15800.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	09/20/67-09/08/70	15	3.362	3.281	4.362	1.959	0.397	0.63	2.177	2.875	3.633	4.17
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			1908.952								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	80 ##	50.	1985.	116000.	50.	170008316.456	13038.724	50.	50.	275.	890.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	80 ##	1.699	2.135	5.064	1.699	0.434	0.659	1.699	1.699	2.433	2.949
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			136.615								
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	04/18/71-04/18/71	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	62	0.2	0.253	1.	0.05	0.047	0.217	0.05	0.1	0.3	0.57
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	61	0.12	0.197	0.8	0.005	0.027	0.164	0.05	0.1	0.29	0.44
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-03/01/79	28 ##	0.25	0.221	0.25	0.15	0.002	0.046	0.15	0.15	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0316

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----		-----n/a-----				
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	1	0.25	1	0	0.00				3	1	0.33			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	99	0	0.00	30	0	0.00	43	0	0.00	26	0	0.00			
00400	PH	Fresh Chronic	9.	101	20	0.20	31	11	0.35	45	6	0.13	25	3	0.12			
		Other-Lo Lim.	6.5	101	0	0.00	31	0	0.00	45	0	0.00	25	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	11	0	0.00	2	0	0.00	4	0	0.00	5	0	0.00			
		Other-Lo Lim.	6.5	11	0	0.00	2	0	0.00	4	0	0.00	5	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	62	0	0.00	17	0	0.00	28	0	0.00	17	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	54	0	0.00	14	0	0.00	24	0	0.00	16	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	8	0	0.00	3	0	0.00	4	0	0.00	1	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water	50.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00									
		Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	30	0	0.00	8	0	0.00	12	0	0.00	10	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	29	6	0.21	8	1	0.13	12	2	0.17	9	3	0.33			
		Drinking Water	1300.	29	0	0.00	8	0	0.00	12	0	0.00	9	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	27	1	0.04	8	0	0.00	12	1	0.08	7	0	0.00			
		Drinking Water	15.	27	2	0.07	8	0	0.00	12	2	0.17	7	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	17	0	0.00	5	0	0.00	7	0	0.00	5	0	0.00			
		Drinking Water	100.	17	0	0.00	5	0	0.00	7	0	0.00	5	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	33	2	0.06	9	1	0.11	13	0	0.00	11	1	0.09			
		Drinking Water	5000.	33	0	0.00	9	0	0.00	13	0	0.00	11	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	15	11	0.73	7	5	0.71	3	2	0.67	5	4	0.80			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	79 &	26	0.33	21	7	0.33	38	13	0.34	20	6	0.30			
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	28	0	0.00	9	0	0.00	11	0	0.00	8	0	0.00			
		Drinking Water	2.	28	0	0.00	9	0	0.00	11	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1967 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	6	19.7	18.05	30.	4.4	108.075	10.396	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	6	8.35	8.233	11.	5.5	3.531	1.879	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	5	8.5	8.68	9.	8.4	0.087	0.295	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	5	8.5	8.609	9.	8.4	0.093	0.305	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	5	0.003	0.002	0.004	0.001	0.	0.001	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	3	19.4	15.367	21.7	5.	81.923	9.051	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	3	8.5	8.633	11.	6.4	5.303	2.303	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	3	8.	8.267	8.8	8.	0.213	0.462	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	3	8.	8.143	8.8	8.	0.236	0.486	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	3	0.01	0.007	0.01	0.002	0.	0.005	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	8	10.	14.238	25.	5.6	68.866	8.299	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	8	10.7	8.85	11.8	4.2	9.906	3.147	**	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	8	8.65	8.7	9.4	8.	0.306	0.553	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	8	8.625	8.442	9.4	8.	0.382	0.618	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	8	0.002	0.004	0.01	0.	0.	0.004	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	3	0.31	0.503	0.9	0.3	0.118	0.344	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	4	0.03	0.038	0.07	0.02	0.001	0.024	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	4	0.685	0.887	1.679	0.5	0.287	0.535	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	4	1.25	1.65	3.399	0.7	1.629	1.276	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	7200.	7200.	14000.	400.	92480000.	9616.652	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	3.374	3.374	4.146	2.602	1.192	1.092	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			2366.432								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	4	0.35	0.45	0.95	0.15	0.135	0.367	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	3	0.17	0.23	0.45	0.07	0.039	0.197	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	13	17.2	14.654	25.6	3.3	52.463	7.243	3.74	6.95	20.55	24.24
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	13	11.4	10.292	13.6	6.8	4.952	2.225	7.28	8.3	12.	13.12
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	13	8.5	8.354	9.	7.	0.366	0.605	7.08	8.25	8.8	8.92
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	13	8.5	7.82	9.	7.	0.675	0.821	7.08	8.25	8.8	8.92
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	13	0.003	0.015	0.1	0.001	0.001	0.03	0.001	0.002	0.006	0.085
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10	300.	12615.	116000.	50.	1325525027.778	36407.761	50.	50.	2600.	105200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10	2.452	2.657	5.064	1.699	1.192	1.092	1.699	1.699	3.153	4.948
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			453.901								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	11	16.7	14.1	21.1	5.	35.49	5.957	5.12	9.4	20.	20.88
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	11	9.6	9.6	12.2	7.4	2.664	1.632	7.48	8.4	11.4	12.12
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	11	8.	8.027	8.6	7.	0.256	0.506	7.08	7.7	8.5	8.58
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	11	8.	7.72	8.6	7.	0.36	0.6	7.08	7.7	8.5	8.58
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	11	0.01	0.019	0.1	0.003	0.001	0.029	0.003	0.003	0.02	0.088
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	1	0.3	0.3	0.3	0.	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	1	1.479	1.479	1.479	1.479	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	386.364	2500.	50.	560545.455	748.696	50.	50.	400.	2180.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	2.077	3.398	1.699	0.38	0.616	1.699	1.699	2.602	3.309
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			119.4								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	10	16.4	14.72	24.4	3.3	54.5	7.382	3.58	6.55	20.55	24.18
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	10	9.7	9.66	14.2	5.6	7.867	2.805	5.74	7.3	12.15	14.04
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	11	8.5	8.427	9.	7.5	0.234	0.484	7.54	8.2	8.8	9.
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	11	8.5	8.149	9.	7.5	0.319	0.565	7.54	8.2	8.8	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	11	0.003	0.007	0.032	0.001	0.	0.01	0.001	0.002	0.006	0.029
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.31	0.414	0.8	0.05	0.043	0.208	0.098	0.3	0.6	0.76
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.02	0.018	0.04	0.005	0.	0.011	0.005	0.005	0.02	0.038
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.279	1.231	1.729	0.11	0.202	0.45	0.248	1.119	1.539	1.699
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.8	1.127	2.199	0.5	0.338	0.581	0.52	0.6	1.599	2.079
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10	100.	130.	300.	50.	7888.889	88.819	50.	50.	200.	290.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	10	2.	2.018	2.477	1.699	0.095	0.309	1.699	1.699	2.301	2.46
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			104.138								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.3	0.332	1.	0.05	0.081	0.285	0.06	0.1	0.5	0.92
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.15	0.182	0.4	0.04	0.016	0.125	0.044	0.1	0.25	0.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	10	16.1	14.66	23.3	3.3	44.465	6.668	3.58	9.025	19.6	23.14
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	11	9.4	8.727	12.	5.9	3.436	1.854	6.08	7.	10.1	11.68
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	11	8.5	8.227	9.	7.5	0.218	0.467	7.5	8.	8.5	8.9
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	11	8.5	8.	9.	7.5	0.275	0.525	7.5	8.	8.5	8.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	11	0.003	0.01	0.032	0.001	0.	0.011	0.001	0.003	0.01	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.5	0.882	2.399	0.2	0.519	0.721	0.2	0.3	1.5	2.259
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.02	0.03	0.11	0.005	0.001	0.034	0.005	0.01	0.03	0.104
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.419	1.363	2.069	0.78	0.203	0.45	0.784	0.88	1.699	2.055
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.9	1.218	2.799	0.5	0.561	0.749	0.5	0.6	1.699	2.659
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	377.273	3300.	50.	945181.818	972.205	50.	50.	100.	2700.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	1.99	3.519	1.699	0.317	0.563	1.699	1.699	2.	3.31
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				97.692								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.2	0.35	0.8	0.05	0.07	0.264	0.06	0.1	0.6	0.78
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.1	0.309	0.8	0.1	0.073	0.27	0.1	0.1	0.5	0.78

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	12	13.6	14.192	25.	4.4	58.81	7.669	4.58	6.575	22.1	24.49
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	12	10.5	10.208	17.	5.	10.563	3.25	5.12	8.5	12.175	15.62
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	12	8.1	8.2	8.8	7.5	0.135	0.367	7.65	8.	8.5	8.77
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	12	8.089	8.062	8.8	7.5	0.155	0.394	7.65	8.	8.5	8.77
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	12	0.008	0.009	0.032	0.002	0.	0.008	0.002	0.003	0.01	0.025
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.3	0.341	0.8	0.05	0.067	0.26	0.06	0.1	0.4	0.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.03	0.042	0.1	0.005	0.002	0.04	0.005	0.005	0.08	0.1
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.5	1.314	1.619	0.3	0.177	0.421	0.42	0.98	1.599	1.615
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.6	0.573	1.	0.1	0.072	0.269	0.14	0.4	0.8	0.98
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12 ##	100.	212.5	1100.	50.	94602.273	307.575	50.	50.	200.	920.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12 ##	2.	2.07	3.041	1.699	0.195	0.442	1.699	1.699	2.301	2.939
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				117.428								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.2	0.159	0.3	0.05	0.009	0.094	0.05	0.05	0.2	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.1	0.127	0.3	0.05	0.007	0.082	0.05	0.07	0.2	0.288

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	11	15.	14.7	27.2	1.1	69.978	8.365	1.66	8.9	22.8	26.32
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	10	10.05	10.13	13.	7.4	4.205	2.051	7.42	8.05	12.1	13.
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	11	8.7	8.582	9.3	7.7	0.284	0.533	7.76	8.	9.	9.24
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	11	8.7	8.294	9.3	7.7	0.375	0.612	7.76	8.	9.	9.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	11	0.002	0.005	0.02	0.001	0.	0.006	0.001	0.001	0.01	0.018
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.2	0.227	0.4	0.05	0.016	0.125	0.05	0.1	0.3	0.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.05	0.051	0.11	0.02	0.001	0.03	0.02	0.02	0.07	0.104
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.369	1.28	1.779	0.11	0.183	0.428	0.328	1.229	1.5	1.741
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.5	0.627	1.199	0.2	0.09	0.3	0.24	0.4	0.8	1.159
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	340.909	2700.	50.	623909.091	789.879	50.	50.	200.	2240.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	2.021	3.431	1.699	0.313	0.56	1.699	1.699	2.301	3.266
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				104.872								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.2	0.205	0.5	0.05	0.014	0.119	0.06	0.1	0.2	0.46
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.16	0.185	0.5	0.09	0.014	0.119	0.094	0.11	0.2	0.458

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	6	10.5	12.317	24.4	1.5	101.082	10.054	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	6	10.25	10.3	13.2	7.4	7.192	2.682	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	6	8.6	8.55	9.4	7.7	0.395	0.628	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	6	8.589	8.216	9.4	7.7	0.529	0.727	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	6	0.003	0.006	0.02	0.	0.008	0.008	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	5	0.3	0.2	0.3	0.05	0.019	0.137	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	5	0.11	0.094	0.12	0.04	0.001	0.034	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	5	1.199	1.192	1.5	0.96	0.049	0.222	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	5	1.	0.88	1.099	0.4	0.087	0.295	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5 ##	50.	160.	600.	50.	60500.	245.967	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5 ##	1.699	1.915	2.778	1.699	0.233	0.483	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				82.188							
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	5	0.3	0.26	0.4	0.1	0.013	0.114	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	5	0.3	0.28	0.4	0.14	0.009	0.097	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	7	24.	21.714	26.5	15.	25.071	5.007	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	7	9.	8.814	10.2	7.5	0.861	0.928	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	7	9.	8.629	9.1	7.5	0.366	0.605	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	7	9.	8.195	9.1	7.5	0.585	0.765	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	7	0.001	0.006	0.032	0.001	0.	0.011	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	6	0.1	0.2	0.8	0.05	0.087	0.295	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	6 ##	0.038	0.038	0.07	0.005	0.001	0.036	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	6	0.3	0.417	0.9	0.1	0.126	0.354	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6 ##	50.	141.667	600.	50.	50416.667	224.537	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	6 ##	1.699	1.879	2.778	1.699	0.194	0.441	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				75.654							
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	6 ##	0.075	0.125	0.3	0.05	0.011	0.104	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	6	0.095	0.138	0.34	0.005	0.023	0.153	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	2	6.	6.	7.	5.	2.	1.414	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	1	11.	11.	11.	11.	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	2	7.6	7.6	7.7	7.5	0.02	0.141	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	2	7.589	7.589	7.7	7.5	0.02	0.142	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	2	0.026	0.026	0.032	0.02	0.	0.008	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	2 ##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	2	0.4	0.4	0.6	0.2	0.08	0.283	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	300.	300.	500.	100.	80000.	282.843	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	2.349	2.349	2.699	2.	0.244	0.494	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				223.607							
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	2 ##	0.125	0.125	0.2	0.05	0.011	0.106	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	2	0.085	0.085	0.12	0.05	0.002	0.049	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	30	22.8	22.84	30.	14.4	9.48	3.079	19.55	20.825	24.55	26.68
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	30	7.4	7.627	12.	4.2	2.663	1.632	5.41	6.7	8.625	9.58
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	12	2.55	2.842	6.	2.	1.384	1.177	2.	2.	3.	5.4
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	31	8.5	8.581	9.4	7.4	0.202	0.449	8.	8.3	9.	9.1
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	31	8.5	8.333	9.4	7.4	0.265	0.515	8.	8.3	9.	9.1
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	31	0.003	0.005	0.04	0.	0.	0.007	0.001	0.001	0.005	0.01
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	17	0.3	0.532	1.699	0.05	0.275	0.524	0.05	0.1	0.85	1.54
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	17	0.07	0.059	0.11	0.005	0.002	0.041	0.005	0.015	0.1	0.11
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	14	1.52	1.439	2.069	0.11	0.222	0.471	0.555	1.334	1.639	2.035
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	17	0.9	1.011	2.199	0.2	0.393	0.627	0.36	0.45	1.599	2.119
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-03/01/79	8 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-03/01/79	8 ##	5.	9.375	30.	5.	74.554	8.634	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/28/70-03/01/79	8 ##	5.	6.125	9.	4.	3.839	1.959	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-03/01/79	9	10.	38.889	250.	5.	6373.611	79.835	5.	5.	30.	250.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	21 ##	50.	409.524	3300.	50.	742404.762	861.629	50.	50.	200.	2180.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	21 ##	1.699	2.089	3.519	1.699	0.343	0.585	1.699	1.699	2.301	3.309
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			122.628								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	17	0.3	0.332	0.8	0.05	0.043	0.207	0.09	0.2	0.5	0.64
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	17	0.3	0.309	0.8	0.005	0.036	0.19	0.081	0.17	0.45	0.56
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-03/01/79	9 ##	0.25	0.217	0.25	0.15	0.003	0.05	0.15	0.15	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	44	7.1	8.082	20.	1.1	19.501	4.416	3.3	5.	10.975	15.25
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	43	11.4	11.158	17.	5.6	3.875	1.968	8.44	10.1	12.2	13.12
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	20	2.	2.115	3.	1.	0.254	0.504	1.36	2.	2.25	3.
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	45	8.2	8.18	9.3	7.	0.343	0.586	7.46	7.7	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	45	8.2	7.811	9.3	7.	0.482	0.694	7.46	7.7	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	45	0.006	0.015	0.1	0.001	0.001	0.023	0.001	0.003	0.02	0.035
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	28	0.3	0.357	2.399	0.05	0.195	0.442	0.05	0.1	0.475	0.62
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	28	0.02	0.026	0.12	0.005	0.001	0.028	0.005	0.005	0.03	0.08
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	24	1.339	1.263	1.779	0.3	0.142	0.377	0.65	1.02	1.5	1.664
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	28	0.6	0.736	2.799	0.1	0.325	0.57	0.19	0.4	0.8	1.599
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-03/01/79	12 ##	5.	6.667	10.	5.	6.061	2.462	5.	5.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-03/01/79	12 ##	5.	8.75	30.	5.	64.205	8.013	5.	5.	8.75	27.
01051	LEAD, TOTAL (UG/L AS PB)	06/28/70-03/01/79	12	8.	19.208	150.	1.5	1710.157	41.354	1.95	5.	10.	109.5
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-03/01/79	13	10.	18.462	40.	5.	159.936	12.647	5.	10.	30.	40.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	39 ##	100.	3516.667	116000.	50.	346663070.175	18618.89	50.	50.	400.	800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	39 ##	2.	2.174	5.064	1.699	0.516	0.718	1.699	1.699	2.602	2.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			149.385								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	28	0.2	0.23	1.	0.05	0.047	0.216	0.05	0.063	0.3	0.52
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	28	0.11	0.163	0.7	0.01	0.021	0.145	0.049	0.09	0.2	0.4
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-03/01/79	11 ##	0.25	0.214	0.25	0.15	0.003	0.05	0.15	0.15	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/20/67-03/01/79	26	17.2	17.569	25.	8.9	18.356	4.284	10.77	15.45	20.	24.3
00300	OXYGEN, DISSOLVED MG/L	09/20/67-03/01/79	26	8.65	8.969	12.	5.	3.189	1.786	6.38	8.1	10.25	11.44
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/67-03/01/79	9	4.	3.922	7.6	2.2	2.739	1.655	2.2	2.7	4.55	7.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0316

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	PH (STANDARD UNITS)	09/20/67-03/01/79	25	8.5	8.436	9.4	7.5	0.217	0.466	8.	8.	8.75	9.12
00400	CONVERTED PH (STANDARD UNITS)	09/20/67-03/01/79	25	8.5	8.219	9.4	7.5	0.266	0.516	8.	8.	8.75	9.12
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/20/67-03/01/79	25	0.003	0.006	0.032	0.	0.	0.007	0.001	0.002	0.01	0.01
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	16	0.3	0.359	0.9	0.05	0.046	0.214	0.155	0.225	0.4	0.83
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	17	0.03	0.04	0.12	0.005	0.001	0.031	0.005	0.02	0.065	0.088
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	16	1.159	1.1	1.679	0.11	0.166	0.408	0.495	0.805	1.455	1.623
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	17	0.7	0.941	3.399	0.1	0.53	0.728	0.42	0.6	1.	2.119
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-03/01/79	10 ##	5.	12.	50.	5.	201.111	14.181	5.	5.	12.5	47.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-03/01/79	9 ##	5.	14.444	60.	5.	334.028	18.276	5.	5.	20.	60.
01051	LEAD, TOTAL (UG/L AS PB)	06/28/70-03/01/79	7	5.	6.143	10.	1.	10.143	3.185	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/20/67-03/01/79	11	10.	25.909	170.	5.	2379.091	48.776	5.	5.	10.	144.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	20 ##	50.	652.5	8000.	50.	3341177.632	1827.889	50.	50.	275.	2490.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	20 ##	1.699	2.109	3.903	1.699	0.406	0.637	1.699	1.699	2.433	3.366
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			128.551								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	17	0.15	0.212	0.95	0.05	0.048	0.219	0.05	0.1	0.2	0.59
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	16	0.1	0.138	0.45	0.005	0.012	0.108	0.037	0.1	0.17	0.338
71900	MERCURY, TOTAL (UG/L AS HG)	09/08/70-03/01/79	8 ##	0.25	0.238	0.25	0.15	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0317

NPS Station ID: SHEN0317
 Location: S F SHENANDOAH RIVER AT ELKTON, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005000703.29
 Description:

LAT/LON: 38.409448/ -78.636116

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 18.78

Agency: 112WRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 01629050
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.40
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0317

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/31/76-08/31/76	1	22.	22.	22.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	10/01/48-10/01/48	1	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/01/48-08/31/76	2	289.5	289.5	380.	199.	16380.5	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/31/76-08/31/76	1	12.2	12.2	12.2	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/01/48-08/31/76	2	8.3	8.3	9.	7.6	0.98	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/01/48-08/31/76	2	7.884	7.884	9.	7.6	1.326	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/01/48-08/31/76	2	0.013	0.013	0.025	0.001	0.017	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/01/48-10/01/48	1	105.	105.	105.	105.	0.	**	**	**	**
00600	NITROGEN, TOTAL (MG/L AS N)	08/31/76-08/31/76	1	3.	3.	3.	3.	0.	**	**	**	**
00603	NITROGEN TOTAL, BOTTOM DEPOSITS (MG/KG-N DRY WGT)	05/16/72-05/16/72	1	4.45	4.45	4.45	4.45	0.	**	**	**	**
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	08/31/76-08/31/76	1	1.5	1.5	1.5	1.5	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/31/76-08/31/76	1	0.45	0.45	0.45	0.45	0.	**	**	**	**
00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	05/16/72-08/31/76	2	4.96	4.96	9.4	0.52	39.427	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/31/76-08/31/76	1	0.06	0.06	0.06	0.06	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/31/76-08/31/76	1	1.	1.	1.	1.	0.	**	**	**	**
00621	NITRATE NITROGEN, BOTTOM DEPOS. (MG/KG-N DRY WGT)	05/16/72-05/16/72	1	0.007	0.007	0.007	0.007	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/31/76-08/31/76	1	1.9	1.9	1.9	1.9	0.	**	**	**	**
00626	NITROGEN,ORG. KJEL.,BOT. DEPOS. (MG/KG-N DRY WGT)	05/16/72-08/31/76	2	87.22	87.22	170.	4.44	13705.057	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/31/76-08/31/76	1	1.1	1.1	1.1	1.1	0.	**	**	**	**
00633	NITRITE PLUS NITRATE,BOT. DEPOS. (MG/KG-N DRY WT)	08/31/76-08/31/76	1	1.	1.	1.	1.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/31/76-08/31/76	1	0.54	0.54	0.54	0.54	0.	**	**	**	**
00668	PHOSPHORUS,TOTAL,BOTTOM DEPOSIT (MG/KG-P DRY WGT)	05/16/72-08/31/76	2	75.6	75.6	150.	1.2	11070.72	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/31/76-08/31/76	1	7.9	7.9	7.9	7.9	0.	**	**	**	**
00686	CARBON, INORGANIC, IN BED MATERIAL (GM/KG AS C)	08/31/76-08/31/76	1	0.4	0.4	0.4	0.4	0.	**	**	**	**
00687	CARBON, ORGANIC, IN BED MATERIAL (GM/KG AS C)	08/31/76-08/31/76	1	4.2	4.2	4.2	4.2	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	10/01/48-10/01/48	1	94.	94.	94.	94.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/01/48-10/01/48	1	8.	8.	8.	8.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	10/01/48-10/01/48	1	26.	26.	26.	26.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	10/01/48-10/01/48	1	7.1	7.1	7.1	7.1	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	10/01/48-10/01/48	1	3.1	3.1	3.1	3.1	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/01/48-10/01/48	1	1.5	1.5	1.5	1.5	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	10/01/48-10/01/48	1	3.	3.	3.	3.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/01/48-10/01/48	1	10.	10.	10.	10.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/01/48-10/01/48	1	0.	0.	0.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	10/01/48-10/01/48	1	7.3	7.3	7.3	7.3	0.	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/31/76-08/31/76	1	1.	1.	1.	1.	0.	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	05/16/72-08/31/76	2	3.	3.	6.	0.	18.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS Cd)	08/31/76-08/31/76	1##	1.	1.	1.	1.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0317

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/16/72-08/31/76	2	0.315	0.315	0.63	0.	0.198	0.445	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/16/72-08/31/76	2	36.5	36.5	63.	10.	1404.5	37.477	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	08/31/76-08/31/76	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01037	COBALT, TOTAL (UG/L AS CO)	08/31/76-08/31/76	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01038	COBALT IN BOTTOM DEPOSITS (MG/KG AS CO DRY WGT)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	08/31/76-08/31/76	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	05/16/72-08/31/76	2	15.	15.	20.	10.	50.	7.071	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	08/31/76-08/31/76	1	180.	180.	180.	180.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	08/31/76-08/31/76	1	21.	21.	21.	21.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	05/16/72-08/31/76	2	10.	10.	20.	0.	200.	14.142	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	05/16/72-08/31/76	2	865.	865.	890.	840.	1250.	35.355	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	08/31/76-08/31/76	1	70.	70.	70.	70.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	05/16/72-08/31/76	2	4.	4.	8.	0.	32.	5.657	**	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	08/31/76-08/31/76	1 ##	0.	0.	0.	0.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	08/31/76-08/31/76	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	05/16/72-08/31/76	2	75.	75.	120.	30.	4050.	63.64	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	08/31/76-08/31/76	1	110.	110.	110.	110.	0.	0.	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	08/31/76-08/31/76	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	05/16/72-08/31/76	2	3400.	3400.	4000.	2800.	720000.	848.528	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/31/76-08/31/76	1	6000.	6000.	6000.	6000.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/31/76-08/31/76	1	3.778	3.778	3.778	3.778	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		6000.						**	**	**	**
31679	FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,48H	08/31/76-08/31/76	1	250.	250.	250.	250.	0.	0.	**	**	**	**
31679	LOG FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,	08/31/76-08/31/76	1	2.398	2.398	2.398	2.398	0.	0.	**	**	**	**
31679	GM FECAL STREPTOCOCCI,MF M-ENTEROCOCCUS AGAR,35C,4	GEOMETRIC MEAN =		250.						**	**	**	**
39250	NAPHTHALENES, POLYCHLORINATED (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	05/16/72-08/31/76	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	05/16/72-08/31/76	2	10.	10.	20.	0.	200.	14.142	**	**	**	**
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	2	3.	3.	6.	0.	18.	4.243	**	**	**	**
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	2	0.85	0.85	1.7	0.	1.445	1.202	**	**	**	**
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	05/16/72-08/31/76	2	0.65	0.65	1.3	0.	0.845	0.919	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39398	ETHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39399	ETHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	05/16/72-08/31/76	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39423	HEPTACHLOR EPOXIDE IN BOT. DEP. (UG/KG DRY SOL.)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	05/16/72-08/31/76	2	40.	40.	80.	0.	3200.	56.569	**	**	**	**
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39531	MALATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39541	PARATHION IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39570	DIAZINON IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39571	DIAZINON IN BOT. DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39601	METHYL PARATHION IN BOT. DEPOS.(UG/KG DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39731	2,4-D IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0317

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	**	**	**	**
39741	2,4,5-T IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	**	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	**	**	**	**
39761	SILVEX IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	**	**	**	**
39786	TRITHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	**	**	**	**
39787	TRITHION IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	**	**	**	**
39790	METHYL TRITHION IN WHOLE WATER SAMPLE (UG/L)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	**	**	**	**
39791	METHYL TRITHION IN BOT DEPOS (UG/KG DRY SOLIDS)	08/31/76-08/31/76	1	0.	0.	0.	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	10/01/48-10/01/48	1	117.	117.	117.	117.	0.	**	**	**	**
70507	PHOSPHORUS IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	08/31/76-08/31/76	1	0.36	0.36	0.36	0.36	0.	**	**	**	**
71835	OXYGEN CONSUMED, FILTERED MG/L	10/01/48-10/01/48	1	3.6	3.6	3.6	3.6	0.	**	**	**	**
71840	OXYGEN CONSUMED, UNFILTERED MG/L	10/01/48-10/01/48	1	4.4	4.4	4.4	4.4	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/01/48-10/01/48	1	2.	2.	2.	2.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	10/01/48-10/01/48	1	20.	20.	20.	20.	0.	**	**	**	**
71887	NITROGEN, TOTAL, AS NO3 - MG/L	08/31/76-08/31/76	1	13.	13.	13.	13.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	08/31/76-08/31/76	1 ##	0.25	0.25	0.25	0.25	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	05/16/72-08/31/76	2	0.35	0.35	0.6	0.1	0.125	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0317

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00400	PH	Fresh Chronic	9.	2	1	0.50	2	1	0.50									
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00	1	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00									
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00									
		Drinking Water	250.	1	0	0.00	1	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00									
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00									
01002	ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00	1	0	0.00									
		Drinking Water	5.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	Fresh Acute	18.	1	0	0.00	1	0	0.00									
		Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	Fresh Acute	82.	1	0	0.00	1	0	0.00									
		Drinking Water	15.	1	1	1.00	1	1	1.00									
01077	SILVER, TOTAL	Fresh Acute	4.1	1	0	0.00	1	0	0.00									
		Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	Fresh Acute	120.	1	0	0.00	1	0	0.00									
		Drinking Water	5000.	1	0	0.00	1	0	0.00									
01147	SELENIUM, TOTAL	Fresh Acute	20.	1	0	0.00	1	0	0.00									
		Drinking Water	50.	1	0	0.00	1	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	1	1.00	1	1	1.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	1	0	0.00	1	0	0.00									
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00	1	0	0.00									
		Drinking Water	0.2	1	0	0.00	1	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									
39360	DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	1	0	0.00	1	0	0.00									
39365	DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	1	0	0.00	1	0	0.00									
39370	DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	1	0	0.00	1	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1	0	0.00	1	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1	0	0.00	1	0	0.00									
		Drinking Water	2.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0317

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00	1	0	0.00									
	Drinking Water	3.	1	0	0.00	1	0	0.00									
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00	1	0	0.00									
	Drinking Water	0.4	1	0	0.00	1	0	0.00									
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00	1	0	0.00									
	Drinking Water	0.2	1	0	0.00	1	0	0.00									
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	1	0	0.00	1	0	0.00									
39540 PARATHION IN WHOLE WATER SAMPLE	Fresh Acute	0.065	1	0	0.00	1	0	0.00									
39730 2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00	1	0	0.00									
39760 SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00	1	0	0.00									
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00									
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0318

NPS Station ID: SHEN0318
 Location: CONWAY RIVER NEAR KINDERHOOK, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080204022600.00
 Description:

LAT/LON: 38.416392/ -78.438059

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 0.34

Agency: 112WRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): 01665340
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 14.40
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0318

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/22/82	6	12.75	11.	17.	1.	30.5	5.523	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/22/82	6	8.	12.667	28.	2.	138.667	11.776	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/22/82	6	6.7	6.633	6.9	6.	0.103	0.32	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/22/82	6	6.7	6.503	6.9	6.	0.123	0.351	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/22/82	6	0.2	0.314	1.	0.126	0.114	0.337	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/22/82	6	6.9	6.85	7.	6.7	0.015	0.122	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/22/82	6	6.9	6.835	7.	6.7	0.015	0.124	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/22/82	6	0.126	0.146	0.2	0.1	0.002	0.043	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/22/82	6 ##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/22/82	6	0.085	0.075	0.1	0.04	0.001	0.029	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/22/82	6	6.	5.833	6.	5.	0.167	0.408	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/22/82	6	1.55	1.517	1.6	1.3	0.014	0.117	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/22/82	6	0.55	0.55	0.6	0.5	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/22/82	6	1.5	1.517	1.6	1.4	0.006	0.075	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/22/82	6	0.3	0.3	0.3	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/22/82	6	34.	33.833	36.	32.	2.967	1.722	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/22/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/22/82	6	0.9	0.9	1.	0.8	0.004	0.063	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/22/82	6	3.	3.167	4.	3.	0.167	0.408	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/22/82	6	8.6	8.85	9.7	8.2	0.407	0.638	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/26/82-05/18/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0318

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	0	0.00	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0318

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0319

NPS Station ID: SHEN0319
 Location: RT. 667
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.416670/ -78.438337

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 3-CON009.86
 Within Park Boundary: No

Date Created: 05/18/98

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANOCK
 RIVER: CONWAY RIVER SECTION: 04 TOPO MAP #: 186B TOPO MAP NAME: FLETCHER

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

REGION: 3 NORTHERN

Parameter Inventory for Station: SHEN0319

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0320

NPS Station ID: SHEN0320
 Location: BIG UGLY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.425004/ -78.543309

Depth of Water: 0
 Elevation: 1240

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): SHEN_VTSSS_RH41
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION RH41 IS LOCATED ON THE ELKTON EAST VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BIG UGLY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.67 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0320

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	5.82	5.82	5.82	5.82	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	5.82	5.82	5.82	5.82	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	1.514	1.514	1.514	1.514	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.53	0.53	0.53	0.53	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	1.64	1.64	1.64	1.64	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0320

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0320

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0321

NPS Station ID: SHEN0321 LAT/LON: 38.426115/ -78.547503
 Location: S BRANCH NAKED CR BL BIG UGLY BR NR FURNACE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005020400.00 RF3 Mile Point: 0.45
 Description:

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01629150
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 6.20
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0321

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/81-06/21/82	6	15.	11.25	20.	1.	66.675	8.165	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/11/81-06/21/82	6	4.5	6.733	21.	0.4	58.427	7.644	**	**	**	**
00400	PH (STANDARD UNITS)	08/11/81-06/21/82	6	7.25	7.15	7.5	6.6	0.115	0.339	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/11/81-06/21/82	6	7.247	7.029	7.5	6.6	0.133	0.364	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/81-06/21/82	6	0.057	0.094	0.251	0.032	0.007	0.084	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/11/81-06/21/82	6	7.35	7.267	7.4	7.	0.031	0.175	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/11/81-06/21/82	6	7.347	7.235	7.4	7.	0.032	0.178	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/81-06/21/82	6	0.045	0.058	0.1	0.04	0.001	0.026	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/11/81-06/21/82	6##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/11/81-06/21/82	6	0.065	0.093	0.2	0.01	0.007	0.086	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/11/81-06/21/82	6	13.5	13.333	15.	11.	1.867	1.366	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/11/81-06/21/82	6	3.05	3.05	3.3	2.6	0.067	0.259	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/11/81-06/21/82	6	1.35	1.4	1.7	1.2	0.032	0.179	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/11/81-06/21/82	6	1.5	1.667	2.4	1.4	0.139	0.372	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/11/81-06/21/82	6	0.2	0.217	0.3	0.2	0.002	0.041	**	**	**	**
00932	SODIUM, PERCENT	08/11/81-06/21/82	6	19.	20.333	28.	18.	14.667	3.83	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/11/81-06/21/82	6	0.65	0.667	0.8	0.6	0.007	0.082	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/11/81-06/21/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/11/81-06/21/82	6	4.	4.333	5.	4.	0.267	0.516	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/11/81-06/21/82	6	8.45	8.317	9.1	7.3	0.654	0.808	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/25/82-05/17/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0321

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0321

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0322

NPS Station ID: SHEN0322
 Location: DEVILS DITCH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.429698/ -78.437809

Depth of Water: 0
 Elevation: 1460
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_VTSSS_GR03
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION GR03 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT DEVILS DITCH OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.88 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0322

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.186	0.186	0.186	0.186	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.17	1.17	1.17	1.17	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0322

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0322

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0323

NPS Station ID: SHEN0323
 Location: KINSEY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.430003/ -78.395810

Depth of Water: 0
 Elevation: 1560
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA14
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA14 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT KINSEY RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.56 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0323

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.117	0.117	0.117	0.117	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.54	1.54	1.54	1.54	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.31	0.31	0.31	0.31	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0323

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00					1	0	0.00	
	Other-Lo Lim.	6.5	1	0	0.00					1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0323

Parameter	Std. Type	Std. Value	Total			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0324

NPS Station ID: SHEN0324
 Location: RT. 635 BRIDGE (ROCKINGHAM COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070005007702.96

LAT/LON: 38.433615/ -78.635837

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 4.20

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: BOONE RUN SECTION: 02D TOPO MAP #: 0050 TOPO MAP NAME: ELKTON WEST, VA

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BBON000.60
 Within Park Boundary: No

Date Created: 07/27/91

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 24.80
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0324

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/18/91-07/29/97	13	10.8	15.138	29.	3.2	86.516	9.301	4.28	7.5	25.2	28.96
00070	TURBIDITY, (JACKSON CANDLE UNITS)	12/18/91-04/01/92	3	4.8	4.2	5.6	2.2	3.16	1.778	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/01/94-07/29/97	4	3.65	3.9	6.2	2.1	3.767	1.941	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	12/18/91-11/05/92	5	21.	28.8	49.	17.	197.2	14.043	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/18/91-07/29/97	12	267.	261.917	414.	174.	5255.356	72.494	174.6	201.	307.	393.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-07/29/97	11	11.6	11.5	17.7	6.6	11.792	3.434	6.64	9.4	13.	17.32
00300	OXYGEN, DISSOLVED MG/L	12/18/91-04/01/92	2	13.3	13.3	14.4	12.2	2.42	1.556	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	12/18/91-07/29/97	12	1.	1.917	10.	0.5	6.765	2.601	0.5	1.	2.	7.6
00340	COD, .25N K2CR2O7 MG/L	12/18/91-07/29/97	12	11.5	11.75	22.	5.	24.932	4.993	5.6	8.	14.5	21.1
00400	PH (STANDARD UNITS)	12/18/91-07/29/97	13	8.8	8.535	9.4	7.3	0.391	0.625	7.38	8.075	8.95	9.24
00400	CONVERTED PH (STANDARD UNITS)	12/18/91-07/29/97	13	8.8	8.064	9.4	7.3	0.631	0.794	7.38	8.075	8.95	9.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/18/91-07/29/97	13	0.002	0.009	0.05	0.	0.	0.015	0.001	0.001	0.009	0.043
00403	PH, LAB, STANDARD UNITS SU	12/18/91-07/29/97	12	8.35	8.2	8.6	7.4	0.129	0.359	7.49	8.025	8.475	8.57
00403	CONVERTED PH, LAB, STANDARD UNITS	12/18/91-07/29/97	12	8.347	8.032	8.6	7.4	0.16	0.4	7.49	8.025	8.475	8.57
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/18/91-07/29/97	12	0.004	0.009	0.04	0.003	0.	0.011	0.003	0.003	0.009	0.034
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/18/91-07/29/97	12	89.5	92.833	139.	47.	982.152	31.339	49.7	65.5	124.	136.9
00500	RESIDUE, TOTAL (MG/L)	12/18/91-07/20/92	4	163.5	158.25	173.	133.	307.583	17.538	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/18/91-07/20/92	4	33.5	33.75	36.	32.	2.917	1.708	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/18/91-07/20/92	4	130.	124.5	141.	97.	365.667	19.122	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/18/91-07/29/97	12	3.5	14.5	128.	1.5	1286.227	35.864	1.5	2.	6.	93.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/18/91-07/29/97	12 ##	1.5	2.5	13.	1.	11.227	3.351	1.	1.125	1.875	10.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/18/91-07/29/97	12	2.5	12.333	115.	1.	1050.333	32.409	1.15	1.5	4.75	83.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/18/91-07/29/97	12 ##	0.02	0.053	0.24	0.02	0.004	0.063	0.02	0.02	0.06	0.192
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/29/97	12	0.01	0.022	0.1	0.005	0.001	0.028	0.005	0.006	0.028	0.085
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/29/97	12	1.125	1.028	1.69	0.02	0.214	0.462	0.17	0.725	1.36	1.621
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/18/91-07/29/97	12	0.4	0.442	0.6	0.3	0.017	0.131	0.3	0.3	0.6	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12/18/91-07/29/97	12	0.15	0.179	0.4	0.05	0.012	0.108	0.065	0.1	0.275	0.37
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/18/91-04/01/92	3	0.16	0.153	0.22	0.08	0.005	0.07	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12/18/91-03/18/96	10	3.8	4.08	8.5	1.4	5.095	2.257	1.44	2.55	4.8	8.4
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12/18/91-07/29/97	12	107.	113.5	159.	80.	785.545	28.028	80.6	85.25	139.	156.6
00940	CHLORIDE, TOTAL IN WATER MG/L	12/18/91-07/29/97	12	10.	11.667	33.	6.	55.333	7.439	6.3	7.	11.75	28.5
00945	SULFATE, TOTAL (MG/L AS SO4)	12/18/91-07/29/97	12	15.5	16.917	27.	10.	31.356	5.6	10.3	12.25	21.75	26.4
00951	FLUORIDE, TOTAL (MG/L AS F)	12/18/91-04/15/93	7 ##	0.15	0.15	0.25	0.05	0.007	0.082	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0324

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/18/91-01/27/93	6	5.95	6.067	7.6	4.4	1.223	1.106	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/20/92-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/20/92-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/07/96	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/20/92-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/20/92-08/07/96	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/07/96-08/07/96	1	114.	114.	114.	114.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/20/92-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/20/92-08/07/96	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/07/96-08/07/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/07/96-08/07/96	1	1350.	1350.	1350.	1350.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/20/92-08/07/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/07/96-08/07/96	1	8320.	8320.	8320.	8320.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/29/97	12	200.	408.333	1400.	50.	229015.152	478.555	50.	850.	1310.	
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/29/97	12	2.301	2.305	3.146	1.699	0.31	0.557	1.699	1.699	2.901	3.115
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			202.016								
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/20/92-08/07/96	1##	35.	35.	35.	35.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/20/92-08/07/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/07/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/07/96	1##	70.	70.	70.	70.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/20/92-08/07/96	1##	15.	15.	15.	15.	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-07/29/97	9	0.08	0.119	0.33	0.03	0.01	0.1	0.03	0.04	0.18	0.33
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/20/92-08/07/96	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/20/92-08/07/96	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/20/92-08/07/96	1##	35.	35.	35.	35.	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	07/20/92-03/17/94	5	5.2	16.72	68.	1.5	824.437	28.713	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0324

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	3	0	0.00				2	0	0.00	1	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	4	0	0.00	3	0	0.00	1	0	0.00						
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	11	0	0.00	5	0	0.00	5	0	0.00	1	0	0.00			
00300	OXYGEN, DISSOLVED	4.	2	0	0.00				1	0	0.00	1	0	0.00			
00400	PH	9.	13	3	0.23	5	0	0.00	6	2	0.33	2	1	0.50			
		6.5	13	0	0.00	5	0	0.00	6	0	0.00	2	0	0.00			
00403	PH, LAB	9.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
		6.5	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	860.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
		250.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	7	0	0.00	1	0	0.00	4	0	0.00	2	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	12	7	0.58	4	4	1.00	6	3	0.50	2	0	0.00			
82078	TURBIDITY, FIELD	50.	5	1	0.20	1	0	0.00	3	1	0.33	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0325

NPS Station ID: SHEN0325
 Location: VAMA502R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.437698/ -78.369309

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_NURE_04 /4090594
 Within Park Boundary: Yes

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE MADISON VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS INSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0325

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/18/77-01/18/77	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/18/77-01/18/77	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/18/77-01/18/77	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/18/77-01/18/77	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/18/77-01/18/77	1	0.398	0.398	0.398	0.398	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/18/77-01/18/77	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/18/77-01/18/77	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/18/77-01/18/77	1	2.52	2.52	2.52	2.52	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/18/77-01/18/77	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/18/77-01/18/77	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/18/77-01/18/77	1	17.	17.	17.	17.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/18/77-01/18/77	1	0.009	0.009	0.009	0.009	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	1	45.	45.	45.	45.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	1	4700.	4700.	4700.	4700.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/18/77-01/18/77	1	49.	49.	49.	49.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/18/77-01/18/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0325

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0326

NPS Station ID: SHEN0326
 Location: Rapidan River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.441198/ -78.368726

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F093
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Madison VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0326

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/95-07/06/98	5	18.5	18.16	20.	16.4	1.883	1.372	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/13/95-07/06/98	5	22.	22.4	25.	20.	4.3	2.074	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/13/95-07/06/98	5	9.4	9.34	10.3	8.6	0.398	0.631	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/13/95-07/06/98	5	6.64	6.588	6.81	6.4	0.029	0.171	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/13/95-07/06/98	5	6.64	6.561	6.81	6.4	0.03	0.174	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/95-07/06/98	5	0.229	0.274	0.398	0.155	0.011	0.105	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/18/97-07/06/98	2	13.	13.	14.	12.	2.	1.414	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	07/08/96-07/06/98	3	2.82	2.7	3.1	2.18	0.222	0.472	**	**	**
83509	STREAM, WIDTH METER	07/08/96-07/06/98	3	8.8	9.033	10.	8.3	0.763	0.874	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	07/08/96-07/06/98	3	0.32	0.343	0.46	0.25	0.011	0.107	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0326

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	5	0	0.00											
00406	PH, FIELD	Fresh Chronic	9.	5	0	0.00	5	0	0.00											
		Other-Lo Lim.	6.5	5	2	0.40	5	2	0.40											

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0327

NPS Station ID: SHEN0327 LAT/LON: 38.443392/ -78.385559
 Location: WILSON RUN (STAUNTON RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 1620
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR05 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.73 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0327

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	8	8.	8.788	19.	0.	51.818	7.198	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	19.	19.375	24.	17.	4.839	2.2	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.665	6.548	6.78	5.89	0.099	0.314	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.664	6.42	6.78	5.89	0.117	0.342	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.217	0.38	1.288	0.166	0.152	0.389	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	18.5	19.	24.	17.	5.143	2.268	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	86.85	77.688	94.4	50.8	315.901	17.774	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.25	1.288	1.7	1.1	0.044	0.21	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.3	0.35	0.5	0.3	0.006	0.076	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.575	1.565	1.76	1.34	0.015	0.124	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.4	0.403	0.5	0.33	0.003	0.057	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.9	0.913	1.	0.9	0.001	0.035	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	2.5	2.488	2.7	2.2	0.044	0.21	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	9.35	9.488	11.1	8.2	1.03	1.015	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.3	0.55	1.4	0.	0.243	0.493	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.22	0.384	1.3	0.17	0.154	0.393	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0327

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0328

NPS Station ID: SHEN0328
 Location: RAPIDAN RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.443615/ -78.369392

 Depth of Water: 0
 Elevation: 970
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA16
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA16 IS LOCATED ON THE MADISON VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE RAPIDAN RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 25.26 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0328

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.155	0.155	0.155	0.155	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.17	1.17	1.17	1.17	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0328

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water																

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0329

NPS Station ID: SHEN0329
 Location: RAPIDAN RIVER NEAR GRAVES MILL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103058000.62
 Description:

LAT/LON: 38.443892/ -78.369727

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.60

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01665260
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 10.60
 Distance from RF3: 0.91

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0329

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/22/82	6	12.5	10.833	18.	0.5	37.067	6.088	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/22/82	6	11.	14.	30.	4.	94.8	9.737	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/22/82	6	6.8	6.833	7.3	6.3	0.119	0.344	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/22/82	6	6.8	6.718	7.3	6.3	0.134	0.367	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/22/82	6	0.158	0.191	0.501	0.05	0.026	0.162	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/22/82	6	6.95	6.9	7.	6.7	0.016	0.126	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/22/82	6	6.947	6.884	7.	6.7	0.016	0.128	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/22/82	6	0.113	0.131	0.2	0.1	0.002	0.041	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/22/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/22/82	6	0.15	0.133	0.2	0.04	0.006	0.076	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/22/82	6	6.	6.	6.	6.	0.	0.	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/22/82	6	1.45	1.45	1.6	1.3	0.011	0.105	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/22/82	6	0.5	0.533	0.6	0.5	0.003	0.052	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/22/82	6	1.3	1.283	1.4	1.2	0.006	0.075	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/22/82	6	0.2	0.173	0.2	0.04	0.004	0.065	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/22/82	6	31.	31.333	33.	30.	1.067	1.033	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/22/82	6	0.2	0.267	0.5	0.2	0.015	0.121	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/22/82	6	0.8	0.833	0.9	0.8	0.003	0.052	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/22/82	6	2.	1.833	2.	1.	0.167	0.408	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/22/82	6	7.95	8.1	8.8	7.5	0.248	0.498	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0329

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	0	0.00	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0329

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0330

NPS Station ID: SHEN0330
 Location: STAUNTON RIVER NEAR GRAVES MILL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103004111.48
 Description:

LAT/LON: 38.443892/ -78.370004

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 15.03

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01665270
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.50
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0330

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/81-06/23/82	6	12.75	10.75	17.	1.5	29.675	5.447	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/17/81-06/23/82	6	5.	8.	22.	1.	66.4	8.149	**	**	**	**
00400	PH (STANDARD UNITS)	08/17/81-06/23/82	6	6.55	6.617	7.1	6.1	0.15	0.387	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/17/81-06/23/82	6	6.525	6.484	7.1	6.1	0.171	0.413	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/23/82	6	0.299	0.328	0.794	0.079	0.072	0.267	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/17/81-06/23/82	6	6.75	6.733	6.9	6.6	0.015	0.121	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/17/81-06/23/82	6	6.747	6.719	6.9	6.6	0.015	0.122	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/81-06/23/82	6	0.179	0.191	0.251	0.126	0.003	0.052	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/17/81-06/23/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/17/81-06/23/82	6	0.1	0.093	0.1	0.07	0.	0.012	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/17/81-06/23/82	6	4.	3.833	4.	3.	0.167	0.408	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/17/81-06/23/82	6	1.1	1.067	1.2	0.9	0.011	0.103	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/17/81-06/23/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/17/81-06/23/82	6	1.3	1.333	1.4	1.3	0.003	0.052	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/17/81-06/23/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/17/81-06/23/82	6	40.	40.333	44.	38.	4.667	2.16	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/17/81-06/23/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/17/81-06/23/82	6	0.8	0.833	0.9	0.8	0.003	0.052	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/17/81-06/23/82	6	2.	2.	2.	2.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/17/81-06/23/82	6	7.8	8.033	8.9	7.4	0.431	0.656	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0330

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	3	0.50	2	1	0.50	2	1	0.50	2	1	0.50			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0330

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0331

NPS Station ID: SHEN0331
 Location: Staunton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.444866/ -78.371781

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F072
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Madison VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0331

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/95-06/29/98	4	19.65	19.65	20.3	19.	0.283	0.532	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/13/95-06/29/98	4	20.	20.	23.	17.	8.667	2.944	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/13/95-06/29/98	4	8.9	9.125	10.	8.7	0.376	0.613	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/13/95-06/29/98	4	6.575	6.573	6.79	6.35	0.033	0.182	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/13/95-06/29/98	4	6.574	6.544	6.79	6.35	0.034	0.185	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/95-06/29/98	4	0.267	0.286	0.447	0.162	0.014	0.119	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/13/95-06/29/98	2	10.5	10.5	11.	10.	0.5	0.707	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/08/97-06/29/98	2	9.15	9.15	9.2	9.1	0.005	0.071	**	**	**	**
83509 STREAM, WIDTH METER	07/08/96-06/29/98	3	6.2	5.9	7.1	4.4	1.89	1.375	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/08/96-06/29/98	3	0.12	0.143	0.24	0.07	0.008	0.087	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0331

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	4	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	4	1	0.25	3	1	0.33	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0332

NPS Station ID: SHEN0332
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.444892/ -78.371726

 Depth of Water: 0
 Elevation: 1030
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION SR01 IS LOCATED ON THE MADISON VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0332

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	8	9.25	9.688	20.	0.	44.496	6.67	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	18.5	18.5	20.	17.	0.857	0.926	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.775	6.693	6.93	6.28	0.061	0.248	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.774	6.623	6.93	6.28	0.067	0.259	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.168	0.238	0.525	0.117	0.025	0.159	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	18.	18.	19.	17.	0.571	0.756	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	90.3	82.825	111.2	53.7	448.774	21.184	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.3	1.313	1.4	1.2	0.007	0.083	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.35	0.35	0.4	0.3	0.003	0.053	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.425	1.444	1.56	1.4	0.003	0.058	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.43	0.41	0.47	0.34	0.002	0.049	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.9	0.863	0.9	0.8	0.003	0.052	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	2.	2.038	2.6	1.7	0.1	0.316	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	8.8	8.938	10.2	8.2	0.523	0.723	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.35	0.39	0.9	0.	0.139	0.373	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.17	0.239	0.52	0.12	0.025	0.158	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0332

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0333

NPS Station ID: SHEN0333
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.444892/ -78.371726

Depth of Water: 0
 Elevation: 1010
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_STAN
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION STAN IS LOCATED ON THE MADISON VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0333

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	254	10.5	10.952	22.	0.	32.324	5.685	4.	6.	16.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	260	19.	19.027	28.	13.	4.273	2.067	17.	18.	20.	21.
00400	PH (STANDARD UNITS)	09/01/92-07/28/97	260	6.785	6.697	7.17	6.04	0.066	0.257	6.28	6.473	6.88	6.94
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/28/97	260	6.785	6.614	7.17	6.04	0.073	0.271	6.28	6.472	6.88	6.94
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/28/97	260	0.164	0.243	0.912	0.068	0.029	0.169	0.115	0.132	0.337	0.525
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/28/97	260	18.	18.531	27.	13.	3.926	1.981	17.	17.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	260	84.55	90.22	188.6	40.3	925.453	30.421	60.3	71.2	99.4	134.13
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/28/97	28	0.8	0.861	2.2	0.2	0.176	0.419	0.49	0.525	1.	1.44
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	260	1.3	1.375	2.3	1.1	0.047	0.216	1.2	1.3	1.4	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	260	0.3	0.363	0.7	0.3	0.008	0.087	0.3	0.3	0.4	0.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	260	1.4	1.408	1.69	1.12	0.008	0.091	1.3	1.34	1.47	1.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	260	0.42	0.44	1.14	0.29	0.009	0.094	0.34	0.37	0.49	0.56
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	260	0.9	0.867	1.	0.7	0.003	0.059	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	260	2.	2.027	3.7	1.4	0.084	0.29	1.7	1.8	2.2	2.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	260	8.5	8.553	10.3	6.4	0.459	0.678	7.8	8.2	9.	9.4
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	98	8.749	10.026	29.815	2.792	20.873	4.569	5.585	6.561	12.754	15.929
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/24/96-06/16/97	11	0.006	0.023	0.09	0.	0.001	0.033	0.	0.004	0.04	0.088
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	260	0.009	0.153	1.5	0.	0.077	0.277	0.	0.003	0.2	0.5
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	260	0.165	0.246	0.92	0.07	0.029	0.171	0.12	0.13	0.338	0.53

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0333

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	260	0	0.00	71	0	0.00	113	0	0.00	76	0	0.00			
	Other-Lo Lim.	6.5	260	71	0.27	71	9	0.13	113	35	0.31	76	27	0.36			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	260	260	1.00	71	71	1.00	113	113	1.00	76	76	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	260	0	0.00	71	0	0.00	113	0	0.00	76	0	0.00			
	Drinking Water	250.	260	0	0.00	71	0	0.00	113	0	0.00	76	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	260	0	0.00	71	0	0.00	113	0	0.00	76	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	260	0	0.00	71	0	0.00	113	0	0.00	76	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1992 - Station SHEN0333

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	15	8.	8.5	17.	0.	18.393	4.289	2.7	6.	12.	15.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	18	18.	18.222	20.	16.	1.124	1.06	16.9	17.75	19.	20.
00400	PH (STANDARD UNITS)	18	6.525	6.567	6.88	6.21	0.075	0.274	6.246	6.288	6.855	6.88
00400	CONVERTED PH (STANDARD UNITS)	18	6.512	6.489	6.88	6.21	0.081	0.285	6.246	6.288	6.855	6.88
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	18	0.307	0.324	0.617	0.132	0.034	0.186	0.132	0.14	0.516	0.568
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	18	18.	17.722	20.	16.	0.918	0.958	16.9	17.	18.	19.1
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	18	61.2	61.9	75.3	49.4	58.915	7.676	49.49	55.05	69.625	72.15
00915	CALCIUM, DISSOLVED (MG/L AS CA)	18	1.3	1.333	1.5	1.2	0.005	0.069	1.29	1.3	1.4	1.41
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	18	0.35	0.35	0.4	0.3	0.003	0.051	0.3	0.3	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	18	1.36	1.367	1.48	1.3	0.002	0.047	1.309	1.328	1.4	1.426
00935	POTASSIUM, DISSOLVED (MG/L AS K)	18	0.405	0.416	0.52	0.34	0.003	0.053	0.358	0.38	0.453	0.511
00941	CHLORIDE, DISSOLVED IN WATER MG/L	18	0.9	0.889	1.	0.8	0.002	0.047	0.8	0.9	0.9	0.91
00946	SULFATE, DISSOLVED (MG/L AS SO4)	18	1.85	1.933	2.9	1.6	0.114	0.338	1.6	1.7	2.125	2.45
00955	SILICA, DISSOLVED (MG/L AS SI02)	18	8.5	8.578	9.5	8.	0.132	0.364	8.09	8.375	8.8	9.05
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	18	0.055	0.218	0.8	0.01	0.078	0.279	0.01	0.018	0.6	0.62
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	18	0.31	0.327	0.62	0.13	0.035	0.187	0.13	0.14	0.523	0.575

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0333

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	56	11.75	11.657	21.	2.5	29.986	5.476	4.	6.125	17.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	57	19.	19.018	23.	16.	1.946	1.395	17.	18.	20.	21.
00400	PH (STANDARD UNITS)	57	6.82	6.736	6.99	6.06	0.056	0.236	6.272	6.73	6.88	6.93
00400	CONVERTED PH (STANDARD UNITS)	57	6.82	6.654	6.99	6.06	0.063	0.25	6.272	6.73	6.88	6.93
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	57	0.151	0.222	0.871	0.102	0.031	0.176	0.117	0.132	0.186	0.535
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	57	18.	18.368	21.	15.	1.523	1.234	17.	18.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	57	78.7	79.646	115.3	40.3	348.559	18.67	56.04	63.25	95.8	106.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	57	1.3	1.333	1.7	1.1	0.014	0.117	1.2	1.3	1.4	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	57	0.4	0.356	0.5	0.3	0.003	0.054	0.3	0.3	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	57	1.41	1.412	1.6	1.12	0.012	0.108	1.26	1.335	1.5	1.542
00935	POTASSIUM, DISSOLVED (MG/L AS K)	57	0.42	0.436	0.66	0.31	0.007	0.085	0.338	0.365	0.49	0.56
00941	CHLORIDE, DISSOLVED IN WATER MG/L	57	0.9	0.867	1.	0.7	0.004	0.064	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	57	2.	2.032	3.7	1.7	0.131	0.362	1.7	1.8	2.1	2.42
00955	SILICA, DISSOLVED (MG/L AS SI02)	57	8.5	8.675	10.3	6.4	0.893	0.945	7.48	8.15	9.45	9.82
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	57	0.2	0.337	1.5	0.004	0.16	0.4	0.005	0.008	0.6	0.92
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	57	0.15	0.224	0.88	0.1	0.032	0.178	0.12	0.13	0.19	0.54

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0333

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	50	10.75	10.74	18.5	0.5	26.911	5.188	3.05	6.5	16.	17.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	51	18.	18.49	23.	17.	1.535	1.239	17.	18.	19.	20.
00400	PH (STANDARD UNITS)	51	6.79	6.703	6.99	6.2	0.051	0.227	6.372	6.47	6.88	6.928
00400	CONVERTED PH (STANDARD UNITS)	51	6.79	6.639	6.99	6.2	0.055	0.235	6.372	6.47	6.88	6.928
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	51	0.162	0.23	0.631	0.102	0.019	0.139	0.118	0.132	0.339	0.425
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	51	18.	18.078	22.	16.	1.554	1.246	17.	17.	19.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	51	92.	88.818	121.9	50.3	249.728	15.803	70.32	75.3	99.4	110.02
00915	CALCIUM, DISSOLVED (MG/L AS CA)	51	1.3	1.322	1.8	1.1	0.019	0.139	1.2	1.2	1.4	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	51	0.3	0.341	0.5	0.3	0.003	0.054	0.3	0.3	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	51	1.41	1.41	1.54	1.26	0.005	0.069	1.32	1.35	1.46	1.498
00935	POTASSIUM, DISSOLVED (MG/L AS K)	51	0.4	0.432	1.14	0.3	0.017	0.13	0.322	0.35	0.48	0.526

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0333

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	51	0.8	0.849	1.	0.7	0.004	0.064	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	51	2.	1.951	2.5	1.6	0.054	0.233	1.7	1.7	2.1	2.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	51	8.6	8.649	9.9	6.9	0.436	0.66	7.9	8.2	9.2	9.4
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	27	13.925	14.645	29.815	6.101	24.926	4.993	8.342	12.009	16.455	20.61
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	51	0.01	0.069	0.5	0.004	0.017	0.129	0.006	0.007	0.05	0.36
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	51	0.16	0.232	0.64	0.1	0.02	0.141	0.12	0.13	0.34	0.428

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0333

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	52	9.	10.827	22.	0.	37.175	6.097	3.15	7.	16.375	20.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	52	19.	20.692	28.	17.	11.198	3.346	17.	18.	23.75	26.7
00400	PH (STANDARD UNITS)	09/01/92-07/28/97	52	6.805	6.736	7.07	6.17	0.058	0.241	6.289	6.62	6.9	6.988
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/28/97	52	6.805	6.66	7.07	6.17	0.064	0.253	6.289	6.62	6.9	6.988
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/28/97	52	0.157	0.219	0.676	0.085	0.024	0.154	0.103	0.126	0.24	0.519
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/01/92-07/28/97	52	19.	20.25	27.	17.	9.799	3.13	17.	18.	23.75	25.7
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	52	92.8	105.323	183.2	41.	1664.407	40.797	60.3	72.825	139.35	173.39
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	52	1.45	1.592	2.3	1.2	0.122	0.349	1.2	1.3	1.875	2.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	52	0.4	0.444	0.7	0.3	0.017	0.129	0.3	0.3	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	52	1.44	1.43	1.69	1.2	0.012	0.11	1.3	1.34	1.49	1.59
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	52	0.41	0.456	0.69	0.29	0.012	0.11	0.35	0.37	0.56	0.62
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	52	0.9	0.885	1.	0.8	0.002	0.046	0.8	0.9	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	52	1.9	1.913	2.4	1.4	0.079	0.281	1.5	1.725	2.1	2.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	52	8.55	8.61	9.7	7.5	0.211	0.459	8.1	8.3	8.975	9.2
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	23	8.548	9.367	13.862	5.593	7.826	2.797	5.603	6.602	11.59	13.625
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	52	0.006	0.089	0.4	0.	0.02	0.141	0.	0.003	0.175	0.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	52	0.16	0.222	0.68	0.09	0.024	0.155	0.103	0.13	0.245	0.525

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0333

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	51	11.	11.353	22.	2.	34.603	5.882	4.2	5.5	16.	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	52	19.	18.615	22.	17.	1.379	1.174	17.	18.	19.	20.
00400	PH (STANDARD UNITS)	09/01/92-07/28/97	52	6.575	6.633	7.17	6.04	0.091	0.301	6.3	6.38	6.863	7.067
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/28/97	52	6.574	6.538	7.17	6.04	0.1	0.316	6.3	6.38	6.862	7.067
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/28/97	52	0.267	0.29	0.912	0.068	0.035	0.187	0.086	0.137	0.417	0.501
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/01/92-07/28/97	52	18.	18.077	22.	16.	1.563	1.25	17.	18.	18.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	52	79.9	81.406	116.9	58.7	177.799	13.334	61.38	73.1	89.85	100.03
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	52	1.3	1.321	1.7	1.2	0.012	0.107	1.2	1.3	1.375	1.47
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	52	0.3	0.34	0.5	0.3	0.004	0.063	0.3	0.3	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	52	1.39	1.389	1.67	1.22	0.008	0.087	1.29	1.32	1.43	1.51
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	52	0.45	0.452	0.62	0.32	0.004	0.067	0.363	0.393	0.5	0.547
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	52	0.9	0.869	1.	0.7	0.003	0.054	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	52	2.1	2.152	2.9	1.8	0.045	0.212	1.9	2.	2.2	2.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	52	8.3	8.231	9.4	6.4	0.397	0.63	7.4	7.8	8.575	9.17
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	33	7.276	8.226	17.614	5.28	7.65	2.766	5.649	6.448	9.522	12.568
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	52	0.002	0.043	0.3	0.	0.008	0.09	0.	0.	0.006	0.2
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	52	0.265	0.293	0.92	0.07	0.035	0.188	0.09	0.143	0.42	0.51

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0333

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	30	9.75	10.75	22.	1.	41.237	6.422	2.55	5.	16.25	19.9
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	30	18.	18.267	21.	13.	2.202	1.484	17.	18.	19.	20.9
00400	PH (STANDARD UNITS)	09/01/92-07/28/97	30	6.785	6.737	7.11	6.17	0.065	0.254	6.225	6.705	6.883	7.064
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/28/97	30	6.785	6.652	7.11	6.17	0.072	0.269	6.225	6.705	6.882	7.064
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/28/97	30	0.164	0.223	0.676	0.078	0.028	0.169	0.087	0.131	0.197	0.596
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/28/97	30	18.	17.9	21.	13.	2.024	1.423	17.	17.	18.	20.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	30	100.6	118.783	188.6	61.9	1773.965	42.118	74.32	82.65	170.65	180.43
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	30	1.3	1.283	1.6	1.2	0.012	0.109	1.2	1.2	1.3	1.48
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	30	0.3	0.32	0.5	0.3	0.003	0.055	0.3	0.3	0.3	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	30	1.4	1.415	1.58	1.31	0.004	0.067	1.341	1.368	1.458	1.526
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	30	0.41	0.429	0.57	0.33	0.004	0.062	0.37	0.378	0.473	0.537
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	30	0.85	0.85	1.	0.7	0.004	0.063	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	30	2.2	2.183	2.5	1.9	0.026	0.162	2.	2.	2.3	2.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	30	8.55	8.6	9.6	7.1	0.239	0.489	8.21	8.3	8.9	9.39
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	15	5.944	6.68	12.317	2.792	7.047	2.655	2.934	4.936	9.123	11.097
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	30	0.003	0.21	1.1	0.	0.139	0.372	0.	0.	0.325	0.99
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	30	0.165	0.225	0.68	0.08	0.029	0.17	0.084	0.13	0.203	0.603

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0334

NPS Station ID: SHEN0334
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.444892/ -78.371726

Depth of Water: 0
 Elevation: 1010
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_VT59
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT59 IS LOCATED ON THE MADISON VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0334

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-04/27/95	20	10.5	11.02	19.	3.5	24.779	4.978	3.55	8.5	15.	18.46
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/12/87-04/27/95	33	18.	18.727	31.	14.	8.517	2.918	16.	17.	20.	21.6
00400 PH (STANDARD UNITS)	08/12/87-04/27/95	33	6.75	6.678	6.99	6.19	0.061	0.247	6.284	6.44	6.89	6.928
00400 CONVERTED PH (STANDARD UNITS)	08/12/87-04/27/95	33	6.75	6.604	6.99	6.19	0.066	0.258	6.284	6.44	6.89	6.928
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/87-04/27/95	33	0.178	0.249	0.646	0.102	0.025	0.159	0.118	0.129	0.363	0.52
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/12/87-04/27/95	33	18.	18.242	30.	14.	8.127	2.851	15.4	17.	19.	21.
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/12/87-04/27/95	33	129.4	151.367	361.7	50.3	7145.584	84.532	65.12	80.75	194.1	293.14
00915 CALCIUM, DISSOLVED (MG/L AS CA)	08/12/87-04/27/95	33	1.3	1.33	2.7	1.1	0.076	0.276	1.14	1.2	1.4	1.5
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/87-04/27/95	33	0.3	0.358	1.2	0.3	0.025	0.158	0.3	0.3	0.4	0.4
00930 SODIUM, DISSOLVED (MG/L AS NA)	08/12/87-04/27/95	33	1.41	1.421	1.63	1.29	0.007	0.084	1.312	1.355	1.5	1.526
00935 POTASSIUM, DISSOLVED (MG/L AS K)	08/12/87-04/27/95	33	0.37	0.418	0.73	0.19	0.013	0.112	0.33	0.355	0.47	0.602
00941 CHLORIDE, DISSOLVED IN WATER MG/L	08/12/87-04/27/95	33	0.9	0.87	1.	0.8	0.004	0.064	0.8	0.8	0.9	0.96
00946 SULFATE, DISSOLVED (MG/L AS SO4)	08/12/87-04/27/95	33	2.	1.988	2.5	1.7	0.04	0.201	1.74	1.8	2.1	2.3
00955 SILICA, DISSOLVED (MG/L AS SI02)	08/12/87-04/27/95	33	8.5	8.788	10.2	7.9	0.496	0.704	8.1	8.2	9.4	10.
04168 ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	6	16.338	16.022	25.092	7.237	62.796	7.924	**	**	**	**
04170 ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	6	12.122	11.004	12.806	6.645	6.024	2.454	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-04/27/95	33	0.01	0.176	1.3	0.	0.099	0.314	0.	0.002	0.25	0.7
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-04/27/95	33	0.18	0.252	0.65	0.1	0.026	0.16	0.12	0.13	0.37	0.526

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0334

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	33	0	0.00	8	0	0.00	16	0	0.00	9	0	0.00			
	Other-Lo Lim.	6.5	33	10	0.30	8	3	0.38	16	4	0.25	9	3	0.33			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	33	26	0.79	8	4	0.50	16	14	0.88	9	8	0.89			
	Fresh Acute	860.	33	0	0.00	8	0	0.00	16	0	0.00	9	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	33	0	0.00	8	0	0.00	16	0	0.00	9	0	0.00			
	Drinking Water	250.	33	0	0.00	8	0	0.00	16	0	0.00	9	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	33	0	0.00	8	0	0.00	16	0	0.00	9	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	33	0	0.00	8	0	0.00	16	0	0.00	9	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0334

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	8	20.	21.25	31.	17.	17.643	4.2	**	**	**	**
00400	PH (STANDARD UNITS)	8	6.745	6.676	6.94	6.32	0.057	0.239	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	8	6.742	6.617	6.94	6.32	0.061	0.247	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	8	0.181	0.241	0.479	0.115	0.019	0.137	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	8	20.	20.875	30.	16.	16.696	4.086	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	8	190.6	204.45	361.7	77.1	14643.131	121.009	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	8	1.4	1.575	2.7	1.3	0.211	0.459	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	8	0.4	0.487	1.2	0.3	0.084	0.29	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	8	1.49	1.473	1.54	1.39	0.003	0.053	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	8	0.46	0.419	0.5	0.19	0.01	0.101	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	8	0.8	0.85	1.	0.8	0.006	0.076	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	8	2.	2.05	2.3	1.8	0.029	0.169	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	8	9.6	9.575	10.2	9.	0.222	0.471	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	8	0.01	0.255	1.3	0.	0.237	0.487	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	8	0.185	0.245	0.48	0.12	0.019	0.137	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0334

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	16	18.	18.063	22.	14.	3.929	1.982	15.4	17.	19.5	21.3
00400	PH (STANDARD UNITS)	16	6.72	6.659	6.96	6.19	0.062	0.249	6.253	6.395	6.863	6.911
00400	CONVERTED PH (STANDARD UNITS)	16	6.72	6.584	6.96	6.19	0.068	0.261	6.253	6.395	6.862	6.911
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	16	0.191	0.261	0.646	0.11	0.031	0.175	0.123	0.137	0.428	0.561
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	16	17.	17.563	21.	14.	3.463	1.861	14.7	17.	18.75	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	16	135.9	137.631	283.6	50.3	4161.677	64.511	58.42	87.55	180.425	250.84
00915	CALCIUM, DISSOLVED (MG/L AS CA)	16	1.2	1.275	1.5	1.1	0.018	0.134	1.1	1.2	1.375	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	16	0.3	0.325	0.4	0.3	0.002	0.045	0.3	0.3	0.375	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	16	1.37	1.394	1.63	1.29	0.009	0.095	1.29	1.333	1.448	1.56
00935	POTASSIUM, DISSOLVED (MG/L AS K)	16	0.37	0.444	0.73	0.32	0.02	0.141	0.327	0.333	0.545	0.716
00941	CHLORIDE, DISSOLVED IN WATER MG/L	16	0.9	0.888	1.	0.8	0.004	0.062	0.8	0.825	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	16	1.85	1.944	2.5	1.7	0.063	0.25	1.7	1.8	2.	2.43
00955	SILICA, DISSOLVED (MG/L AS SI02)	16	8.4	8.7	10.1	7.9	0.419	0.647	8.04	8.3	9.125	9.89
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	16	0.015	0.186	0.8	0.	0.077	0.278	0.	0.001	0.3	0.73
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	16	0.19	0.264	0.65	0.11	0.031	0.177	0.124	0.143	0.435	0.566

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0334

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	9	18.	17.667	20.	14.	2.75	1.658	14.	17.	18.5	20.
00400	PH (STANDARD UNITS)	9	6.85	6.713	6.99	6.27	0.075	0.273	6.27	6.405	6.905	6.99
00400	CONVERTED PH (STANDARD UNITS)	9	6.85	6.63	6.99	6.27	0.083	0.287	6.27	6.405	6.905	6.99
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.141	0.234	0.537	0.102	0.027	0.164	0.102	0.124	0.396	0.537
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	9	17.	17.111	19.	14.	2.111	1.453	14.	16.5	18.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	9	84.4	128.6	208.	65.	4188.178	64.716	65.	72.8	194.1	208.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	9	1.2	1.211	1.3	1.1	0.004	0.06	1.1	1.2	1.25	1.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	9	0.3	0.3	0.3	0.3	0.	0.	0.3	0.3	0.3	0.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	9	1.41	1.423	1.52	1.34	0.005	0.069	1.34	1.355	1.485	1.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	9	0.37	0.369	0.4	0.35	0.	0.015	0.35	0.36	0.375	0.4
00941	CHLORIDE, DISSOLVED IN WATER MG/L	9	0.9	0.856	0.9	0.8	0.003	0.053	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	9	2.	2.011	2.2	1.9	0.011	0.105	1.9	1.9	2.1	2.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	9	8.2	8.244	8.6	8.	0.038	0.194	8.	8.1	8.4	8.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0334

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-04/27/95	9	0.006	0.089	0.5	0.	0.028	0.168	0.	0.002	0.14	0.5
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-04/27/95	9	0.14	0.236	0.54	0.1	0.027	0.165	0.1	0.125	0.4	0.54

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0335

NPS Station ID: SHEN0335
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.444892/ -78.371726

Depth of Water: 0
 Elevation: 1010
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_ST0A
 Within Park Boundary: Yes

Date Created: 05/01/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION ST0A IS LOCATED ON THE MADISON VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0335

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/07/93-07/25/97	220	19.	19.632	24.	17.	1.868	1.367	18.	19.	20.	21.
00400	PH (STANDARD UNITS)	04/16/93-07/25/97	223	6.63	6.59	7.04	6.06	0.052	0.228	6.26	6.4	6.75	6.876
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/25/97	223	6.63	6.528	7.04	6.06	0.056	0.236	6.26	6.4	6.75	6.876
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/25/97	223	0.234	0.297	0.871	0.091	0.028	0.169	0.133	0.178	0.398	0.55
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	06/07/93-07/25/97	220	19.	19.132	23.	16.	1.667	1.291	18.	18.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/25/97	223	75.4	74.792	127.9	35.4	316.634	17.794	53.7	61.7	87.9	95.82
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	09/04/96-07/25/97	41	1.4	1.756	8.7	0.7	1.982	1.408	0.8	1.1	1.9	3.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/25/97	223	1.5	1.5	2.7	1.2	0.028	0.167	1.34	1.4	1.5	1.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/25/97	223	0.4	0.4	0.6	0.3	0.003	0.053	0.3	0.4	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/25/97	223	1.36	1.341	1.66	0.97	0.013	0.112	1.17	1.28	1.42	1.466
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/25/97	223	0.5	0.539	1.64	0.31	0.025	0.158	0.44	0.47	0.53	0.662
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/25/97	223	0.8	0.782	1.	0.6	0.007	0.086	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/25/97	223	2.2	2.348	4.	1.5	0.29	0.538	1.8	2.	2.7	3.1
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/25/97	223	8.2	8.103	9.8	5.1	0.792	0.89	7.04	7.5	8.8	9.2
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	07/19/93-06/04/97	67	16.753	19.081	68.934	6.557	152.297	12.341	7.52	9.127	25.161	39.124
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/04/96-07/25/97	34	0.007	0.02	0.17	0.	0.001	0.034	0.001	0.005	0.013	0.06
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/25/97	223	0.5	0.613	2.6	0.	0.379	0.615	0.005	0.01	1.	1.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/25/97	223	0.24	0.299	0.88	0.09	0.029	0.17	0.134	0.18	0.4	0.55

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0335

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH					118	0	0.00	49	0	0.00	56	0	0.00			
	Fresh Chronic	9.	223	0	0.00	118	0	0.00	49	0	0.00	56	0	0.00			
	Other-Lo Lim.	6.5	223	71	0.32	118	38	0.32	49	7	0.14	56	26	0.46			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS					118	118	1.00	49	49	1.00	56	56	1.00			
	Other-Lo Lim.	200.	223	223	1.00	118	118	1.00	49	49	1.00	56	56	1.00			
00941	CHLORIDE, DISSOLVED IN WATER					118	0	0.00	49	0	0.00	56	0	0.00			
	Fresh Acute	860.	223	0	0.00	118	0	0.00	49	0	0.00	56	0	0.00			
	Drinking Water	250.	223	0	0.00	118	0	0.00	49	0	0.00	56	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)					118	0	0.00	49	0	0.00	56	0	0.00			
	Drinking Water	250.	223	0	0.00	118	0	0.00	49	0	0.00	56	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)					118	0	0.00	49	0	0.00	56	0	0.00			
	Drinking Water	44.	223	0	0.00	118	0	0.00	49	0	0.00	56	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1993 - Station SHEN0335

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/07/93-07/25/97	92	19.5	19.913	24.	17.	2.366	1.538	18.	19.	21.	22.
00400	PH (STANDARD UNITS)	04/16/93-07/25/97	95	6.59	6.548	6.81	6.21	0.028	0.167	6.276	6.43	6.69	6.744
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/25/97	95	6.59	6.515	6.81	6.21	0.029	0.17	6.276	6.43	6.69	6.744
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/25/97	95	0.257	0.306	0.617	0.155	0.016	0.127	0.18	0.204	0.372	0.53
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	06/07/93-07/25/97	92	19.	19.12	22.	16.	2.019	1.421	18.	18.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/25/97	95	68.7	68.219	103.7	35.4	264.02	16.249	44.94	56.2	79.4	91.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/25/97	95	1.5	1.513	2.7	1.3	0.045	0.213	1.3	1.4	1.6	1.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/25/97	95	0.4	0.406	0.6	0.3	0.005	0.068	0.3	0.4	0.4	0.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/25/97	95	1.32	1.292	1.46	0.97	0.014	0.12	1.116	1.2	1.39	1.424
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/25/97	95	0.48	0.536	1.64	0.31	0.035	0.188	0.42	0.46	0.53	0.71
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/25/97	95	0.8	0.788	0.9	0.7	0.005	0.07	0.7	0.7	0.8	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/25/97	95	2.4	2.52	4.	1.8	0.313	0.559	1.96	2.1	2.9	3.34
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/25/97	95	8.	7.801	9.1	5.1	0.912	0.955	6.52	7.3	8.6	8.9
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	07/19/93-06/04/97	14	28.411	27.527	41.549	16.566	78.613	8.866	16.66	18.197	34.102	41.443
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/25/97	95	1.	1.008	2.6	0.002	0.346	0.588	0.36	0.6	1.3	1.84
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/25/97	95	0.26	0.308	0.62	0.16	0.016	0.128	0.18	0.21	0.38	0.534

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0335

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/07/93-07/25/97	87	19.	19.586	24.	18.	1.292	1.137	18.	19.	20.	21.
00400	PH (STANDARD UNITS)	04/16/93-07/25/97	87	6.72	6.638	7.04	6.06	0.068	0.261	6.26	6.39	6.86	6.916
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/25/97	87	6.72	6.555	7.04	6.06	0.075	0.274	6.26	6.39	6.86	6.916
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/25/97	87	0.191	0.279	0.871	0.091	0.035	0.187	0.121	0.138	0.407	0.55
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	06/07/93-07/25/97	87	19.	19.379	23.	17.	1.354	1.164	18.	19.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/25/97	87	80.7	81.667	127.9	38.2	333.192	18.254	59.94	71.1	94.4	102.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/25/97	87	1.5	1.516	2.2	1.3	0.015	0.121	1.4	1.4	1.6	1.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/25/97	87	0.4	0.398	0.6	0.3	0.002	0.04	0.4	0.4	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/25/97	87	1.42	1.39	1.55	1.16	0.008	0.089	1.268	1.32	1.46	1.49
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/25/97	87	0.5	0.553	1.29	0.44	0.024	0.154	0.47	0.49	0.53	0.698
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/25/97	87	0.8	0.775	1.	0.6	0.01	0.1	0.7	0.7	0.8	0.92
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/25/97	87	2.	2.064	3.2	1.5	0.137	0.37	1.7	1.8	2.2	2.62
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/25/97	87	8.6	8.569	9.8	6.8	0.548	0.74	7.48	8.1	9.2	9.42
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	07/19/93-06/04/97	24	20.924	25.586	68.934	9.25	184.807	13.594	14.283	17.512	26.797	47.075
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/25/97	87	0.02	0.264	1.8	0.005	0.173	0.415	0.006	0.008	0.3	1.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/25/97	87	0.19	0.281	0.88	0.09	0.035	0.188	0.12	0.14	0.41	0.55

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0335

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/07/93-07/25/97	22	20.	19.591	22.	17.	2.063	1.436	17.3	18.	21.	21.
00400	PH (STANDARD UNITS)	04/16/93-07/25/97	22	6.44	6.438	6.74	6.08	0.059	0.243	6.13	6.21	6.683	6.737
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/25/97	22	6.437	6.374	6.74	6.08	0.063	0.252	6.13	6.21	6.682	6.737
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/25/97	22	0.365	0.422	0.832	0.182	0.051	0.225	0.183	0.208	0.617	0.741
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	06/07/93-07/25/97	22	19.	19.091	21.	17.	1.515	1.231	17.3	18.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/25/97	22	63.25	68.159	91.2	51.9	160.143	12.655	54.94	60.125	83.65	88.46
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/25/97	22	1.4	1.436	1.7	1.2	0.017	0.129	1.23	1.375	1.5	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/25/97	22	0.4	0.382	0.4	0.3	0.002	0.039	0.3	0.4	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/25/97	22	1.305	1.326	1.66	1.24	0.007	0.083	1.253	1.29	1.34	1.384
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/25/97	22	0.5	0.524	0.76	0.44	0.005	0.068	0.449	0.495	0.56	0.594
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/25/97	22	0.8	0.823	1.	0.6	0.008	0.087	0.7	0.8	0.9	0.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0335

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/25/97	22	2.9	2.768	3.6	1.9	0.345	0.587	1.93	2.25	3.3	3.57
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/25/97	22	7.7	7.641	8.4	6.9	0.168	0.41	7.13	7.3	8.	8.17
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	07/19/93-06/04/97	20	8.102	9.479	16.443	6.557	8.187	2.861	7.237	7.486	11.767	14.777
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/25/97	22	0.026	0.271	1.3	0.	0.162	0.402	0.	0.	0.525	1.04
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/25/97	22	0.37	0.426	0.84	0.18	0.052	0.228	0.183	0.21	0.625	0.75

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0335

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	06/07/93-07/25/97	19	19.	18.526	20.	17.	0.485	0.697	18.	18.	19.	19.
00400	PH (STANDARD UNITS)	04/16/93-07/25/97	19	6.72	6.752	6.99	6.31	0.024	0.154	6.64	6.67	6.87	6.94
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/25/97	19	6.72	6.723	6.99	6.31	0.024	0.156	6.64	6.67	6.87	6.94
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/25/97	19	0.191	0.189	0.49	0.102	0.007	0.084	0.115	0.135	0.214	0.229
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	06/07/93-07/25/97	19	18.	18.105	19.	16.	0.433	0.658	18.	18.	18.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/25/97	19	88.7	83.858	102.8	56.2	150.648	12.274	68.7	73.7	92.8	97.8
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/25/97	19	1.4	1.432	1.6	1.3	0.008	0.089	1.3	1.4	1.5	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/25/97	19	0.4	0.4	0.4	0.4	0.	0.	0.4	0.4	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/25/97	19	1.38	1.376	1.53	1.26	0.008	0.087	1.26	1.3	1.44	1.53
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/25/97	19	0.52	0.511	0.67	0.43	0.003	0.056	0.44	0.48	0.53	0.58
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/25/97	19	0.7	0.737	0.8	0.6	0.004	0.06	0.7	0.7	0.8	0.8
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/25/97	19	2.1	2.3	2.7	1.9	0.116	0.34	1.9	2.	2.6	2.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/25/97	19	7.8	8.011	9.3	7.4	0.397	0.63	7.4	7.5	8.5	9.1
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	07/19/93-06/04/97	9	9.367	9.932	12.276	8.528	1.512	1.23	8.528	9.052	10.937	12.276
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/25/97	19	0.6	0.626	2.1	0.	0.291	0.539	0.	0.3	0.9	1.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/25/97	19	0.19	0.192	0.49	0.1	0.007	0.083	0.12	0.14	0.22	0.23

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0336

NPS Station ID: SHEN0336
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.444892/ -78.371726

 Depth of Water: 0
 Elevation: 1010
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_ST01
 Within Park Boundary: Yes

Date Created: 05/01/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION ST01 IS LOCATED ON THE MADISON VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0336

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-01/20/96	199	19.	19.452	24.	16.	2.168	1.472	18.	18.	20.	21.
00400	PH (STANDARD UNITS)	11/01/92-01/20/96	199	6.65	6.573	7.05	6.03	0.064	0.252	6.16	6.39	6.75	6.84
00400	CONVERTED PH (STANDARD UNITS)	11/01/92-01/20/96	199	6.65	6.495	7.05	6.03	0.07	0.264	6.16	6.39	6.75	6.84
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/01/92-01/20/96	199	0.224	0.32	0.933	0.089	0.043	0.208	0.145	0.178	0.407	0.692
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/01/92-01/20/96	199	19.	19.075	23.	16.	2.201	1.484	17.	18.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-01/20/96	199	75.3	74.984	131.2	32.8	419.8	20.489	47.9	56.7	89.4	101.8
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	01/18/96-01/20/96	6	1.7	1.65	2.1	1.1	0.219	0.468	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-01/20/96	199	1.4	1.424	1.9	1.2	0.018	0.135	1.3	1.3	1.5	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-01/20/96	199	0.4	0.386	0.5	0.3	0.002	0.049	0.3	0.4	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-01/20/96	199	1.4	1.386	1.55	1.1	0.01	0.102	1.23	1.32	1.46	1.51
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-01/20/96	199	0.45	0.479	1.02	0.33	0.014	0.119	0.37	0.4	0.51	0.64
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-01/20/96	199	0.9	0.877	2.	0.6	0.019	0.138	0.8	0.8	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-01/20/96	199	2.1	2.299	4.	1.6	0.302	0.55	1.7	1.8	2.6	3.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-01/20/96	199	8.3	8.368	10.1	6.1	0.756	0.87	7.4	7.9	9.	9.6
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-01/20/96	37	12.63	14.253	30.39	5.475	37.091	6.09	6.667	8.908	18.741	22.959
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-01/20/96	199	0.6	0.638	2.3	0.004	0.294	0.542	0.008	0.1	1.	1.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-01/20/96	199	0.23	0.323	0.94	0.09	0.044	0.209	0.15	0.18	0.41	0.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0336

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	199	0	0.00	36	0	0.00	130	0	0.00	33	0	0.00			
	Other-Lo Lim.	6.5	199	69	0.35	36	4	0.11	130	54	0.42	33	11	0.33			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	199	199	1.00	36	36	1.00	130	130	1.00	33	33	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	199	0	0.00	36	0	0.00	130	0	0.00	33	0	0.00			
	Drinking Water	250.	199	0	0.00	36	0	0.00	130	0	0.00	33	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	199	0	0.00	36	0	0.00	130	0	0.00	33	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	199	0	0.00	36	0	0.00	130	0	0.00	33	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1992 - Station SHEN0336

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	46	19.	19.696	24.	16.	3.816	1.954	18.	18.	21.	23.
00400	PH (STANDARD UNITS)	46	6.21	6.244	6.73	6.03	0.03	0.173	6.087	6.148	6.262	6.607
00400	CONVERTED PH (STANDARD UNITS)	46	6.21	6.217	6.73	6.03	0.031	0.175	6.087	6.148	6.262	6.607
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	46	0.617	0.607	0.933	0.186	0.032	0.18	0.248	0.546	0.712	0.819
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	46	19.	19.413	23.	16.	3.492	1.869	18.	18.	21.	23.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	46	61.15	61.602	94.4	42.8	149.4	12.223	46.1	52.375	69.5	77.17
00915	CALCIUM, DISSOLVED (MG/L AS CA)	46	1.4	1.459	1.9	1.2	0.035	0.188	1.3	1.3	1.6	1.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	46	0.4	0.398	0.5	0.3	0.004	0.065	0.3	0.4	0.4	0.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	46	1.35	1.338	1.45	1.1	0.006	0.076	1.26	1.29	1.4	1.43
00935	POTASSIUM, DISSOLVED (MG/L AS K)	46	0.465	0.508	0.91	0.35	0.019	0.137	0.377	0.4	0.56	0.69
00941	CHLORIDE, DISSOLVED IN WATER MG/L	46	0.9	0.907	1.	0.7	0.003	0.057	0.87	0.9	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	46	2.25	2.439	4.	1.7	0.386	0.621	1.8	1.9	2.8	3.39
00955	SILICA, DISSOLVED (MG/L AS SI02)	46	8.3	8.104	8.8	6.3	0.312	0.559	7.2	7.875	8.425	8.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	46	0.5	0.46	1.1	0.01	0.097	0.312	0.01	0.2	0.7	0.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	46	0.62	0.612	0.94	0.19	0.033	0.181	0.255	0.548	0.715	0.826

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0336

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	51	20.	19.647	23.	17.	1.953	1.397	17.	19.	21.	21.
00400	PH (STANDARD UNITS)	51	6.7	6.651	6.88	6.05	0.032	0.18	6.39	6.58	6.76	6.83
00400	CONVERTED PH (STANDARD UNITS)	51	6.7	6.605	6.88	6.05	0.034	0.185	6.39	6.58	6.76	6.83
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	51	0.2	0.248	0.891	0.132	0.023	0.152	0.148	0.174	0.263	0.407
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	51	19.	19.118	22.	16.	2.066	1.437	17.	18.	20.	21.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	51	84.4	76.437	106.2	45.3	358.605	18.937	52.32	56.2	92.8	100.96
00915	CALCIUM, DISSOLVED (MG/L AS CA)	51	1.4	1.396	1.6	1.2	0.013	0.113	1.2	1.3	1.5	1.58
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	51	0.4	0.38	0.5	0.3	0.002	0.045	0.3	0.4	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	51	1.46	1.422	1.55	1.17	0.01	0.098	1.242	1.36	1.5	1.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	51	0.45	0.442	0.77	0.35	0.005	0.068	0.37	0.39	0.47	0.488
00941	CHLORIDE, DISSOLVED IN WATER MG/L	51	0.9	0.865	0.9	0.6	0.004	0.059	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	51	2.	2.222	3.9	1.7	0.324	0.569	1.7	1.8	2.4	3.18
00955	SILICA, DISSOLVED (MG/L AS SI02)	51	8.5	8.676	10.1	6.1	0.819	0.905	7.72	8.	9.5	9.78
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	51	0.9	1.001	2.1	0.008	0.269	0.519	0.42	0.7	1.4	1.88
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	51	0.2	0.25	0.9	0.13	0.023	0.153	0.15	0.18	0.27	0.41

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0336

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	62	19.	19.387	22.	17.	1.028	1.014	18.	19.	20.	20.7
00400	PH (STANDARD UNITS)	62	6.73	6.719	7.05	6.27	0.038	0.194	6.389	6.635	6.835	6.971
00400	CONVERTED PH (STANDARD UNITS)	62	6.73	6.673	7.05	6.27	0.04	0.2	6.389	6.635	6.835	6.971
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	62	0.186	0.212	0.537	0.089	0.012	0.109	0.107	0.146	0.232	0.409
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	62	19.	19.016	22.	17.	1.295	1.138	17.	18.	20.	20.7
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	62	89.05	87.265	131.2	43.7	478.256	21.869	49.6	75.9	102.125	115.86
00915	CALCIUM, DISSOLVED (MG/L AS CA)	62	1.45	1.439	1.7	1.2	0.012	0.109	1.3	1.4	1.5	1.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	62	0.4	0.387	0.5	0.3	0.001	0.038	0.3	0.4	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	62	1.44	1.424	1.54	1.15	0.007	0.086	1.31	1.348	1.49	1.52
00935	POTASSIUM, DISSOLVED (MG/L AS K)	62	0.48	0.504	1.02	0.33	0.02	0.14	0.353	0.41	0.523	0.747
00941	CHLORIDE, DISSOLVED IN WATER MG/L	62	0.8	0.834	1.	0.6	0.009	0.096	0.7	0.8	0.9	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	62	1.9	2.113	3.1	1.6	0.191	0.437	1.7	1.8	2.45	2.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	62	8.9	8.708	10.	6.3	0.632	0.795	7.7	8.	9.325	9.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0336

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-01/20/96	62	0.01	0.372	1.6	0.004	0.245	0.495	0.004	0.006	0.9	1.1
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-01/20/96	62	0.19	0.214	0.54	0.09	0.012	0.11	0.11	0.148	0.233	0.411

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0336

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-01/20/96	32	18.	18.75	23.	17.	2.258	1.503	17.	18.	19.	21.7
00400	PH (STANDARD UNITS)	11/01/92-01/20/96	32	6.655	6.657	6.85	6.42	0.012	0.112	6.503	6.588	6.743	6.817
00400	CONVERTED PH (STANDARD UNITS)	11/01/92-01/20/96	32	6.655	6.643	6.85	6.42	0.013	0.113	6.503	6.587	6.742	6.817
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/01/92-01/20/96	32	0.221	0.227	0.38	0.141	0.004	0.06	0.152	0.181	0.259	0.314
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/01/92-01/20/96	32	18.	18.563	23.	16.	2.448	1.564	17.	17.25	19.	21.4
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-01/20/96	32	69.5	66.531	91.2	32.8	277.969	16.672	37.16	56.825	78.6	86.15
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-01/20/96	32	1.4	1.378	1.7	1.2	0.013	0.116	1.2	1.3	1.4	1.57
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-01/20/96	32	0.4	0.378	0.5	0.3	0.002	0.049	0.3	0.325	0.4	0.4
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-01/20/96	32	1.39	1.357	1.5	1.16	0.012	0.109	1.18	1.233	1.443	1.48
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-01/20/96	32	0.41	0.438	0.71	0.34	0.008	0.089	0.363	0.383	0.448	0.623
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-01/20/96	32	0.9	0.953	2.	0.8	0.081	0.284	0.8	0.8	0.975	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-01/20/96	32	2.2	2.406	3.6	2.1	0.156	0.395	2.1	2.125	2.6	3.21
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-01/20/96	32	8.1	7.944	8.7	6.1	0.467	0.683	6.72	7.6	8.5	8.7
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-01/20/96	32	0.6	0.606	1.4	0.008	0.12	0.347	0.2	0.4	0.7	1.2
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-01/20/96	32	0.225	0.23	0.38	0.14	0.004	0.06	0.153	0.183	0.265	0.317

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0336

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-01/20/96	8	20.	20.125	21.	19.	0.411	0.641	**	**	**	**
00400	PH (STANDARD UNITS)	11/01/92-01/20/96	8	6.48	6.488	6.6	6.38	0.007	0.084	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/01/92-01/20/96	8	6.48	6.48	6.6	6.38	0.007	0.085	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/01/92-01/20/96	8	0.331	0.331	0.417	0.251	0.004	0.063	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/01/92-01/20/96	8	19.	19.375	21.	18.	0.839	0.916	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-01/20/96	8	83.05	81.313	88.7	71.7	53.47	7.312	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-01/20/96	8	1.5	1.475	1.6	1.4	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-01/20/96	8	0.4	0.388	0.4	0.3	0.001	0.035	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-01/20/96	8	1.205	1.246	1.38	1.13	0.011	0.106	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-01/20/96	8	0.505	0.515	0.68	0.39	0.009	0.095	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-01/20/96	8	0.8	0.825	0.9	0.8	0.002	0.046	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-01/20/96	8	3.15	3.013	3.5	2.3	0.276	0.525	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-01/20/96	8	6.7	6.975	8.4	6.1	0.748	0.865	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-01/20/96	8	1.55	1.55	2.3	0.9	0.337	0.581	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-01/20/96	8	0.335	0.334	0.42	0.25	0.004	0.065	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0337

NPS Station ID: SHEN0337
 Location: Staunton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.444892/ -78.371726

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_VTS59
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Madison VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0337

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-04/27/95	1	12.2	12.2	12.2	12.2	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-04/27/95	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/27/95-04/27/95	1	10.4	10.4	10.4	10.4	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/27/95-04/27/95	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/27/95-04/27/95	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/27/95-04/27/95	1	0.141	0.141	0.141	0.141	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-04/27/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0337

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00							1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00							1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0	0.00							1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0338

NPS Station ID: SHEN0338
 Location: Staunton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.444977/ -78.373198

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_LTEM_2L307
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Madison VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0338

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	39	15.	14.449	18.5	4.2	6.74	2.596	12.	13.	16.3	17.8
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/24/95-05/15/97	7	17.	19.	26.	16.	15.333	3.916	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	33	10.	10.109	13.5	8.5	1.12	1.058	8.7	9.3	10.9	11.12
00406 PH, FIELD, STANDARD UNITS SU	05/28/91-05/15/97	17	6.76	6.812	7.93	6.2	0.237	0.487	6.256	6.495	6.98	7.754
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/28/91-05/15/97	17	6.76	6.633	7.93	6.2	0.271	0.521	6.256	6.495	6.98	7.754
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/28/91-05/15/97	17	0.174	0.233	0.631	0.012	0.032	0.178	0.018	0.105	0.32	0.556
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/24/95-05/15/97	7	11.	11.429	17.	10.	6.286	2.507	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0338

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	33	0	0.00	15	0	0.00	1	0	0.00	17	0	0.00
00406 PH, FIELD	Fresh Chronic	9.	17	0	0.00	7	0	0.00	1	0	0.00	9	0	0.00
	Other-Lo Lim.	6.5	17	4	0.24	7	1	0.14	1	0	0.00	9	3	0.33

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0338

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	18	15.9	15.694	18.	12.	3.185	1.785	12.9	14.3	17.225	18.
00300 OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	15	10.	9.807	11.	8.5	0.911	0.954	8.62	8.8	11.	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0338

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	1	13.5	13.5	13.5	13.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0338

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	20	13.7	13.84	18.5	10.9	3.243	1.801	11.37	12.5	15.	15.97
00300 OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	17	10.	10.176	12.	8.7	0.633	0.796	8.94	9.85	10.8	11.36

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0339

NPS Station ID: SHEN0339
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.445003/ -78.371698

Depth of Water: 0
 Elevation: 1010
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA15
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA15 IS LOCATED ON THE MADISON VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.56 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0339

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.155	0.155	0.155	0.155	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	1	1.26	1.26	1.26	1.26	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0339

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0340

NPS Station ID: SHEN0340
 Location: BUSH MOUNTAIN STREAM
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.445003/ -78.437505

Depth of Water: 0
 Elevation: 1720
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_VTSSS_GR04
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION GR04 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BUSH MOUNTAIN STREAM OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.49 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0340

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.66	6.66	6.66	6.66	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.66	6.66	6.66	6.66	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.219	0.219	0.219	0.219	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.36	1.36	1.36	1.36	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.31	0.31	0.31	0.31	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0340

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0341

NPS Station ID: SHEN0341 LAT/LON: 38.445448/ -78.376504
 Location: WILSON RUN (STAUNTON RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 1350
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR04 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.75 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0341

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	7.5	8.143	16.	0.	32.976	5.742	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	7	20.	19.857	22.	18.	2.476	1.574	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	7	6.78	6.691	6.94	6.1	0.08	0.282	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	7	6.78	6.59	6.94	6.1	0.092	0.303	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	7	0.166	0.257	0.794	0.115	0.058	0.241	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	7	19.	19.429	21.	18.	1.619	1.272	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	7	73.7	77.314	107.	51.8	540.135	23.241	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	7	1.2	1.3	1.5	1.2	0.017	0.129	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	7	0.4	0.357	0.4	0.3	0.003	0.053	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	7	1.55	1.586	1.79	1.38	0.023	0.152	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	7	0.46	0.433	0.51	0.36	0.004	0.062	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	7	0.9	0.943	1.	0.9	0.003	0.053	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	7	3.	3.014	3.3	2.9	0.021	0.146	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	7	9.	9.386	10.6	8.3	0.911	0.955	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	7	0.04	0.237	0.7	0.	0.085	0.291	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	7	0.17	0.26	0.8	0.12	0.058	0.242	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0341

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	7	1	0.14	3	0	0.00	3	0	0.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	7	7	1.00	3	3	1.00	3	3	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	7	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00				
	Drinking Water	250.	7	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	7	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	7	0	0.00	3	0	0.00	3	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0342

NPS Station ID: SHEN0342 LAT/LON: 38.445448/ -78.376504
 Location: WILSON RUN (STAUNTON RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 0
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_SR04
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0342

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/95-05/24/95	1	12.7	12.7	12.7	12.7	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/24/95-05/24/95	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/24/95-05/24/95	1	9.8	9.8	9.8	9.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/24/95-05/24/95	1	6.44	6.44	6.44	6.44	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/24/95-05/24/95	1	6.44	6.44	6.44	6.44	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/95-05/24/95	1	0.363	0.363	0.363	0.363	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/24/95-05/24/95	1	12.	12.	12.	12.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0342

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0		0.00						1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0		0.00						1	0	0.00						
	Other-Lo Lim.	6.5	1	1		1.00						1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0343

NPS Station ID: SHEN0343
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.445503/ -78.375226

Depth of Water: 0
 Elevation: 1320
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR02 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.15 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0343

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	8	8.5	9.375	20.	0.	47.411	6.886	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	18.5	18.625	20.	18.	0.554	0.744	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.795	6.698	6.92	6.27	0.063	0.251	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.793	6.626	6.92	6.27	0.069	0.262	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.161	0.237	0.537	0.12	0.026	0.162	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	18.	17.875	19.	17.	0.696	0.835	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	64.5	69.7	98.7	42.8	423.131	20.57	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.3	1.325	1.4	1.2	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.35	0.35	0.4	0.3	0.003	0.053	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.415	1.41	1.48	1.36	0.002	0.047	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.42	0.401	0.46	0.34	0.002	0.045	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.85	0.85	0.9	0.8	0.003	0.053	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	2.	2.	2.5	1.6	0.123	0.351	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	8.55	8.713	9.8	8.1	0.401	0.633	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.22	0.432	1.1	0.	0.241	0.491	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.165	0.239	0.54	0.12	0.026	0.162	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0343

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0344

NPS Station ID: SHEN0344
 Location: STAUNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.445670/ -78.381920

Depth of Water: 0
 Elevation: 1340
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR06 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.35 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0344

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-10/05/94	3	9.5	8.833	11.	6.	6.583	2.566	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-10/05/94	3	21.	21.333	23.	20.	2.333	1.528	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-10/05/94	3	6.23	6.21	6.32	6.08	0.015	0.121	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-10/05/94	3	6.23	6.199	6.32	6.08	0.015	0.122	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-10/05/94	3	0.589	0.633	0.832	0.479	0.033	0.181	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-10/05/94	3	20.	21.	23.	20.	3.	1.732	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-10/05/94	3	66.9	71.333	90.3	56.8	295.303	17.184	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-10/05/94	3	1.3	1.367	1.5	1.3	0.013	0.115	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-10/05/94	3	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-10/05/94	3	1.58	1.677	1.89	1.56	0.034	0.185	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-10/05/94	3	0.37	0.403	0.48	0.36	0.004	0.067	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-10/05/94	3	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-10/05/94	3	3.4	3.367	3.6	3.1	0.063	0.252	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-10/05/94	3	9.4	9.733	10.7	9.1	0.723	0.85	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-10/05/94	3	0.2	0.533	1.3	0.1	0.443	0.666	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-10/05/94	3	0.59	0.637	0.84	0.48	0.034	0.184	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0344

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	3	0	0.00	1	0	0.00	2	0	0.00							
	Other-Lo Lim.	6.5	3	3	1.00	1	1	1.00	2	2	1.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	3	3	1.00	1	1	1.00	2	2	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	3	0	0.00	1	0	0.00	2	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	3	0	0.00	1	0	0.00	2	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	3	0	0.00	1	0	0.00	2	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	3	0	0.00	1	0	0.00	2	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0345

NPS Station ID: SHEN0345
 Location: BOOTENS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.445809/ -78.436392

Depth of Water: 0
 Elevation: 1720
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51079 VIRGINIA/GREENE
 STORET Station ID(s): SHEN_VTSSS_GR02
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION GR02 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BOOTENS RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.07 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0345

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.186	0.186	0.186	0.186	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.31	0.31	0.31	0.31	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0345

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0345

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0346

NPS Station ID: SHEN0346
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.446142/ -78.376281

 Depth of Water: 0
 Elevation: 1340
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR03 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.34 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0346

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	8	8.5	9.5	20.	0.	48.286	6.949	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	18.	18.	20.	17.	1.143	1.069	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.725	6.655	6.93	6.23	0.064	0.253	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.725	6.584	6.93	6.23	0.07	0.264	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.188	0.26	0.589	0.117	0.03	0.173	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	17.5	17.625	19.	17.	0.554	0.744	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	65.6	68.388	101.1	41.2	480.467	21.92	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.3	1.3	1.4	1.2	0.009	0.093	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.35	0.35	0.4	0.3	0.003	0.053	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.38	1.379	1.47	1.31	0.002	0.049	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.415	0.395	0.46	0.32	0.003	0.051	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.8	0.825	0.9	0.8	0.002	0.046	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	1.8	1.875	2.4	1.5	0.105	0.324	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	8.4	8.612	9.8	8.	0.418	0.647	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.3	0.418	1.1	0.	0.205	0.453	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.19	0.263	0.59	0.12	0.03	0.173	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0346

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0347

NPS Station ID: SHEN0347
 Location: STAUNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.449420/ -78.380282

Depth of Water: 0
 Elevation: 1360
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR18
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR18 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.06 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0347

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	4	6.5	7.5	14.	3.	21.667	4.655	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	4	28.5	28.5	30.	27.	1.667	1.291	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	4	6.485	6.5	6.85	6.18	0.122	0.349	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	4	6.409	6.403	6.85	6.18	0.135	0.367	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	4	0.39	0.396	0.661	0.141	0.075	0.274	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	4	28.	28.	29.	27.	0.667	0.816	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	4	67.05	66.15	71.9	58.6	30.577	5.53	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	4	1.9	1.875	2.	1.7	0.016	0.126	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	4	0.5	0.475	0.5	0.4	0.002	0.05	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	4	2.035	2.14	2.5	1.99	0.058	0.241	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	4	0.56	0.57	0.64	0.52	0.003	0.051	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	4	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	4	5.15	5.175	5.8	4.6	0.243	0.492	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	4	10.7	10.75	11.	10.6	0.03	0.173	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	4	0.9	0.725	1.1	0.	0.249	0.499	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	4	0.395	0.4	0.67	0.14	0.078	0.279	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0347

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	4	0	0.00				3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	4	2	0.50				3	1	0.33	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	4	4	1.00				3	3	1.00	1	1	1.00			
	Fresh Acute	860.	4	0	0.00				3	0	0.00	1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	4	0	0.00				3	0	0.00	1	0	0.00			
	Drinking Water	250.	4	0	0.00				3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00				3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	4	0	0.00				3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0348

NPS Station ID: SHEN0348
 Location: Staunton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.450781/ -78.379615

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F073
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0348

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/95-05/24/95	2	14.	14.	14.3	13.7	0.18	0.424	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/24/95-05/24/95	2	22.5	22.5	29.	16.	84.5	9.192	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/24/95-05/24/95	2	9.45	9.45	9.8	9.1	0.245	0.495	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/24/95-05/24/95	2	6.65	6.65	6.81	6.49	0.051	0.226	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/24/95-05/24/95	2	6.621	6.621	6.81	6.49	0.053	0.23	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/95-05/24/95	2	0.239	0.239	0.324	0.155	0.014	0.119	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/24/95-05/24/95	2	14.	14.	18.	10.	32.	5.657	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0348

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00							2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	1	0.50							2	1	0.50			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0349

NPS Station ID: SHEN0349
 Location: STAUNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.452392/ -78.406420

Depth of Water: 0
 Elevation: 2580
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION SR12 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0349

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	6.	8.357	19.5	0.	49.476	7.034	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	15.5	15.75	18.	14.	2.214	1.488	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.7	6.603	6.82	6.16	0.064	0.253	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.694	6.532	6.82	6.16	0.07	0.264	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.202	0.294	0.692	0.151	0.039	0.198	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	15.	15.625	18.	14.	2.268	1.506	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	73.15	69.563	101.1	42.9	462.434	21.504	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.15	1.15	1.4	1.	0.023	0.151	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.3	0.325	0.4	0.3	0.002	0.046	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.135	1.136	1.27	1.02	0.007	0.081	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.375	0.375	0.44	0.32	0.002	0.048	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.8	0.775	0.8	0.7	0.002	0.046	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	1.35	1.413	1.9	1.2	0.047	0.217	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	7.8	7.875	9.2	6.9	0.705	0.84	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.24	0.45	1.9	0.	0.423	0.65	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.205	0.296	0.7	0.15	0.04	0.199	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0349

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0350

NPS Station ID: SHEN0350
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.452781/ -78.378948

Depth of Water: 0
 Elevation: 1420
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR07 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0350

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	11.	9.857	20.	0.	52.393	7.238	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	7	18.	17.714	19.	17.	0.571	0.756	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	7	6.85	6.679	6.89	6.17	0.089	0.298	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	7	6.85	6.578	6.89	6.17	0.101	0.317	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	7	0.141	0.264	0.676	0.129	0.047	0.217	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	7	17.	17.429	19.	17.	0.619	0.787	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	7	82.8	73.7	107.	45.4	560.35	23.672	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	7	1.3	1.286	1.4	1.2	0.008	0.09	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	7	0.3	0.314	0.4	0.3	0.001	0.038	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	7	1.33	1.34	1.45	1.29	0.003	0.051	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	7	0.4	0.381	0.44	0.31	0.002	0.049	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	7	0.8	0.814	0.9	0.8	0.001	0.038	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	7	1.7	1.714	2.2	1.4	0.078	0.279	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	7	8.3	8.557	9.6	7.8	0.396	0.629	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	7	0.4	0.588	1.5	0.	0.404	0.636	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	7	0.14	0.266	0.68	0.13	0.048	0.218	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0350

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	7	2	0.29	4	1	0.25	2	0	0.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	4	4	1.00	2	2	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00				
	Fresh Acute	860.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00				
	Drinking Water	250.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	4	0	0.00	2	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0351

NPS Station ID: SHEN0351
 Location: CONWAY RIVER (UPPER REACH)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.453116/ -78.436115

Depth of Water: 0
 Elevation: 1940
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_GR01
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION GR01 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE CONWAY RIVER (UPPER REACH) OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0351

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.155	0.155	0.155	0.155	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	1	1.22	1.22	1.22	1.22	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0351

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0352

NPS Station ID: SHEN0352
 Location: Rapidan River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.453726/ -78.368393

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F092
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Madison VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0352

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/95-07/26/95	1	18.1	18.1	18.1	18.1	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/26/95-07/26/95	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/26/95-07/26/95	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/26/95-07/26/95	1	6.68	6.68	6.68	6.68	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/26/95-07/26/95	1	6.68	6.68	6.68	6.68	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/95-07/26/95	1	0.209	0.209	0.209	0.209	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/26/95-07/26/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0352

Parameter	Std. Type	Std. Value	Total		Prop.		-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
			Obs	Exceed Standard	Exceeding	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0353

NPS Station ID: SHEN0353
 Location: Staunton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.456254/ -78.381032

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F074
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0353

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/95-06/30/98	5	16.4	15.38	18.2	10.4	10.142	3.185	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/24/95-06/30/98	5	17.	18.6	26.	15.	19.3	4.393	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/24/95-06/30/98	5	9.9	9.82	10.7	8.9	0.587	0.766	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	05/24/95-06/30/98	5	6.49	6.42	6.89	5.7	0.196	0.443	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/24/95-06/30/98	5	6.49	6.21	6.89	5.7	0.251	0.501	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/95-06/30/98	5	0.324	0.617	1.995	0.129	0.604	0.777	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/24/95-06/30/98	3	10.	11.333	16.	8.	17.333	4.163	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	07/08/97-06/30/98	2	8.23	8.23	8.56	7.9	0.218	0.467	**	**	**
83509	STREAM, WIDTH METER	07/08/96-06/30/98	3	7.7	7.7	8.8	6.6	1.21	1.1	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	07/08/96-06/30/98	3	0.07	0.07	0.07	0.07	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0353

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	2	0	0.00				3	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	5	0	0.00	2	0	0.00				3	0	0.00			
		Other-Lo Lim.	6.5	5	3	0.60	2	1	0.50				3	2	0.67			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0354

NPS Station ID: SHEN0354
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.457004/ -78.382615

 Depth of Water: 0
 Elevation: 1550
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION SR08 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.75 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0354

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	6	8.75	8.083	16.5	0.	37.942	6.16	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	6	17.	17.	18.	16.	0.4	0.632	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	6	6.855	6.73	6.87	6.21	0.068	0.261	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	6	6.855	6.646	6.87	6.21	0.077	0.277	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	6	0.14	0.226	0.617	0.135	0.037	0.193	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	6	16.	16.333	17.	16.	0.267	0.516	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	6	71.2	70.9	101.2	46.2	442.24	21.03	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	6	1.2	1.233	1.4	1.1	0.011	0.103	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	6	1.275	1.263	1.3	1.22	0.001	0.031	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	6	0.365	0.348	0.4	0.29	0.002	0.047	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	6	0.8	0.817	0.9	0.8	0.002	0.041	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	6	1.55	1.567	1.8	1.3	0.043	0.207	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	6	8.05	8.15	8.8	7.5	0.259	0.509	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	6	0.8	0.752	1.6	0.	0.464	0.681	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	6	0.145	0.23	0.62	0.14	0.037	0.192	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0354

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	6	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	6	1	0.17	3	0	0.00	2	0	0.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	6	6	1.00	3	3	1.00	2	2	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	6	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	6	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	6	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	6	0	0.00	3	0	0.00	2	0	0.00	1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0355

NPS Station ID: SHEN0355
 Location: RT. 642 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103
 RF3 Index: 02080103057900.00

LAT/LON: 38.457226/ -78.302503

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 1.00

Agency: 21VASWCB
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 3-ROB023.06
 Within Park Boundary: No

Date Created: 08/25/90

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK
 RIVER: ROBINSON RIVER SECTION: 04 TOPO MAP #: 0010 TOPO MAP NAME: MADISON, VA

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 11.50
 Distance from RF3: 0.09

On/Off RF1:
 On/Off RF3:

REGION: 3 NORTHERN

Parameter Inventory for Station: SHEN0355

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

EPA Water Quality Criteria Analysis for Station: SHEN0356

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0357

NPS Station ID: SHEN0357 LAT/LON: 38.457448/ -78.401753
 Location: GARTH SPRING RUN (STAUNTON RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 0
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_SR13
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0357

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/25/95-05/25/95	2	12.75	12.75	12.9	12.6	0.045	0.212	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/25/95-05/25/95	2	13.	13.	13.	13.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/25/95-05/25/95	2	9.45	9.45	9.6	9.3	0.045	0.212	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/25/95-05/25/95	2	6.405	6.405	6.47	6.34	0.008	0.092	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/25/95-05/25/95	2	6.4	6.4	6.47	6.34	0.008	0.092	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/25/95-05/25/95	2	0.398	0.398	0.457	0.339	0.007	0.084	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/25/95-05/25/95	2	8.5	8.5	9.	8.	0.5	0.707	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0357

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0	0.00							2	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	2	0	0	0.00							2	0	0.00						
	Other-Lo Lim.	6.5	2	2	2	1.00							2	2	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0358

NPS Station ID: SHEN0358
 Location: STAUNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.457726/ -78.400726

Depth of Water: 0
 Elevation: 2180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION SR11 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.00 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0358

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	6.	8.071	19.	0.	50.369	7.097	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	16.5	16.5	18.	15.	0.857	0.926	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.63	6.581	6.89	6.05	0.085	0.291	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.627	6.485	6.89	6.05	0.095	0.309	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.236	0.327	0.891	0.129	0.069	0.262	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	16.	16.375	18.	15.	0.839	0.916	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	73.25	69.15	96.2	44.4	345.826	18.596	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.15	1.163	1.3	1.	0.011	0.106	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.215	1.218	1.33	1.12	0.004	0.065	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.375	0.371	0.45	0.32	0.002	0.049	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.8	0.775	0.8	0.7	0.002	0.046	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	2.	2.038	2.4	1.8	0.037	0.192	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	7.65	7.838	9.2	6.9	0.677	0.823	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.25	0.442	1.2	0.	0.232	0.482	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.24	0.331	0.9	0.13	0.07	0.264	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0358

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0359

NPS Station ID: SHEN0359
 Location: STAUNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.457726/ -78.400726

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_SR11
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0359

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/30/95-05/30/95	2	12.45	12.45	12.5	12.4	0.005	0.071	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/30/95-05/30/95	2	11.	11.	14.	8.	18.	4.243	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/30/95-05/30/95	2	9.85	9.85	9.9	9.8	0.005	0.071	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/30/95-05/30/95	2	6.345	6.345	6.42	6.27	0.011	0.106	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/30/95-05/30/95	2	6.339	6.339	6.42	6.27	0.011	0.106	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/30/95-05/30/95	2	0.459	0.459	0.537	0.38	0.012	0.111	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/30/95-05/30/95	2	7.5	7.5	9.	6.	4.5	2.121	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0359

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00							2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	2	1.00							2	2	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0360

NPS Station ID: SHEN0360
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.458253/ -78.401810

Depth of Water: 0
 Elevation: 2120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR14
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR14 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.37 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0360

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	7.	8.143	17.	0.	38.06	6.169	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	15.	15.375	17.	14.	0.839	0.916	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.775	6.621	6.92	6.18	0.084	0.289	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.773	6.532	6.92	6.18	0.093	0.305	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.169	0.293	0.661	0.12	0.043	0.207	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	15.	15.25	17.	14.	0.786	0.886	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	57.25	60.6	93.7	27.9	372.129	19.291	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.2	1.175	1.3	1.	0.011	0.104	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.3	0.313	0.4	0.3	0.001	0.035	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.09	1.098	1.21	1.06	0.002	0.048	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.29	0.284	0.32	0.23	0.001	0.037	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.8	0.787	0.8	0.7	0.001	0.035	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	1.15	1.175	1.4	1.	0.016	0.128	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	7.55	7.625	8.9	6.8	0.511	0.715	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.75	0.913	2.1	0.2	0.45	0.671	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.17	0.296	0.67	0.12	0.045	0.211	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0360

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	3	0.38	4	1	0.25	3	1	0.33	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0361

NPS Station ID: SHEN0361
 Location: Staunton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.458365/ -78.399643

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F075
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0361

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/30/95-07/08/98	5	14.8	14.62	16.8	11.9	3.307	1.819	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/30/95-07/08/98	5	14.	14.8	18.	12.	5.2	2.28	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/30/95-07/08/98	5	9.1	9.64	11.3	8.9	1.018	1.009	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/30/95-07/08/98	5	6.44	6.35	6.49	6.07	0.03	0.172	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/30/95-07/08/98	5	6.44	6.32	6.49	6.07	0.031	0.175	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/30/95-07/08/98	5	0.363	0.479	0.851	0.324	0.048	0.219	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/30/95-07/08/98	3	9.	9.333	10.	9.	0.333	0.577	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/10/96-07/08/98	3	10.4	10.1	10.6	9.3	0.49	0.7	**	**	**	**
83509 STREAM, WIDTH METER	07/10/96-07/08/98	3	4.6	5.	6.	4.4	0.76	0.872	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/10/96-07/08/98	3	0.04	0.057	0.09	0.04	0.001	0.029	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0361

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
			Obs	Obs		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	5	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	5	5	0	0.00	4	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	5	5	5	1.00	4	4	1.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0362

NPS Station ID: SHEN0362
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.458365/ -78.399726

Depth of Water: 0
 Elevation: 2120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION SR10 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0362

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	6.	7.857	17.	0.	40.56	6.369	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	15.5	15.625	17.	14.	1.125	1.061	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.745	6.641	6.89	6.13	0.076	0.276	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.74	6.552	6.89	6.13	0.085	0.292	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.182	0.28	0.741	0.129	0.048	0.22	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	15.	15.375	17.	14.	0.839	0.916	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	77.6	74.438	111.2	44.4	621.177	24.923	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.2	1.175	1.3	1.	0.011	0.104	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.1	1.111	1.23	1.04	0.003	0.057	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.32	0.309	0.36	0.26	0.002	0.041	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.8	0.775	0.8	0.7	0.002	0.046	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	1.35	1.313	1.5	1.1	0.018	0.136	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	7.6	7.738	9.	6.9	0.548	0.741	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.7	0.725	1.7	0.	0.419	0.648	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.185	0.284	0.75	0.13	0.049	0.221	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0362

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0363

NPS Station ID: SHEN0363
 Location: STAUNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.459420/ -78.390754

Depth of Water: 0
 Elevation: 1800
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR09 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.19 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0363

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	6.	8.686	19.	0.	47.758	6.911	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	17.	16.75	18.	16.	0.5	0.707	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.77	6.664	6.94	6.14	0.086	0.293	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.766	6.563	6.94	6.14	0.098	0.312	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.171	0.273	0.724	0.115	0.051	0.225	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	16.	16.5	18.	16.	0.571	0.756	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	61.2	62.05	96.2	36.9	416.029	20.397	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.2	1.25	1.4	1.1	0.011	0.107	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.3	0.313	0.4	0.3	0.001	0.035	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	1.2	1.216	1.31	1.17	0.002	0.044	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.35	0.336	0.39	0.27	0.002	0.047	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	1.45	1.488	1.7	1.3	0.036	0.189	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	7.85	8.038	9.2	7.3	0.414	0.644	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.65	0.721	2.1	0.	0.576	0.759	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.175	0.276	0.73	0.12	0.051	0.227	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0363

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	8	2	0.25	4	1	0.25	3	0	0.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0364

NPS Station ID: SHEN0364
 Location: STAUNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.459420/ -78.390754

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_SR09
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0364

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/30/95-05/30/95	2	11.35	11.35	12.3	10.4	1.805	1.344	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/30/95-05/30/95	2	14.5	14.5	16.	13.	4.5	2.121	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/30/95-05/30/95	2	10.25	10.25	10.4	10.1	0.045	0.212	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	05/30/95-05/30/95	2	6.155	6.155	6.44	5.87	0.162	0.403	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/30/95-05/30/95	2	6.068	6.068	6.44	5.87	0.178	0.422	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/30/95-05/30/95	2	0.856	0.856	1.349	0.363	0.486	0.697	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/30/95-05/30/95	2	9.	9.	10.	8.	2.	1.414	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0364

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00														
00406	PH, FIELD	Fresh Chronic	9.	2	0	0.00														
		Other-Lo Lim.	6.5	2	2	1.00														

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0365

NPS Station ID: SHEN0365
 Location: BIG CREEK NEAR JOLLETT, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005003007.86
 Description:

LAT/LON: 38.460281/ -78.493059

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 8.22

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01629130
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.30
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0365

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/81-06/21/82	6	14.25	11.417	19.	1.5	44.542	6.674	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/11/81-06/21/82	6	2.5	3.367	9.	0.2	10.407	3.226	**	**	**
00400	PH (STANDARD UNITS)	08/11/81-06/21/82	6	7.3	7.267	7.8	6.6	0.151	0.388	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/11/81-06/21/82	6	7.3	7.106	7.8	6.6	0.182	0.426	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/81-06/21/82	6	0.05	0.078	0.251	0.016	0.007	0.086	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/11/81-06/21/82	6	7.3	7.317	7.8	7.	0.082	0.286	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/11/81-06/21/82	6	7.289	7.249	7.8	7.	0.087	0.295	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/81-06/21/82	6	0.051	0.056	0.1	0.016	0.001	0.031	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/11/81-06/21/82	6##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/11/81-06/21/82	6	0.25	0.283	0.4	0.2	0.01	0.098	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/11/81-06/21/82	6	12.5	15.5	31.	10.	62.7	7.918	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/11/81-06/21/82	6	3.	3.767	7.9	2.3	4.391	2.095	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/11/81-06/21/82	6	1.25	1.533	2.8	1.1	0.443	0.665	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	08/11/81-06/21/82	6	1.5	1.5	1.8	1.3	0.028	0.167	**	**	**
00931	SODIUM ADSORPTION RATIO	08/11/81-06/21/82	6	0.2	0.183	0.2	0.1	0.002	0.041	**	**	**
00932	SODIUM, PERCENT	08/11/81-06/21/82	6	19.5	18.167	22.	11.	17.367	4.167	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/11/81-06/21/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/11/81-06/21/82	6	0.9	0.933	1.	0.9	0.003	0.052	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/11/81-06/21/82	6	3.5	3.333	4.	2.	0.667	0.816	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/11/81-06/21/82	6	9.05	9.1	10.5	7.8	0.988	0.994	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-05/17/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0365

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0365

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0		2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0366

NPS Station ID: SHEN0366 LAT/LON: 38.461670/ -78.605281
 Location: RT. 603 BRIDGE (ROCKINGHAM/PAGE COUNTY LINE)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005031300.00 RF3 Mile Point: 1.54

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BNAK001.24
 Within Park Boundary: No

Date Created: 07/27/91

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 5.60
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: NAKED CREEK SECTION: 02D TOPO MAP #: 0051 TOPO MAP NAME: ELKTON EAST, VIRGINIA

Parameter Inventory for Station: SHEN0366

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	13	11.7	14.315	25.6	4.	66.028	8.126	4.68	6.35	23.1	25.56
00070	TURBIDITY, (JACKSON CANDLE UNITS)	3	0.5	0.533	0.7	0.4	0.023	0.153	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	4	1.3	9.6	35.	0.8	286.9	16.938	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	5	5.	9.6	27.	1.	116.8	10.807	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	76.	88.583	155.	49.	1247.356	35.318	51.1	59.25	113.5	152.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11	11.3	11.3	15.	8.2	4.52	2.126	8.44	9.8	12.6	14.88
00300	OXYGEN, DISSOLVED MG/L	2	12.4	12.4	13.2	11.6	1.28	1.131	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	12 ##	0.75	0.917	3.	0.5	0.492	0.702	0.5	0.5	1.	2.4
00340	COD, .25N K2CR2O7 MG/L	12	4.	4.458	10.	0.5	8.203	2.864	0.5	2.625	7.	9.1
00400	PH (STANDARD UNITS)	13	9.	8.619	9.5	7.	0.526	0.726	7.28	8.	9.1	9.38
00400	CONVERTED PH (STANDARD UNITS)	13	9.	7.939	9.5	7.	1.027	1.013	7.28	8.	9.1	9.38
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	13	0.001	0.011	0.1	0.	0.001	0.027	0.	0.001	0.01	0.068
00403	PH, LAB, STANDARD UNITS SU	12	7.45	7.392	8.1	6.3	0.303	0.55	6.45	6.95	7.875	8.1
00403	CONVERTED PH, LAB, STANDARD UNITS	12	7.447	7.053	8.1	6.3	0.428	0.654	6.45	6.95	7.875	8.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.036	0.089	0.501	0.008	0.019	0.139	0.008	0.013	0.114	0.398
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	27.5	35.583	79.	13.	458.629	21.416	14.2	18.25	48.75	76.
00500	RESIDUE, TOTAL (MG/L)	4	60.	57.	80.	28.	505.333	22.48	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	4	14.5	14.75	20.	10.	24.917	4.992	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	4	41.	42.25	69.	18.	468.25	21.639	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12 ##	1.5	2.833	16.	1.5	17.379	4.169	1.5	1.5	1.5	12.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12 ##	1.5	1.542	2.	1.5	0.021	0.144	1.5	1.5	1.5	1.85
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12 ##	1.5	2.583	15.	1.	15.311	3.913	1.15	1.5	1.5	10.95
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.009	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	0.555	0.506	0.97	0.02	0.074	0.272	0.065	0.293	0.67	0.925
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.1	0.079	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12/18/91-03/18/96	10	1.05	1.66	4.1	0.5	1.372	1.171	0.5	0.875	2.55
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12/18/91-07/29/97	12	33.	41.	80.	21.	402.364	20.059	21.3	24.	52.25
00940	CHLORIDE, TOTAL IN WATER MG/L	12/18/91-07/29/97	12	1.5	1.583	2.5	1.	0.402	0.634	1.	1.	2.
00945	SULFATE, TOTAL (MG/L AS SO4)	12/18/91-07/29/97	12	5.	4.667	5.	3.	0.424	0.651	3.3	4.25	5.
00951	FLUORIDE, TOTAL (MG/L AS F)	12/18/91-04/15/93	6 ##	0.1	0.111	0.25	0.015	0.088	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0366

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/18/91-11/05/92	5	10.6	10.42	11.1	9.4	0.432	0.657	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/20/92-08/07/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/20/92-08/07/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/07/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/07/96	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/20/92-08/07/96	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/20/92-08/07/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/07/96-08/07/96	1	657.	657.	657.	657.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/07/96	1	14.	14.	14.	14.	0.	0.	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/20/92-08/07/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/20/92-08/07/96	1	45.	45.	45.	45.	0.	0.	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/07/96-08/07/96	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/07/96-08/07/96	1	6570.	6570.	6570.	6570.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/20/92-08/07/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/07/96-08/07/96	1	25700.	25700.	25700.	25700.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/29/97	12 ##	50.	75.	200.	50.	2045.455	45.227	50.	50.	100.	170.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/29/97	12 ##	1.699	1.824	2.301	1.699	0.041	0.201	1.699	1.699	2.	2.211
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/29/97			66.742								
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/20/92-08/07/96	1 ##	30.	30.	30.	30.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/20/92-08/07/96	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/07/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/07/96	1 ##	60.	60.	60.	60.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/07/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/20/92-08/07/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-07/29/97	9 ##	0.005	0.011	0.04	0.005	0.	0.012	0.005	0.005	0.015	0.04
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/20/92-08/07/96	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/20/92-08/07/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/20/92-08/07/96	1 ##	30.	30.	30.	30.	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	07/20/92-03/17/94	5	1.3	1.42	2.9	0.6	0.787	0.887	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0366

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	3	0	0.00			2	0	0.00	1	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	3	0	0.00	1	0	0.00					
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	11	0	0.00	5	0	0.00	5	0	0.00	1	0	0.00		
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00			1	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	13	7	0.54	5	2	0.40	6	4	0.67	2	1	0.50		
		Other-Lo Lim.	6.5	13	0	0.00	5	0	0.00	6	0	0.00	2	0	0.00		
00403	PH, LAB	Fresh Chronic	9.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00		
		Other-Lo Lim.	6.5	12	1	0.08	4	0	0.00	6	1	0.17	2	0	0.00		
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00		
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00		
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00		
		Drinking Water	250.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00		

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0367

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	12	1	0.08	4	0	0.00	6	1	0.17	2	0	0.00			
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	5	0	0.00	1	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0367

NPS Station ID: SHEN0367
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.461809/ -78.409503

Depth of Water: 0
 Elevation: 2420
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR15
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR15 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0367

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	6.	7.786	17.	0.	38.155	6.177	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	14.5	14.375	15.	13.	0.554	0.744	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.665	6.531	6.83	6.11	0.095	0.308	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.657	6.433	6.83	6.11	0.106	0.326	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.22	0.369	0.776	0.148	0.071	0.266	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	14.	13.875	15.	13.	0.411	0.641	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	62.25	61.213	81.2	36.2	346.31	18.609	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	1.05	1.05	1.2	0.9	0.009	0.093	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	0.99	0.995	1.11	0.92	0.003	0.053	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.3	0.294	0.34	0.24	0.002	0.04	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.75	0.75	0.8	0.7	0.003	0.053	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	1.05	1.063	1.3	0.9	0.02	0.141	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	6.95	7.038	8.2	6.3	0.446	0.667	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.7	0.824	1.9	0.09	0.43	0.656	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.225	0.371	0.78	0.15	0.071	0.266	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0367

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	3	0.38	4	1	0.25	3	1	0.33	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0368

NPS Station ID: SHEN0368
 Location: STAUNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.462504/ -78.411198

Depth of Water: 0
 Elevation: 2560
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR16
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR16 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.25 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0368

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	6	8.	7.167	12.	0.	16.267	4.033	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	6	18.	18.167	20.	16.	1.767	1.329	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	6	6.455	6.348	6.56	5.96	0.064	0.254	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	6	6.452	6.282	6.56	5.96	0.07	0.264	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	6	0.354	0.523	1.096	0.275	0.115	0.339	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	6	18.	17.667	19.	16.	1.067	1.033	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	6	93.6	91.133	94.4	85.4	17.227	4.151	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	6	1.45	1.417	1.6	1.2	0.022	0.147	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	6	0.4	0.383	0.4	0.3	0.002	0.041	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	6	1.055	1.082	1.18	1.02	0.005	0.067	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	6	0.275	0.277	0.31	0.26	0.	0.019	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	6	0.8	0.783	0.8	0.7	0.002	0.041	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	6	1.	1.05	1.2	0.9	0.015	0.122	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	6	6.95	7.167	8.3	6.6	0.431	0.656	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	6	3.05	2.45	3.4	0.7	1.491	1.221	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	6	0.355	0.527	1.11	0.28	0.118	0.343	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0368

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	6	3	0.50	2	1	0.50	3	1	0.33	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	6	6	1.00	2	2	1.00	3	3	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0369

NPS Station ID: SHEN0369
 Location: BIG CREEK
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.462810/ -78.484393

Depth of Water: 0
 Elevation: 1740

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_VTSS_PG09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PG09 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BIG CREEK INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.51 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0369

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.99	6.99	6.99	6.99	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.99	6.99	6.99	6.99	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.102	0.102	0.102	0.102	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.24	1.24	1.24	1.24	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0369

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0369

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0370

NPS Station ID: SHEN0370
 Location: Staunton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.462976/ -78.410503

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F076
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0370

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/25/95-07/08/98	5	15.6	14.82	15.9	12.6	1.872	1.368	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/25/95-07/08/98	5	13.	13.	15.	11.	2.5	1.581	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/25/95-07/08/98	5	8.9	9.4	10.7	8.8	0.66	0.812	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/25/95-07/08/98	5	6.43	6.378	6.53	6.04	0.038	0.194	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/25/95-07/08/98	5	6.43	6.338	6.53	6.04	0.04	0.199	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/25/95-07/08/98	5	0.372	0.46	0.912	0.295	0.065	0.255	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/25/95-07/08/98	3	8.	8.333	10.	7.	2.333	1.528	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/10/96-07/08/98	3	14.09	13.913	14.45	13.2	0.414	0.643	**	**	**	**
83509 STREAM, WIDTH METER	07/10/96-07/08/98	3	3.8	3.533	3.8	3.	0.213	0.462	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/10/96-07/08/98	3	0.02	0.02	0.03	0.01	0.	0.01	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0370

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00	1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	5	0	0.00	4	0	0.00	1	0	0.00						
	Other-Lo Lim.	6.5	5	4	0.80	4	3	0.75	1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0371

NPS Station ID: SHEN0371
 Location: Rapidan River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.463365/ -78.368087

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F135
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Madison VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0371

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/96-07/07/98	3	17.2	17.233	19.1	15.4	3.423	1.85	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/11/96-07/07/98	3	23.	22.667	25.	20.	6.333	2.517	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/11/96-07/07/98	3	9.3	9.833	11.5	8.7	2.173	1.474	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/11/96-07/07/98	3	6.38	6.273	6.87	5.57	0.431	0.657	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/11/96-07/07/98	3	6.38	5.966	6.87	5.57	0.573	0.757	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/11/96-07/07/98	3	0.417	1.081	2.692	0.135	1.965	1.402	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/07/98-07/07/98	1	13.	13.	13.	13.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/11/96-07/07/98	3	7.3	7.7	9.1	6.7	1.56	1.249	**	**	**	**
83509 STREAM, WIDTH METER	07/11/96-07/07/98	3	7.	7.033	7.4	6.7	0.123	0.351	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/11/96-07/07/98	3	0.2	0.22	0.28	0.18	0.003	0.053	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0371

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00										
	Other-Lo Lim.	6.5	3	2	0.67	3	2	0.67										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0372

NPS Station ID: SHEN0372
 Location: RT. 649 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103036
 RF3 Index: 02080103003619.90
 Description:

LAT/LON: 38.465838/ -78.315003

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 21.540
 RF3 Mile Point: 20.59

Agency: 21VASWCB
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 3-ROB024.06
 Within Park Boundary: No

Date Created: 08/25/90

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.60
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN
 RIVER: ROBINSON RIVER SECTION: 04 TOPO MAP #: 0010 TOPO MAP NAME: MADISON, VA

Parameter Inventory for Station: SHEN0372

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/22/74-09/29/98	58	13.2	13.214	30.	0.4	53.482	7.313	3.69	7.475	18.175	23.32
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/19/90-12/14/93	6	1.05	3.867	18.	0.5	48.247	6.946	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/20/94-09/29/98	16	1.65	3.581	28.8	0.6	46.708	6.834	0.67	1.05	2.775	12.07
00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/01/93	8	9.	12.375	41.	3.	152.839	12.363	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/18/91-09/29/98	26	40.5	43.077	102.	32.	177.834	13.335	34.7	35.75	44.75	52.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/19/90-09/29/98	30	35.	38.7	101.	30.	161.39	12.704	32.	34.	38.75	48.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/18/91-09/29/98	27	10.9	10.907	15.4	8.8	2.483	1.576	8.9	9.6	11.9	12.7
00300	OXYGEN, DISSOLVED MG/L	10/22/74-06/13/91	31	10.2	10.548	15.	8.	3.371	1.836	8.22	9.2	11.8	13.18
00310	BOD, 5 DAY, 20 DEG C MG/L	11/19/90-09/29/98	30	1.	1.073	5.	0.5	0.671	0.819	0.5	0.5	1.	1.59
00340	COD, .25N K2CR2O7 MG/L	11/19/90-04/22/98	28 ##	2.75	4.107	13.	0.5	8.34	2.888	2.3	2.5	5.	8.2
00400	PH (STANDARD UNITS)	10/22/74-09/29/98	56	7.4	7.355	9.	6.4	0.227	0.476	6.87	7.	7.575	7.83
00400	CONVERTED PH (STANDARD UNITS)	10/22/74-09/29/98	56	7.4	7.143	9.	6.4	0.272	0.522	6.87	7.	7.575	7.83
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/22/74-09/29/98	56	0.04	0.072	0.398	0.001	0.007	0.082	0.015	0.027	0.1	0.136
00403	PH, LAB, STANDARD UNITS SU	11/19/90-09/29/98	30	6.6	6.597	7.1	5.9	0.091	0.302	6.3	6.3	6.8	7.08
00403	CONVERTED PH, LAB, STANDARD UNITS	11/19/90-09/29/98	30	6.6	6.493	7.1	5.9	0.102	0.32	6.3	6.3	6.8	7.08
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/90-09/29/98	30	0.251	0.321	1.259	0.079	0.062	0.248	0.084	0.158	0.501	0.501
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/19/90-09/29/98	30	9.5	10.167	18.	5.	10.557	3.249	7.	7.75	12.	16.7
00500	RESIDUE, TOTAL (MG/L)	11/19/90-09/29/98	28	35.	36.179	80.	18.	205.189	14.324	22.	26.25	41.	64.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/19/90-09/29/98	27	12.	12.759	30.	2.5	60.084	7.751	2.5	7.	17.	26.8
00510	RESIDUE, TOTAL FIXED (MG/L)	11/19/90-09/29/98	27	21.	22.222	50.	5.	117.026	10.818	9.8	14.	26.	39.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/19/90-09/29/98	30 ##	1.5	3.2	36.	0.5	40.183	6.339	1.5	1.5	2.625	4.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/19/90-09/29/98	30 ##	1.5	1.533	4.	0.5	0.309	0.556	1.	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/19/90-09/29/98	30 ##	1.5	2.767	32.	0.	31.564	5.618	1.5	1.5	1.5	3.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/22/74-09/29/98	57 ##	0.02	0.036	0.1	0.02	0.	0.019	0.02	0.02	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/22/74-09/29/98	56 ##	0.005	0.006	0.03	0.005	0.	0.004	0.005	0.005	0.005	0.007
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-09/29/98	41	0.2	0.303	2.59	0.07	0.158	0.397	0.1	0.125	0.33	0.576
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-09/29/98	56	0.1	0.14	0.5	0.05	0.01	0.099	0.05	0.05	0.2	0.3
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	08/03/76-06/06/79	16	0.155	0.184	0.5	0.025	0.017	0.132	0.025	0.093	0.27	0.423
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/90-09/29/98	29 ##	0.05	0.067	0.2	0.05	0.001	0.033	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11/19/90-12/14/93	6 ##	0.008	0.011	0.03	0.005	0.	0.01	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/19/90-06/17/96	22	1.2	1.645	6.1	0.5	2.037	1.427	0.5	0.5	2.225	4.17
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	28	11.	13.357	25.	7.	27.275	5.223	8.	10.	16.	22.2
00940	CHLORIDE,TOTAL IN WATER MG/L	11/19/90-09/29/98	29	2.	2.293	10.	1.	2.491	1.578	1.	2.	2.5	2.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0372

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/90-09/29/98	28	3.	3.268	6.	2.5	0.824	0.908	2.5	2.5	5.
00951	FLUORIDE, TOTAL (MG/L AS F)	11/19/90-03/01/93	9 ##	0.05	0.094	0.25	0.05	0.005	0.073	0.05	0.05	0.25
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/19/90-12/03/92	8	10.35	11.625	20.6	9.3	14.196	3.768	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/11/77-09/20/94	5 ##	1.	1.7	5.	0.5	3.45	1.857	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/11/77-09/20/94	6 ##	5.	4.417	5.	1.5	2.042	1.429	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/11/77-09/20/94	6 ##	7.5	10.	25.	5.	60.	7.746	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/11/77-09/20/94	6 ##	5.	8.333	25.	5.	66.667	8.165	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/12/79-09/20/94	2	78.	78.	100.	56.	968.	31.113	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/11/77-09/20/94	6	4.	4.583	9.	1.	9.042	3.007	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/12/79-09/20/94	2 ##	15.	15.	25.	5.	200.	14.142	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/11/77-04/12/79	5 ##	50.	50.	50.	50.	0.	0.	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	09/20/94-09/20/94	1 ##	25.	25.	25.	25.	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/11/77-09/20/94	6 ##	12.5	35.	150.	5.	3250.	57.009	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	09/20/94-09/20/94	1 ##	10.	10.	10.	10.	0.	0.	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-09/29/98	53	50.	539.396	16000.	20.	4868756.244	2206.526	50.	50.	1020.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-09/29/98	53	1.699	2.077	4.204	1.301	0.316	0.562	1.699	1.699	3.007
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				119.471						2.389	
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34671	PCB - 1016 TOTWUG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
38451	DICHLORPROP WATER, SUSPUG/L	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
38745	2,4-DB WATER, TOTUG/L	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39340	GAMMA-BHC(LINDANE), WHOLE WATER, UG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER, UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	09/20/94-09/20/94	1	13.	13.	13.	13.	0.	0.	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	10/22/74-06/06/79	27 ##	0.05	0.052	0.1	0.05	0.	0.01	0.05	0.05	0.05
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/22/74-09/29/98	51 ##	0.01	0.015	0.05	0.005	0.	0.014	0.005	0.005	0.038
71900	MERCURY, TOTAL (UG/L AS HG)	04/11/77-09/20/94	5 ##	0.25	0.69	2.5	0.15	1.027	1.013	**	**	**
77825	ALACHLOR WHOLE WATER, UG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/18/92-06/16/94	8	0.9	1.075	2.7	0.4	0.562	0.75	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0372

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS		6	0	0.00				5	0	0.00	1	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER		16	0	0.00	6	0	0.00	5	0	0.00	5	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE		27	0	0.00	8	0	0.00	10	0	0.00	9	0	0.00			
00300	OXYGEN, DISSOLVED		31	0	0.00	7	0	0.00	13	0	0.00	11	0	0.00			
00400	PH		56	1	0.02	15	1	0.07	22	0	0.00	19	0	0.00			
	Other-Lo Lim.	6.5	56	3	0.05	15	1	0.07	22	2	0.09	19	0	0.00			
00403	PH, LAB		30	0	0.00	8	0	0.00	12	0	0.00	10	0	0.00			
	Other-Lo Lim.	6.5	30	14	0.47	8	3	0.38	12	7	0.58	10	4	0.40			
00615	NITRITE NITROGEN, TOTAL AS N		56	0	0.00	15	0	0.00	21	0	0.00	20	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N		41	0	0.00	11	0	0.00	16	0	0.00	14	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.		16	0	0.00	4	0	0.00	6	0	0.00	6	0	0.00			
00940	CHLORIDE, TOTAL IN WATER		29	0	0.00	8	0	0.00	11	0	0.00	10	0	0.00			
	Fresh Acute	860.	29	0	0.00	8	0	0.00	11	0	0.00	10	0	0.00			
	Drinking Water	250.	29	0	0.00	8	0	0.00	11	0	0.00	10	0	0.00			
00945	SULFATE, TOTAL (AS SO4)		28	0	0.00	8	0	0.00	10	0	0.00	10	0	0.00			
00951	FLUORIDE, TOTAL AS F		9	0	0.00	1	0	0.00	6	0	0.00	2	0	0.00			
01002	ARSENIC, TOTAL		5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Drinking Water	50.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL		1 &	0	0.00	1	0	0.00									
	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00									
	Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL		6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
01042	COPPER, TOTAL		5 &	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	1300.	6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
01051	LEAD, TOTAL		6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
	Fresh Acute	82.	6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	15.	6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
01065	NICKEL, DISSOLVED		5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Fresh Acute	1400.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	100.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
01067	NICKEL, TOTAL		1	0	0.00	1	0	0.00									
	Fresh Acute	1400.	1	0	0.00	1	0	0.00									
	Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL		6	1	0.17	2	0	0.00	1	1	1.00	3	0	0.00			
	Drinking Water	5000.	6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
01147	SELENIUM, TOTAL		1	0	0.00	1	0	0.00									
	Fresh Acute	20.	1	0	0.00	1	0	0.00									
	Drinking Water	50.	1	0	0.00	1	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH		53	16	0.30	15	4	0.27	20	4	0.20	18	8	0.44			
34356	ENDOSULFAN, BETA, TOTAL		1	0	0.00	1	0	0.00									
34361	ENDOSULFAN, ALPHA, TOTAL		1	0	0.00	1	0	0.00									
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP		1	0	0.00	1	0	0.00									
	Fresh Acute	20.	1	0	0.00	1	0	0.00									
	Drinking Water	1.	1	0	0.00	1	0	0.00									
39033	ATRAZINE IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
39340	GAMMA-BHC(LINDANE), WHOLE WATER		1	0	0.00	1	0	0.00									
	Fresh Acute	2.	1	0	0.00	1	0	0.00									
	Drinking Water	0.2	1	0	0.00	1	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE		1	0	0.00	1	0	0.00									
	Fresh Acute	2.4	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
	Fresh Acute	0.18	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									
39400	TOXAPHENE IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
	Fresh Acute	0.73	1	0	0.00	1	0	0.00									
	Drinking Water	3.	1	0	0.00	1	0	0.00									
39410	HEPTACHLOR IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
	Fresh Acute	0.52	1	0	0.00	1	0	0.00									
	Drinking Water	0.4	1	0	0.00	1	0	0.00									
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
	Fresh Acute	0.52	1	0	0.00	1	0	0.00									
	Drinking Water	0.2	1	0	0.00	1	0	0.00									
39730	2,4-D IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
39760	SILVEX IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00									
71900	MERCURY, TOTAL		4 &	0	0.00	1	0	0.00				3	0	0.00			
	Fresh Acute	2.4	4 &	0	0.00	1	0	0.00				3	0	0.00			
	Drinking Water	2.	4 &	0	0.00	1	0	0.00				3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0372

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	8	0	0.00	2	0	0.00	2	0	0.00	4	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0372

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	15	18.7	19.593	30.	14.	17.228	4.151	14.96	16.8	22.	26.52
00300	OXYGEN, DISSOLVED MG/L	7	9.2	9.043	10.4	8.	0.82	0.905	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	7###	2.5	2.929	5.	2.5	0.869	0.932	**	**	**	**
00400	PH (STANDARD UNITS)	15	7.3	7.44	9.	6.4	0.474	0.688	6.76	7.	7.9	8.76
00400	CONVERTED PH (STANDARD UNITS)	15	7.3	7.107	9.	6.4	0.593	0.77	6.76	7.	7.9	8.76
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	15	0.05	0.078	0.398	0.001	0.009	0.097	0.002	0.013	0.1	0.219
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	15###	0.02	0.034	0.05	0.02	0.	0.015	0.02	0.02	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	15###	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.007
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-09/29/98	11	0.14	0.215	0.7	0.07	0.034	0.186	0.072	0.1	0.23
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-09/29/98	15	0.1	0.143	0.5	0.05	0.018	0.133	0.05	0.05	0.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	7	16.	16.429	22.	10.	24.619	4.962	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-09/29/98	15	100.	370.	2500.	50.	467428.571	683.687	50.	50.	200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-09/29/98	15	2.	2.108	3.398	1.699	0.327	0.572	1.699	1.699	2.301
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/22/74-09/29/98	15	2.	2.108	3.398	1.699	0.327	0.572	1.699	1.699	2.301
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/22/74-09/29/98	15	0.02	0.014	0.03	0.005	0.	0.009	0.005	0.005	0.02

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0372

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	23	7.	6.078	11.1	0.4	9.529	3.087	0.86	3.7	8.	10.06
00300	OXYGEN, DISSOLVED MG/L	13	11.8	12.192	15.	10.	2.039	1.428	10.16	11.6	13.	14.84
00340	COD, .25N K2CR2O7 MG/L	12###	2.75	3.	6.	0.5	2.591	1.61	0.5	2.5	4.	5.7
00400	PH (STANDARD UNITS)	22	7.3	7.273	8.5	6.4	0.212	0.46	6.59	6.975	7.525	7.77
00400	CONVERTED PH (STANDARD UNITS)	22	7.3	7.059	8.5	6.4	0.259	0.509	6.59	6.975	7.525	7.77
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	22	0.05	0.087	0.398	0.003	0.01	0.098	0.017	0.03	0.106	0.269
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	22###	0.02	0.034	0.05	0.02	0.	0.015	0.02	0.02	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	21###	0.005	0.006	0.03	0.005	0.	0.006	0.005	0.005	0.005	0.009
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-09/29/98	16	0.315	0.474	2.59	0.1	0.341	0.584	0.142	0.198	0.505
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-09/29/98	21	0.1	0.1	0.3	0.05	0.004	0.063	0.05	0.05	0.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	12	10.5	12.083	25.	8.	23.902	4.889	8.	8.5	15.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	20###	50.	884.9	16000.	20.	12663974.937	3558.648	50.	50.	100.	300.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	20###	1.699	1.952	4.204	1.301	0.366	0.605	1.699	1.699	2.	2.477
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	20###	1.699	1.952	4.204	1.301	0.366	0.605	1.699	1.699	2.	2.477
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/22/74-09/29/98	17###	0.005	0.016	0.05	0.005	0.	0.016	0.005	0.005	0.025

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0372

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	20	17.15	16.635	27.8	4.7	30.633	5.535	10.12	11.875	20.475	23.48
00300	OXYGEN, DISSOLVED MG/L	11	9.6	9.564	11.4	8.2	1.007	1.003	8.22	8.5	10.2	11.22
00340	COD, .25N K2CR2O7 MG/L	9	8.	6.5	13.	2.5	14.438	3.8	2.5	2.5	9.	13.
00400	PH (STANDARD UNITS)	19	7.5	7.384	7.7	6.9	0.061	0.248	6.9	7.2	7.6	7.6
00400	CONVERTED PH (STANDARD UNITS)	19	7.5	7.308	7.7	6.9	0.067	0.26	6.9	7.2	7.6	7.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	19	0.032	0.049	0.126	0.02	0.001	0.034	0.025	0.025	0.063	0.126
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	20###	0.035	0.04	0.1	0.02	0.001	0.025	0.02	0.02	0.05	0.095
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	20###	0.005	0.006	0.02	0.005	0.	0.003	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/22/74-09/29/98	14	0.17	0.177	0.34	0.09	0.006	0.078	0.095	0.1	0.245
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/22/74-09/29/98	20	0.2	0.18	0.3	0.05	0.008	0.088	0.055	0.1	0.275
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	9	11.	12.667	24.	7.	29.5	5.431	7.	9.	16.5
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	18	100.	296.667	1100.	50.	125729.412	354.583	50.	50.	425.	1100.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	18	2.	2.191	3.041	1.699	0.256	0.506	1.699	1.699	2.626	3.041

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0372

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			155.07								
70507 PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/22/74-09/29/98	19	0.01	0.017	0.05	0.005	0.	0.015	0.005	0.005	0.03	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0373

NPS Station ID: SHEN0373
 Location: S FK SHEN RIV AT RT 602 081
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005003
 RF3 Index: 02070005000302.90
 Description:

LAT/LON: 38.466670/ -78.626948

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.390
 RF3 Mile Point: 3.48

Agency: 1112A9WQ
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): UP-POT-081 /SHEN-081 /081 /S-FK 081
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.21

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0373

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	3	12.5	12.833	23.	3.	100.083	10.004	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	4	9.2	9.175	12.3	6.	6.943	2.635	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	4	1.85	2.6	4.9	1.8	2.353	1.534	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.35	7.35	7.4	7.3	0.005	0.071	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.347	7.347	7.4	7.3	0.005	0.071	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/13/73	2	0.045	0.045	0.05	0.04	0.	0.007	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	65.	65.	65.	65.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	7.	7.	7.	7.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	0.34	0.361	0.535	0.23	0.016	0.127	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	0.72	0.963	1.708	0.703	0.247	0.497	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	1.19	1.315	2.15	0.73	0.372	0.61	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	0.27	0.368	0.73	0.2	0.062	0.249	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	3	4.5	3.733	5.3	1.4	4.243	2.06	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	3	26.4	26.433	37.2	15.7	115.563	10.75	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	1	11.	11.	11.	11.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	330.	330.	330.	330.	0.	0.	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	2.519	2.519	2.519	2.519	0.	0.	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			330.							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	42.5	42.5	45.	40.	12.5	3.536	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	1.628	1.628	1.653	1.602	0.001	0.036	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			42.426							
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	0.385	0.508	1.02	0.24	0.123	0.35	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0373

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	0	0.00				1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	0	0.00				1	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0374

NPS Station ID: SHEN0374
 Location: STAUNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.466809/ -78.418171

Depth of Water: 0
 Elevation: 2960
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_SR17
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION SR17 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE STAUNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.21 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0374

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/15/92-05/08/97	7	3.	6.5	16.5	0.	43.667	6.608	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/15/92-05/08/97	8	11.	11.25	14.	9.	2.5	1.581	**	**	**	**
00400	PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.605	6.456	6.79	5.97	0.103	0.321	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/15/92-05/08/97	8	6.603	6.348	6.79	5.97	0.117	0.341	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/15/92-05/08/97	8	0.25	0.449	1.072	0.162	0.121	0.348	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/15/92-05/08/97	8	11.	11.	13.	9.	2.	1.414	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/15/92-05/08/97	8	86.15	84.963	96.2	72.5	58.477	7.647	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/15/92-05/08/97	8	0.8	0.837	1.1	0.6	0.034	0.185	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/15/92-05/08/97	8	0.25	0.25	0.3	0.2	0.003	0.053	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/15/92-05/08/97	8	0.84	0.841	0.94	0.78	0.003	0.052	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/15/92-05/08/97	8	0.315	0.313	0.38	0.26	0.002	0.042	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/15/92-05/08/97	8	0.7	0.725	0.8	0.7	0.002	0.046	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/15/92-05/08/97	8	0.75	0.775	1.	0.6	0.016	0.128	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/15/92-05/08/97	8	6.4	6.55	7.7	5.8	0.423	0.65	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/15/92-05/08/97	8	0.085	0.137	0.3	0.	0.019	0.139	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/15/92-05/08/97	8	0.255	0.454	1.08	0.16	0.122	0.35	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0374

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	8	3	0.38	4	1	0.25	3	1	0.33	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	8	8	1.00	4	4	1.00	3	3	1.00	1	1	1.00			
	Fresh Acute	860.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8	0	0.00	4	0	0.00	3	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0375

NPS Station ID: SHEN0375
 Location: Rapidan River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.467087/ -78.383365

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F091
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0375

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/25/95-07/25/95	1	17.9	17.9	17.9	17.9	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/25/95-07/25/95	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/25/95-07/25/95	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/25/95-07/25/95	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/25/95-07/25/95	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/25/95-07/25/95	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/25/95-07/25/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0375

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00					
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0376

NPS Station ID: SHEN0376
 Location: Staunton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.467142/ -78.418226

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_LTEM_2L306
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0376

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	38	13.	12.934	21.	9.	4.969	2.229	9.95	12.	14.	16.
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/25/95-05/15/97	5	9.	9.6	12.	9.	1.8	1.342	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	31	10.	9.897	12.	8.	0.892	0.944	8.52	9.	10.7	11.
00406 PH, FIELD, STANDARD UNITS SU	09/11/91-05/15/97	15	6.49	6.957	8.66	5.95	1.016	1.008	6.004	6.18	8.29	8.636
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/11/91-05/15/97	15	6.49	6.443	8.66	5.95	1.298	1.139	6.004	6.18	8.29	8.636
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/11/91-05/15/97	15	0.324	0.36	1.122	0.002	0.12	0.346	0.002	0.005	0.661	0.996
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/25/95-05/15/97	5	6.	6.8	10.	6.	3.2	1.789	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0376

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	31	0	0.00	15	0	0.00	16	0	0.00		
00406 PH, FIELD	Fresh Chronic	9.	15	0	0.00	7	0	0.00	8	0	0.00		
	Other-Lo Lim.	6.5	15	8	0.53	7	6	0.86	8	2	0.25		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0376

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	17	14.	13.824	16.7	10.7	2.408	1.552	11.74	12.85	14.75	16.14
00300 OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	15	9.9	9.673	11.	8.4	0.839	0.916	8.46	8.8	10.2	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0376

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/22/89-05/15/97	21	12.2	12.214	21.	9.	6.049	2.46	9.18	10.5	13.	13.16
00300 OXYGEN, DISSOLVED MG/L	06/22/89-05/15/97	16	10.	10.106	12.	8.	0.903	0.95	8.7	9.5	10.925	11.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0377

NPS Station ID: SHEN0377
 Location: EAST BRANCH NAKED CREEK NEAR JOLLETT, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005000135.29
 Description:

LAT/LON: 38.468615/ -78.497226
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 35.29

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01629120
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.27

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0377

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/81-06/21/82	6	14.75	11.	19.	1.	59.7	7.727	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/11/81-06/21/82	6	4.5	6.1	16.	0.6	29.42	5.424	**	**	**	**
00400	PH (STANDARD UNITS)	08/11/81-06/21/82	5	7.	6.94	7.3	6.6	0.068	0.261	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/11/81-06/21/82	5	7.	6.88	7.3	6.6	0.073	0.269	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/81-06/21/82	5	0.1	0.132	0.251	0.05	0.006	0.077	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/11/81-06/21/82	6	7.1	7.	7.1	6.8	0.024	0.155	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/11/81-06/21/82	6	7.1	6.976	7.1	6.8	0.025	0.157	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/81-06/21/82	6	0.079	0.106	0.158	0.079	0.002	0.041	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/11/81-06/21/82	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/11/81-06/21/82	6	0.45	0.55	0.9	0.3	0.059	0.243	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/11/81-06/21/82	6	10.	9.833	10.	9.	0.167	0.408	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/11/81-06/21/82	6	2.15	2.15	2.3	2.	0.011	0.105	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/11/81-06/21/82	6	1.1	1.1	1.2	1.	0.004	0.063	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/11/81-06/21/82	6	1.5	1.483	1.5	1.4	0.002	0.041	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/11/81-06/21/82	6	0.2	0.2	0.2	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/11/81-06/21/82	6	24.	23.833	25.	22.	1.367	1.169	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/11/81-06/21/82	6	0.35	0.35	0.4	0.3	0.003	0.055	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/11/81-06/21/82	6	0.85	0.867	1.	0.7	0.015	0.121	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/11/81-06/21/82	6	3.	2.833	4.	2.	0.567	0.753	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/11/81-06/21/82	6	9.05	9.117	10.3	7.9	0.906	0.952	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-05/17/82	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0377

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0377

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0		2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0378

NPS Station ID: SHEN0378
 Location: Rapidan River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.471143/ -78.382920

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2FVA4
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle just inside Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0378

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/10/96-07/07/98	3	17.3	17.267	18.	16.5	0.563	0.751	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/10/96-07/07/98	3	22.	21.333	23.	19.	4.333	2.082	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/10/96-07/07/98	3	9.1	9.467	10.7	8.6	1.203	1.097	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/10/96-07/07/98	3	6.76	6.47	6.77	5.88	0.261	0.511	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/10/96-07/07/98	3	6.76	6.257	6.77	5.88	0.329	0.574	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/10/96-07/07/98	3	0.174	0.554	1.318	0.17	0.438	0.662	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/07/98-07/07/98	1	12.	12.	12.	12.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/10/96-07/07/98	3	5.27	4.767	5.83	3.2	1.919	1.385	**	**	**	**
83509 STREAM, WIDTH METER	07/10/96-07/07/98	3	7.9	7.9	8.4	7.4	0.25	0.5	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/10/96-07/07/98	3	0.16	0.163	0.18	0.15	0.	0.015	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0378

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00										
	Other-Lo Lim.	6.5	3	1	0.33	3	1	0.33										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0379

NPS Station ID: SHEN0379
 Location: EAST BRANCH OF NAKED CREEK
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.477809/ -78.481892

Depth of Water: 0
 Elevation: 1780

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_VTSS_PG08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB01 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE EAST BRANCH OF NAKED CREEK INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.10 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0379

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	7.04	7.04	7.04	7.04	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	7.04	7.04	7.04	7.04	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.091	0.091	0.091	0.091	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0379

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0380

NPS Station ID: SHEN0380
 Location: East Branch Naked Creek
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.477920/ -78.481726

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F029
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0380

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/94-07/01/96	3	18.5	17.7	19.	15.6	3.37	1.836	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/01/96-07/01/96	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/01/96-07/01/96	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/02/94-07/01/96	2	8.185	8.185	9.37	7.	2.808	1.676	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/02/94-07/01/96	2	7.299	7.299	9.37	7.	4.378	2.092	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/02/94-07/01/96	2	0.05	0.05	0.1	0.	0.005	0.07	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/01/96-07/01/96	1	5.	5.	5.	5.	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	07/01/96-07/01/96	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/01/96-07/01/96	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0380

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	2	1	0.50	2	1	0.50										
	Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0381

NPS Station ID: SHEN0381
 Location: RT. 602 BRIDGE
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:

LAT/LON: 38.481142/ -78.627003

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF078.24 /VA1B02DX0071/VA1B6X0071
 Within Park Boundary: No

Date Created: / /

RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005002
 RF3 Index: 02070006002502.25

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 31.590
 RF3 Mile Point: 24.48

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 02D TOPO MAP #: 0050 TOPO MAP NAME: ELKTON WEST, VA

Parameter Inventory for Station: SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	95	14.4	14.803	29.4	0.6	62.451	7.903	4.4	7.8	22.2	25.
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	94	9.65	9.744	16.2	5.5	4.936	2.222	7.	7.975	11.4	12.4
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-02/17/71	10	2.35	3.78	16.6	1.6	20.444	4.522	1.65	2.175	2.925	15.24
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	94	8.5	8.371	10.	7.	0.349	0.591	7.6	8.	8.7	9.15
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	94	8.5	8.001	10.	7.	0.488	0.699	7.6	8.	8.7	9.15
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	94	0.003	0.01	0.1	0.	0.016	0.001	0.001	0.002	0.01	0.025
00403	PH, LAB, STANDARD UNITS SU	12/05/68-09/24/73	9	7.7	7.911	9.1	7.4	0.256	0.506	7.4	7.6	8.1	9.1
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-09/24/73	9	7.7	7.751	9.1	7.4	0.285	0.534	7.4	7.6	8.1	9.1
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-09/24/73	9	0.02	0.018	0.04	0.001	0.	0.012	0.001	0.008	0.025	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-06/28/70	8	105.5	107.25	139.	73.	392.5	19.812	**	**	**	**
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	06/28/70-06/28/70	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-06/28/70	8	206.	218.125	302.	151.	2664.411	51.618	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-06/28/70	8	65.5	64.	103.	24.	679.429	26.066	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-06/28/70	8	151.	154.125	268.	91.	3041.839	55.153	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-06/28/70	8	13.5	42.	238.	7.	6323.429	79.52	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-06/28/70	8	5.	6.75	18.	0.	34.786	5.898	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-06/28/70	8	7.	35.25	220.	4.	5623.643	74.991	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	59	0.2	0.283	1.099	0.05	0.071	0.267	0.05	0.1	0.4	0.7
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	59	0.03	0.049	0.3	0.005	0.003	0.052	0.005	0.01	0.07	0.12
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	52	1.354	1.352	2.599	0.4	0.22	0.469	0.776	1.062	1.584	1.886
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	60	0.65	0.732	2.699	0.05	0.225	0.474	0.3	0.4	0.9	1.199
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/17/78-03/01/79	7	1.6	1.643	2.1	1.2	0.096	0.31	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/14/71-08/29/78	9 ##	1.	1.611	2.5	0.5	0.736	0.858	0.5	1.	2.5	2.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/14/71-08/29/78	13 ##	5.	5.077	6.	5.	0.077	0.277	5.	5.	5.	5.6
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/29/78	23 ##	5.	7.609	20.	5.	13.34	3.652	5.	5.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/29/78	22 ##	5.	8.182	30.	5.	44.156	6.645	5.	5.	10.	20.
01045	IRON, TOTAL (UG/L AS FE)	06/28/70-08/29/78	5	100.	176.	400.	80.	17880.	133.716	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	06/28/70-08/29/78	20 ##	5.	9.775	38.	1.	112.276	10.596	1.85	5.	9.	30.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-12/05/71	3	60.	53.333	60.	40.	133.333	11.547	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-08/29/78	11 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-08/29/78	23	20.	26.304	150.	5.	961.858	31.014	5.	5.	30.	52.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	08/15/68-10/14/70	12	1615.	5017.667	23000.	36.	72344186.061	8505.539	36.	220.	4050.	23000.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	08/15/68-10/14/70	12	3.165	3.031	4.362	1.556	0.867	0.931	1.556	2.29	3.592	4.362

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =		1073.061									
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	81	100.	514.198	8000.	50.	1923139.66	1386.773	50.	50.	200.	1140.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/19/70-03/01/79	81	2.	2.118	3.903	1.699	0.335	0.579	1.699	1.699	2.301	3.054
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		131.208									
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	59	0.2	0.237	0.8	0.05	0.031	0.176	0.05	0.1	0.3	0.5
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	58	0.155	0.214	0.8	0.01	0.027	0.165	0.05	0.1	0.308	0.41
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-08/29/78	21 ##	0.25	0.279	0.7	0.15	0.013	0.114	0.25	0.25	0.25	0.45

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0381

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	94	0	0.00	30	0	0.00	42	0	0.00	22	0	0.00			
00400	PH	Fresh Chronic	9.	94	18	0.19	30	10	0.33	43	6	0.14	21	2	0.10			
		Other-Lo Lim.	6.5	94	0	0.00	30	0	0.00	43	0	0.00	21	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	9	1	0.11	2	0	0.00	3	0	0.00	4	1	0.25			
		Other-Lo Lim.	6.5	9	0	0.00	2	0	0.00	3	0	0.00	4	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	59	0	0.00	17	0	0.00	28	0	0.00	14	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	52	0	0.00	14	0	0.00	24	0	0.00	14	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	7	0	0.00	3	0	0.00	4	0	0.00						
01002	ARSENIC, TOTAL	Fresh Acute	360.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
		Drinking Water	50.	9	0	0.00	4	0	0.00	3	0	0.00	2	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1 &	1	1.00	1	1	1.00	1	1	1.00						
		Drinking Water	5.	1 &	1	1.00	1	1	1.00									
01034	CHROMIUM, TOTAL	Drinking Water	100.	23	0	0.00	7	0	0.00	8	0	0.00	8	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	22	3	0.14	7	1	0.14	8	0	0.00	7	2	0.29			
		Drinking Water	1300.	22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	20	0	0.00	7	0	0.00	8	0	0.00	5	0	0.00			
		Drinking Water	15.	20	4	0.20	7	3	0.43	8	1	0.13	5	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	11	0	0.00	4	0	0.00	4	0	0.00	3	0	0.00			
		Drinking Water	100.	11	0	0.00	4	0	0.00	4	0	0.00	3	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	23	1	0.04	7	1	0.14	8	0	0.00	8	0	0.00			
		Drinking Water	5000.	23	0	0.00	7	0	0.00	8	0	0.00	8	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	12	6	0.50	6	3	0.50	2	1	0.50	4	2	0.50			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	81	26	0.32	24	6	0.25	39	11	0.28	18	9	0.50			
71900	MERCURY, TOTAL	Fresh Acute	2.4	21	0	0.00	8	0	0.00	8	0	0.00	5	0	0.00			
		Drinking Water	2.	21	0	0.00	8	0	0.00	8	0	0.00	5	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	3	23.3	20.167	29.4	7.8	124.003	11.136	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	3	9.	7.867	9.1	5.5	4.203	2.05	**	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	3	8.	8.4	9.2	8.	0.48	0.693	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	3	8.	8.163	9.2	8.	0.565	0.751	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	3	0.01	0.007	0.01	0.001	0.	0.005	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	3	18.9	15.167	22.2	4.4	89.663	9.469	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	3	6.2	7.9	11.4	6.1	9.19	3.032	**	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	3	7.8	8.067	8.6	7.8	0.213	0.462	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	3	7.8	7.943	8.6	7.8	0.236	0.486	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	3	0.016	0.011	0.016	0.003	0.	0.008	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	9	14.4	15.544	25.	6.7	59.103	7.688	6.7	8.6	24.15	25.
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	9	10.8	9.744	13.6	6.4	6.478	2.545	6.4	7.5	11.7	13.6
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	9	8.7	8.678	9.6	7.6	0.352	0.593	7.6	8.3	9.15	9.6
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	9	8.7	8.312	9.6	7.6	0.502	0.709	7.6	8.3	9.15	9.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	9	0.002	0.005	0.025	0.	0.	0.008	0.	0.001	0.005	0.025
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	3	0.46	0.42	0.6	0.2	0.041	0.203	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	4	0.04	0.038	0.06	0.01	0.001	0.026	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	4	0.59	0.73	1.339	0.4	0.18	0.424	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	4	0.75	1.2	2.699	0.6	1.006	1.003	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	4800.	4800.	7000.	2600.	9680000.	3111.27	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	3.63	3.63	3.845	3.415	0.093	0.304	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			4266.146								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	4	0.2	0.188	0.25	0.1	0.004	0.063	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	3	0.18	0.143	0.2	0.05	0.007	0.081	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	12	14.4	13.833	25.6	3.9	66.05	8.127	4.05	4.4	21.55	25.09
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	12	9.9	10.	13.6	6.4	4.953	2.225	6.58	8.1	11.7	13.24
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	12	8.5	8.4	9.	7.3	0.233	0.482	7.45	8.075	8.7	8.94
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	12	8.5	8.083	9.	7.3	0.342	0.585	7.45	8.075	8.7	8.94
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	12	0.003	0.008	0.05	0.001	0.	0.014	0.001	0.002	0.009	0.04
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12 ##	75.	841.667	8000.	50.	5126742.424	2264.231	50.	50.	450.	5810.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12 ##	1.849	2.202	3.903	1.699	0.473	0.687	1.699	1.699	2.644	3.586
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			159.072								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	11	16.1	14.2	21.7	1.7	51.502	7.176	2.48	7.8	21.1	21.58
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	12	9.3	9.733	12.	7.	2.228	1.493	7.42	8.7	10.95	11.88
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	12	8.25	8.092	10.	7.	0.712	0.844	7.	7.45	8.5	9.55
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	12	8.182	7.58	10.	7.	0.998	0.999	7.	7.45	8.5	9.55
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	12	0.007	0.026	0.1	0.	0.001	0.037	0.001	0.003	0.036	0.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	2	0.115	0.115	0.12	0.11	0.	0.007	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	2	1.165	1.165	1.539	0.79	0.281	0.53	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	200.	925.	6000.	50.	3030227.273	1740.755	50.	50.	750.	4950.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.301	2.413	3.778	1.699	0.502	0.709	1.699	1.699	2.872	3.664
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			258.734								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	2	0.055	0.055	0.07	0.04	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	11	13.3	12.773	27.8	1.1	80.244	8.958	1.32	5.6	18.3	27.36
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	11	10.	10.4	13.2	7.	5.232	2.287	7.08	8.4	12.4	13.16
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	9	8.5	8.333	8.8	7.7	0.135	0.367	7.7	8.	8.55	8.8
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	9	8.5	8.178	8.8	7.7	0.162	0.402	7.7	8.	8.55	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	9	0.003	0.007	0.02	0.002	0.	0.007	0.002	0.003	0.011	0.02
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.2	0.308	1.	0.05	0.082	0.286	0.05	0.2	0.3	0.94
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	10	0.02	0.05	0.3	0.01	0.008	0.089	0.01	0.01	0.04	0.274
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	10	1.339	1.355	1.829	1.	0.078	0.28	1.006	1.082	1.549	1.822
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.8	0.954	2.299	0.3	0.376	0.613	0.32	0.5	1.	2.219
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	177.273	1200.	50.	117181.818	342.318	50.	50.	100.	1000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	1.934	3.079	1.699	0.184	0.429	1.699	1.699	2.	2.924
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			85.883								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.2	0.227	0.6	0.05	0.035	0.188	0.05	0.05	0.3	0.58
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	10	0.1	0.17	0.4	0.04	0.017	0.132	0.042	0.09	0.25	0.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	9	16.7	15.322	23.9	3.3	55.497	7.45	3.3	8.6	21.5	23.9
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	9	8.	8.656	12.	6.3	3.78	1.944	6.3	7.4	10.4	12.
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	9	8.	8.133	8.5	7.5	0.148	0.384	7.5	7.85	8.5	8.5
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	9	8.	7.98	8.5	7.5	0.174	0.417	7.5	7.85	8.5	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	9	0.01	0.01	0.032	0.003	0.	0.01	0.003	0.003	0.015	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	9	0.4	0.489	1.099	0.2	0.073	0.271	0.2	0.3	0.6	1.099
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	9	0.03	0.044	0.12	0.005	0.002	0.042	0.005	0.015	0.075	0.12
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	9	1.879	1.725	2.599	0.77	0.413	0.643	0.77	1.085	2.179	2.599
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	9	0.7	0.844	1.399	0.6	0.085	0.292	0.6	0.6	1.1	1.399
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	9 ##	50.	66.667	100.	50.	625.	25.	50.	50.	100.	100.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	9 ##	1.699	1.799	2.	1.699	0.023	0.151	1.699	1.699	2.	2.
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			62.996								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	9	0.4	0.389	0.8	0.1	0.054	0.232	0.1	0.2	0.55	0.8
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	9	0.4	0.333	0.8	0.1	0.055	0.235	0.1	0.1	0.45	0.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	12	13.6	14.65	25.	4.4	65.328	8.083	4.58	7.2	23.575	25.
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	12	10.2	10.342	16.2	7.	5.239	2.289	7.36	9.15	11.3	14.91
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	12	8.	8.175	8.8	7.7	0.137	0.37	7.73	7.85	8.475	8.77
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	12	8.	8.052	8.8	7.7	0.153	0.391	7.73	7.85	8.475	8.77
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	12	0.01	0.009	0.02	0.002	0.	0.006	0.002	0.003	0.014	0.019
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.2	0.373	1.	0.05	0.136	0.368	0.05	0.1	0.7	1.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.03	0.034	0.13	0.005	0.002	0.04	0.005	0.005	0.03	0.122
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.469	1.503	2.489	0.87	0.19	0.436	0.874	1.369	1.709	2.345
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.5	0.654	1.5	0.2	0.159	0.398	0.22	0.4	1.	1.42
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	100.	245.833	1500.	50.	162026.515	402.525	50.	62.5	200.	1140.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	12	2.	2.138	3.176	1.699	0.175	0.419	1.699	1.774	2.301	2.966
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			137.331								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.2	0.2	0.4	0.05	0.014	0.116	0.05	0.1	0.3	0.38
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.11	0.178	0.4	0.05	0.014	0.12	0.05	0.09	0.3	0.38

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	11	15.	14.455	26.1	0.6	71.165	8.436	1.26	7.8	22.8	25.44
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	10	10.45	9.96	12.6	7.5	3.667	1.915	7.5	7.5	11.35	12.58
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	11	8.7	8.555	9.3	7.7	0.297	0.545	7.76	8.	9.	9.24
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	11	8.7	8.27	9.3	7.7	0.386	0.621	7.76	8.	9.	9.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	11	0.002	0.005	0.02	0.001	0.	0.006	0.001	0.001	0.01	0.018
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.2	0.177	0.4	0.05	0.016	0.127	0.05	0.05	0.2	0.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	11	0.04	0.056	0.16	0.01	0.002	0.042	0.012	0.03	0.08	0.144
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	11	1.239	1.272	1.789	1.019	0.043	0.207	1.029	1.159	1.369	1.711
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	11	0.5	0.541	1.199	0.05	0.081	0.285	0.12	0.4	0.6	1.119
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	50.	190.909	900.	50.	69409.091	263.456	50.	50.	300.	800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	11 ##	1.699	2.021	2.954	1.699	0.204	0.452	1.699	1.699	2.477	2.884
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			104.872								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	11	0.2	0.177	0.5	0.05	0.015	0.121	0.06	0.1	0.2	0.44
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	11	0.15	0.175	0.51	0.09	0.013	0.116	0.092	0.11	0.19	0.448

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	6	14.5	14.667	26.	2.5	79.503	8.916	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	6	11.6	11.1	15.	6.3	11.032	3.321	**	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	6	8.65	8.717	9.5	7.7	0.41	0.64	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	6	8.647	8.324	9.5	7.7	0.594	0.771	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	6	0.002	0.005	0.02	0.	0.	0.008	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	5 ##	0.05	0.09	0.2	0.05	0.004	0.065	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	5	0.08	0.076	0.14	0.02	0.002	0.048	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	5	1.299	1.087	1.399	0.58	0.124	0.352	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	5	0.7	0.72	1.	0.4	0.057	0.239	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5 ##	50.	520.	2400.	50.	1104500.	1050.952	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5 ##	1.699	2.035	3.38	1.699	0.565	0.752	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			108.447								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	5	0.3	0.36	0.6	0.1	0.053	0.23	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	5	0.38	0.348	0.6	0.01	0.057	0.239	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	6	22.5	20.833	25.	14.	24.567	4.956	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	6	9.	8.517	10.	6.5	2.186	1.478	**	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	6	9.	8.883	9.4	7.5	0.498	0.705	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	6	9.	8.229	9.4	7.5	1.012	1.006	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	6	0.001	0.006	0.032	0.	0.	0.013	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	5	0.1	0.12	0.3	0.05	0.011	0.104	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	5	0.08	0.084	0.14	0.04	0.001	0.038	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	5	0.7	0.62	0.9	0.2	0.077	0.277	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5 ##	50.	90.	200.	50.	4250.	65.192	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	5 ##	1.699	1.88	2.301	1.699	0.072	0.269	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			75.786								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	4	0.25	0.25	0.4	0.1	0.017	0.129	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	5	0.3	0.28	0.39	0.15	0.009	0.093	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	2	6.	6.	7.	5.	1.414	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	1	10.4	10.4	10.4	10.4	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	2	7.75	7.75	8.	7.5	0.125	0.354	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	2	7.682	7.682	8.	7.5	0.134	0.367	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	2	0.021	0.021	0.032	0.01	0.	0.015	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	2 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	2	0.35	0.35	0.5	0.2	0.045	0.212	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	100.	100.	100.	100.	0.	0.	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	2	2.	2.	2.	2.	0.	0.	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			100.							
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	2	0.08	0.08	0.12	0.04	0.003	0.057	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	31	23.9	22.955	29.4	14.4	10.501	3.241	18.52	21.1	25.	26.08
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	30	7.6	8.123	13.8	5.5	2.729	1.652	6.31	7.	9.225	9.78
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	30	8.5	8.607	9.4	7.4	0.274	0.523	7.82	8.475	9.	9.3
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	30	8.5	8.276	9.4	7.4	0.387	0.622	7.82	8.475	9.	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	30	0.003	0.005	0.04	0.	0.	0.008	0.001	0.001	0.003	0.015
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	17	0.1	0.271	1.099	0.05	0.085	0.291	0.05	0.05	0.4	0.78
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	17	0.04	0.056	0.16	0.01	0.002	0.045	0.01	0.02	0.095	0.128
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	14	1.734	1.656	2.599	0.58	0.351	0.593	0.835	1.174	2.034	2.544
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	17	0.7	0.75	1.899	0.05	0.225	0.475	0.17	0.4	1.	1.499
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	24 ##	75.	766.667	8000.	50.	4017536.232	2004.379	50.	50.	175.	4250.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	24 ##	1.849	2.106	3.903	1.699	0.433	0.658	1.699	1.699	2.226	3.588
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			127.668								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	16	0.2	0.316	0.8	0.05	0.045	0.211	0.085	0.2	0.5	0.66
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	17	0.23	0.298	0.8	0.1	0.033	0.18	0.1	0.155	0.4	0.568

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	42	7.	7.638	16.7	0.6	19.551	4.422	2.29	4.4	10.725	14.68
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	42	11.2	11.043	16.2	6.3	3.904	1.976	8.23	9.95	12.4	13.14
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	43	8.2	8.205	9.5	7.	0.324	0.569	7.5	7.8	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	43	8.2	7.853	9.5	7.	0.451	0.671	7.5	7.8	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	43	0.006	0.014	0.1	0.	0.	0.022	0.001	0.003	0.016	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	29	0.2	0.254	1.	0.05	0.066	0.257	0.05	0.1	0.28	0.7
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	28	0.02	0.039	0.3	0.005	0.004	0.061	0.005	0.01	0.038	0.104
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	24	1.369	1.311	1.889	0.49	0.136	0.368	0.795	1.017	1.524	1.854
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	29	0.6	0.652	2.299	0.2	0.172	0.414	0.2	0.4	0.8	1.099
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	39 ##	50.	456.41	7000.	50.	1499497.301	1224.54	50.	50.	200.	1500.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	39 ##	1.699	2.072	3.845	1.699	0.333	0.577	1.699	1.699	2.301	3.176
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			117.971								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	29	0.1	0.207	0.6	0.05	0.032	0.179	0.05	0.05	0.3	0.6
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	28	0.105	0.177	0.6	0.01	0.026	0.161	0.04	0.075	0.275	0.503

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0381

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-03/01/79	22	16.65	16.995	25.	8.3	20.564	4.535	10.07	14.125	21.25	22.94
00300	OXYGEN, DISSOLVED MG/L	08/15/68-03/01/79	22	9.4	9.473	13.6	6.2	3.266	1.807	6.73	8.075	10.825	11.75
00400	PH (STANDARD UNITS)	08/15/68-03/01/79	21	8.4	8.376	10.	7.6	0.404	0.636	7.62	7.8	8.75	9.44
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-03/01/79	21	8.4	8.077	10.	7.6	0.498	0.706	7.62	7.8	8.75	9.44
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-03/01/79	21	0.004	0.008	0.025	0.	0.	0.008	0.001	0.002	0.016	0.024
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-03/01/79	13	0.3	0.362	1.	0.1	0.069	0.263	0.1	0.2	0.5	0.88
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-03/01/79	14	0.05	0.058	0.14	0.005	0.002	0.039	0.013	0.03	0.08	0.135
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-11/02/77	14	1.229	1.117	1.5	0.4	0.109	0.33	0.545	0.845	1.377	1.485
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-03/01/79	14	0.7	0.878	2.699	0.5	0.335	0.579	0.5	0.6	0.825	2.1
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	18	150.	302.778	1200.	50.	117785.948	343.2	50.	50.	500.	930.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/19/70-03/01/79	18	2.151	2.234	3.079	1.699	0.226	0.475	1.699	1.699	2.699	2.967
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			171.341								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-03/01/79	14	0.2	0.211	0.4	0.1	0.007	0.084	0.1	0.175	0.263	0.35
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-03/01/79	13	0.19	0.185	0.4	0.05	0.013	0.115	0.05	0.1	0.25	0.392

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0382

NPS Station ID: SHEN0382
 Location: S FORK SHEN AT RT340 GROVE HILL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005002
 RF3 Index: 02080103038301.21
 Description:

LAT/LON: 38.481392/ -78.623059

Depth of Water: 999
 Elevation: 0
 RF1 Mile Point: 31.830
 RF3 Mile Point: 2.31

Agency: 1112A9WQ
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): UP-POT-082 /SHEN-082 /082 /S FK 082
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 12.20
 Distance from RF3: 0.00

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0382

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	4	15.25	13.875	22.5	2.5	74.229	8.616	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	4	9.8	9.925	13.	7.1	6.149	2.48	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	4	2.15	2.1	2.3	1.8	0.047	0.216	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.4	7.4	7.4	7.4	0.	0.	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.4	7.4	7.4	7.4	0.	0.	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/13/73	2	0.04	0.04	0.04	0.04	0.	0.	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	64.	64.	64.	64.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	8.	8.	8.	8.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	0.263	0.253	0.285	0.2	0.001	0.038	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	0.699	0.833	1.283	0.65	0.091	0.302	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	1.18	1.325	2.15	0.79	0.349	0.591	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	0.245	0.325	0.59	0.22	0.031	0.177	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	3	4.	3.	4.9	0.1	6.51	2.551	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	3	24.7	25.733	36.	16.5	95.863	9.791	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	1	13.	13.	13.	13.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	124.	124.	170.	78.	4232.	65.054	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	2.061	2.061	2.23	1.892	0.057	0.239	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2##	15.	15.	20.	10.	50.	7.071	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2##	1.151	1.151	1.301	1.	0.045	0.213	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2##	1.151	1.151	1.301	1.	0.045	0.213	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2##	1.151	1.151	1.301	1.	0.045	0.213	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	0.355	0.428	0.75	0.25	0.049	0.221	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0382

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	0	0.00				1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	0	0.00				1	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0383

NPS Station ID: SHEN0383
 Location: S.F.SHEN.R. RTE 602 BR SHNANDOAH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005002
 RF3 Index: 02070005000303.50
 Description:

LAT/LON: 38.481392/ -78.626948

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 31.590
 RF3 Mile Point: 3.77

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 020 /020 /SF SHEN S-13
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.06

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0383

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/21/67-06/23/67	9	24.	24.444	26.	23.	1.465	1.21	23.	23.25	25.75	26.
00300	OXYGEN, DISSOLVED MG/L	06/21/67-06/23/67	10	7.65	7.79	10.7	6.6	1.548	1.244	6.61	6.775	8.175	10.53
00310	BOD, 5 DAY, 20 DEG C MG/L	06/21/67-06/23/67	10	6.5	6.42	9.4	3.8	4.213	2.053	3.85	4.45	8.325	9.33
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/21/67-06/22/67	5	940.	938.	1720.	270.	354320.	595.248	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	06/21/67-06/22/67	5	2.973	2.883	3.236	2.431	0.11	0.331	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			764.441								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	80.	94.	140.	80.	680.	26.077	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/21/67-06/22/67	5	1.903	1.962	2.146	1.903	0.011	0.105	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			91.607								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0383

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	10	0	0.00						10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	2	0.40						5	2	0.40			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	0	0.00						5	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0384

NPS Station ID: SHEN0384
 Location: S.F.SHEN.R. RTE 602 BR SHENNDOAH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005002
 RF3 Index: 02070005000303.50
 Description:

LAT/LON: 38.481392/ -78.626948

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 31.590
 RF3 Mile Point: 3.77

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 073 /073 /SFSHEN-S13
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.06

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0384

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	23.75	23.75	24.	23.5	0.125	0.354	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	37.5	37.5	55.	20.	612.5	24.749	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	4.35	4.35	5.6	3.1	3.125	1.768	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	3.3	3.3	3.9	2.7	0.72	0.849	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.348	0.348	0.386	0.31	0.003	0.054	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	1.133	1.133	1.219	1.047	0.015	0.122	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	1.88	1.88	2.06	1.7	0.065	0.255	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	23750.	23750.	34500.	13000.	231125000.	15202.796	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	4.326	4.326	4.538	4.114	0.09	0.3	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			21177.819								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	17850.	17850.	27800.	7900.	198005000.	14071.425	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	4.171	4.171	4.444	3.898	0.149	0.386	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			14819.582								
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	6.375	6.375	6.75	6.	0.281	0.53	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.885	0.885	0.97	0.8	0.014	0.12	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0384

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	1	0.50	2	1	0.50								
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	1	0.50	2	1	0.50								
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00								
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00								
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0385

NPS Station ID: SHEN0385 LAT/LON: 38.482226/ -78.628060
 Location: SOUTH FORK SHENANDOAH RIVER DOWNSTREAM OF RT.602
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005003000.93 RF3 Mile Point: 1.19

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF078.18
 Within Park Boundary: No

Date Created: 07/27/91

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH RIVER SECTION: 02 TOPO MAP #: 0050 TOPO MAP NAME: ELKTON WEST, VIRGINIA

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.30
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0385

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0386

NPS Station ID: SHEN0386 LAT/LON: 38.482504/ -78.627781
 Location: RI. MI. NEAR DAM ON S FRK SHEN. NEAR SHENANDOAH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1B-SHENANDOAH
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005000600.00 RF3 Mile Point: 0.00
 Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 02 TOPO MAP #: 0050 TOPO MAP NAME: ELKTON WEST, VA

Agency: 21VASWCB
 FIPS State/County: 51165 VIRGINIA/ROCKINGHAM
 STORET Station ID(s): 1BSSF078.20
 Within Park Boundary: No

Date Created: 09/03/88

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.20
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	107	15.	15.324	28.1	1.1	59.163	7.692	5.22	8.2	23.2	24.82
00070	TURBIDITY, (JACKSON CANDLE UNITS)	25	5.6	6.676	33.	0.6	50.627	7.115	0.94	2.3	8.25	14.74
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	53	4.2	11.291	110.	0.7	388.29	19.705	1.72	2.75	9.	25.8
00080	COLOR (PLATINUM-COBALT UNITS)	23	16.	18.478	53.	11.	81.625	9.035	11.4	14.	21.	28.6
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	9	274.	275.333	427.	51.	14741.25	121.414	51.	189.5	386.5	427.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	97	310.	303.237	429.	148.	5223.683	72.275	190.8	258.5	362.5	392.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	78	10.5	10.668	16.3	6.6	4.948	2.225	7.9	8.975	12.125	13.82
00300	OXYGEN, DISSOLVED MG/L	27	10.	9.896	12.9	7.	4.407	2.099	7.	7.3	11.7	12.8
00310	BOD, 5 DAY, 20 DEG C MG/L	105	1.	1.215	5.	0.5	0.439	0.662	0.5	1.	1.6	2.
00340	COD, .25N K2CR2O7 MG/L	105	7.	8.41	61.	0.5	61.552	7.845	2.5	4.	10.	14.
00400	PH (STANDARD UNITS)	107	8.3	8.253	9.5	6.5	0.23	0.48	7.6	8.	8.6	8.8
00400	CONVERTED PH (STANDARD UNITS)	107	8.3	7.915	9.5	6.5	0.346	0.588	7.6	8.	8.6	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	107	0.005	0.012	0.316	0.	0.001	0.033	0.002	0.003	0.01	0.025
00403	PH, LAB, STANDARD UNITS SU	105	8.1	8.054	8.8	6.8	0.167	0.409	7.4	7.9	8.35	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	105	8.1	7.807	8.8	6.8	0.229	0.479	7.4	7.9	8.35	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	105	0.008	0.016	0.158	0.002	0.001	0.025	0.003	0.004	0.013	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	105	126.	121.4	192.	54.	1136.704	33.715	68.6	100.5	152.	160.
00500	RESIDUE, TOTAL (MG/L)	28	195.	193.	292.	104.	2001.407	44.737	132.	157.75	225.	246.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	28	42.	43.143	76.	20.	176.127	13.271	27.6	34.5	50.75	68.2
00510	RESIDUE, TOTAL FIXED (MG/L)	28	151.	145.393	248.	13.	2103.284	45.862	83.6	120.75	173.5	195.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	104	5.	11.654	160.	0.5	541.966	23.28	1.5	2.	9.75	24.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	104	##	1.5	2.221	33.	0.	13.111	3.621	1.	1.5	4.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	104	4.	9.192	127.	0.5	363.288	19.06	1.5	1.5	8.	20.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	107	##	0.02	0.154	12.	0.02	1.338	1.157	0.02	0.02	0.084
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	107	0.02	0.018	0.05	0.005	0.	0.012	0.005	0.01	0.02	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	107	1.7	1.671	2.77	0.42	0.174	0.417	1.1	1.35	1.93	2.11
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	107	0.3	0.41	2.4	0.1	0.1	0.317	0.2	0.2	0.5	0.72
00665	PHOSPHORUS, TOTAL (MG/L AS P)	106	0.2	0.191	2.	0.05	0.04	0.2	0.05	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	27	0.12	0.139	0.28	0.005	0.005	0.073	0.05	0.07	0.2	0.262
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	78	2.65	3.349	25.8	0.5	10.94	3.308	1.5	2.1	3.425	4.81
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	105	138.	151.267	1900.	9.	30921.274	175.844	84.	112.	165.	174.8
00940	CHLORIDE, TOTAL IN WATER MG/L	103	11.	11.427	25.	1.	20.654	4.545	6.	8.	15.	17.6
00945	SULFATE, TOTAL (MG/L AS SO4)	103	13.	12.856	21.	0.2	9.468	3.077	9.	11.	15.	17.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00951	FLUORIDE, TOTAL (MG/L AS F)	01/24/89-01/11/93	30 ##	0.12	0.127	0.25	0.05	0.004	0.063	0.05	0.05	0.17	0.246
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/15/89-01/11/93	29	5.4	5.321	10.4	1.8	5.377	2.319	2.1	3.4	7.05	8.3
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/16/91-06/25/96	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/16/91-06/25/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/16/91-06/25/96	1 ##	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/16/91-06/25/96	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/16/91-06/25/96	1	31.	31.	31.	31.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/16/91-06/25/96	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/16/91-06/25/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/16/91-06/25/96	1	36.	36.	36.	36.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/02/88-12/07/98	96	100.	476.042	8000.	50.	1635156.798	1278.732	50.	50.	200.	1030.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	08/02/88-12/07/98	96	2.	2.112	3.903	1.699	0.323	0.568	1.699	1.699	2.301	3.012
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			129.52								
32240	TANNIN AND LIGNIN (MG/L)	10/19/92-11/17/92	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/16/91-06/25/96	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/16/91-06/25/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/16/91-06/25/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/16/91-06/25/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/16/91-06/25/96	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/16/91-06/25/96	1 ##	250.	250.	250.	250.	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	79	0.11	0.124	0.5	0.005	0.007	0.083	0.05	0.06	0.17	0.22
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/16/91-06/25/96	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/16/91-06/25/96	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/16/91-06/25/96	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/03/92-06/06/94	25	4.	9.564	81.	0.7	332.457	18.233	1.26	2.1	6.	30.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0386

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	25	0	0.00	7	0	0.00	9	0	0.00	9	0	0.00
00076	TURBIDITY, HACH TURBIDIMETER	50.	53	3	0.06	19	0	0.00	22	3	0.14	12	0	0.00
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	78	0	0.00	25	0	0.00	33	0	0.00	20	0	0.00
00300	OXYGEN, DISSOLVED	4.	27	0	0.00	9	0	0.00	9	0	0.00	9	0	0.00
00400	PH	9.	107	5	0.05	35	1	0.03	43	4	0.09	29	0	0.00
	Other-Lo Lim.	6.5	107	1	0.01	35	0	0.00	43	1	0.02	29	0	0.00
00403	PH, LAB	9.	105	0	0.00	33	0	0.00	44	0	0.00	28	0	0.00
	Other-Lo Lim.	6.5	105	0	0.00	33	0	0.00	44	0	0.00	28	0	0.00
00615	NITRITE NITROGEN, TOTAL AS N	1.	107	0	0.00	34	0	0.00	44	0	0.00	29	0	0.00
00620	NITRATE NITROGEN, TOTAL AS N	10.	107	0	0.00	34	0	0.00	44	0	0.00	29	0	0.00
00940	CHLORIDE, TOTAL IN WATER	860.	103	0	0.00	33	0	0.00	42	0	0.00	28	0	0.00
	Drinking Water	250.	103	0	0.00	33	0	0.00	42	0	0.00	28	0	0.00
00945	SULFATE, TOTAL (AS SO4)	250.	103	0	0.00	33	0	0.00	42	0	0.00	28	0	0.00
00951	FLUORIDE, TOTAL AS F	4.	30	0	0.00	10	0	0.00	11	0	0.00	9	0	0.00
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	96	29	0.30	31	8	0.26	41	13	0.32	24	8	0.33
82078	TURBIDITY, FIELD	50.	25	2	0.08	7	0	0.00	11	2	0.18	7	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1988 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	3	10.	15.8	28.1	9.3	113.59	10.658	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	3	1.	1.	1.	0.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	3	8.	8.667	12.	6.	9.333	3.055	**	**	**	**
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	3	8.56	8.6	8.71	8.53	0.009	0.096	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	3	8.56	8.593	8.71	8.53	0.009	0.097	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	3	0.003	0.003	0.003	0.002	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	3	8.1	8.2	8.6	7.9	0.13	0.361	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	3	8.1	8.115	8.6	7.9	0.141	0.375	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	3	0.008	0.008	0.013	0.003	0.	0.005	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	3	151.	154.667	167.	146.	120.333	10.97	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	3	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	3	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	3##	0.5	0.667	1.	0.5	0.083	0.289	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	3	0.04	0.043	0.07	0.02	0.001	0.025	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	3	0.02	0.017	0.02	0.01	0.	0.006	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	3	1.81	1.92	2.7	1.25	0.535	0.731	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	3	0.5	0.6	0.8	0.5	0.03	0.173	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	3	0.2	0.233	0.3	0.2	0.003	0.058	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/02/88-09/05/96	3	3.	2.9	3.3	2.4	0.21	0.458	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	3	176.	176.667	184.	170.	49.333	7.024	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	3##	50.	66.667	100.	50.	833.333	28.868	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	3##	1.699	1.799	2.	1.699	0.03	0.174	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			62.996								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	8	21.4	17.45	24.2	3.2	68.58	8.281	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	1	343.	343.	343.	343.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	5	2.	1.8	3.	1.	0.7	0.837	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	5	9.	10.2	15.	4.	19.7	4.438	**	**	**	**
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	8	8.39	8.276	8.65	7.91	0.072	0.269	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	8	8.39	8.203	8.65	7.91	0.078	0.28	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	8	0.004	0.006	0.012	0.002	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	5	7.9	7.8	8.	7.4	0.065	0.255	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	5	7.9	7.734	8.	7.4	0.071	0.266	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	5	0.013	0.018	0.04	0.01	0.	0.013	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	5	104.	101.4	135.	57.	791.3	28.13	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	5	3.	16.7	72.	0.5	959.7	30.979	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	5	3.	2.8	5.	0.5	5.075	2.253	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	5	1.	2.	7.	0.5	7.875	2.806	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	5	0.05	0.08	0.15	0.02	0.004	0.06	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	5	0.04	0.028	0.04	0.01	0.	0.016	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	5	1.62	1.568	2.31	0.84	0.304	0.551	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	5	0.4	0.58	1.1	0.2	0.132	0.363	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	5	0.2	0.16	0.2	0.1	0.003	0.055	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	5	2.1	2.28	3.1	1.7	0.292	0.54	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	5	120.	117.8	155.	68.	993.2	31.515	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	5	10.	10.	15.	5.	13.	3.606	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	5	16.	16.	20.	12.	8.5	2.915	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	5	100.	210.	700.	50.	75500.	274.773	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	5	2.	2.109	2.845	1.699	0.186	0.432	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			128.474								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	4	24.3	22.425	26.1	15.	25.229	5.023	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	4	350.	334.25	397.	240.	4551.583	67.465	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	4	1.5	1.5	2.	1.	0.333	0.577	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	4	7.	7.	9.	5.	3.333	1.826	**	**	**	**
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	4	8.25	8.32	8.75	8.03	0.094	0.306	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	4	8.249	8.252	8.75	8.03	0.1	0.316	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	4	0.006	0.006	0.009	0.002	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	4	8.2	8.15	8.4	7.8	0.07	0.265	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	4	8.189	8.086	8.4	7.8	0.075	0.275	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	4	0.006	0.008	0.016	0.004	0.	0.005	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	4	145.5	133.75	154.	90.	870.917	29.511	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	4	10.5	9.5	14.	3.	25.667	5.066	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	4	2.5	2.625	5.	0.5	4.896	2.213	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	4	8.5	7.	9.	2.	11.333	3.367	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	5	0.06	0.078	0.16	0.04	0.002	0.048	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	5	0.02	0.026	0.04	0.02	0.	0.009	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	5	1.72	1.67	2.07	1.26	0.105	0.324	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	5	0.5	0.5	0.6	0.4	0.005	0.071	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/08/88-12/07/98	4	0.15	0.175	0.3	0.1	0.009	0.096	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	4	2.45	2.525	3.1	2.1	0.216	0.465	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	4	165.	151.	170.	104.	988.	31.432	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	4	14.	13.5	18.	8.	17.	4.123	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	4	17.	17.25	21.	14.	8.25	2.872	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	10	20.	16.47	25.	5.5	62.731	7.92	5.71	8.275	23.925	24.99
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	11	298.	305.091	395.	164.	4689.091	68.477	181.4	278.	378.	393.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/17/91-12/07/98	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	11	1.	1.364	2.	1.	0.255	0.505	1.	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	11	7.	7.909	15.	2.	17.691	4.206	2.4	5.	12.	14.8
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	10	8.25	8.036	9.3	6.5	0.719	0.848	6.545	7.288	8.508	9.25
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	10	8.247	7.304	9.3	6.5	1.315	1.147	6.545	7.288	8.508	9.25
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	10	0.006	0.05	0.316	0.001	0.01	0.1	0.001	0.003	0.058	0.296
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	11	8.1	8.082	8.6	7.3	0.136	0.368	7.4	7.8	8.4	8.58
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	11	8.1	7.921	8.6	7.3	0.164	0.405	7.4	7.8	8.4	8.58
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	11	0.008	0.012	0.05	0.003	0.	0.013	0.003	0.004	0.016	0.043
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	11	120.	127.	169.	62.	900.6	30.01	71.	114.	158.	167.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	11	7.	10.545	42.	1.5	150.823	12.281	1.5	3.	10.	38.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	11	1.	2.091	7.	1.	3.641	1.908	1.	1.	3.	6.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	11	5.	8.727	35.	1.5	106.568	10.323	1.5	2.	9.	32.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	11	0.04	1.137	12.	0.02	12.981	3.603	0.02	0.02	0.07	9.632
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	11	0.01	0.018	0.05	0.005	0.	0.013	0.006	0.01	0.02	0.046
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	11	1.73	1.789	2.77	0.94	0.193	0.439	1.064	1.59	2.	2.632
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	11	0.4	0.409	0.7	0.3	0.015	0.122	0.3	0.3	0.5	0.66
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	11	0.3	0.373	2.	0.1	0.3	0.548	0.1	0.1	0.3	1.66
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	11	2.5	2.555	4.1	1.4	0.585	0.765	1.5	2.1	3.	3.98
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	11	134.	144.364	180.	94.	708.655	26.621	99.6	126.	170.	178.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	11	9.	11.	19.	5.	18.2	4.266	5.4	8.	15.	18.4
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	11	13.	14.273	18.	10.	7.218	2.687	10.4	12.	17.	18.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	6 ##	50.	1250.	7200.	50.	8497000.	2914.961	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	6 ##	1.699	2.109	3.857	1.699	0.748	0.865	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			128.49								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	12.	14.2	26.	5.3	54.395	7.375	5.57	7.475	21.675	25.55
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	303.5	277.7	378.	148.	6467.789	80.423	150.9	187.5	337.	376.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	8	9.8	10.563	12.7	8.6	2.614	1.617	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	11	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00340	COD, .25N K2CR2O7 MG/L	11	8.	10.636	33.	4.	68.055	8.25	4.	6.	11.	29.8
00400	PH (STANDARD UNITS)	12	8.45	8.5	9.5	7.9	0.184	0.429	7.93	8.225	8.775	9.29
00400	CONVERTED PH (STANDARD UNITS)	12	8.447	8.346	9.5	7.9	0.209	0.458	7.93	8.225	8.775	9.29
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.004	0.005	0.013	0.	0.	0.004	0.001	0.002	0.006	0.012
00403	PH, LAB, STANDARD UNITS SU	11	8.4	8.373	8.7	7.9	0.068	0.261	7.92	8.2	8.6	8.7
00403	CONVERTED PH, LAB, STANDARD UNITS	11	8.4	8.297	8.7	7.9	0.074	0.273	7.92	8.2	8.6	8.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.004	0.005	0.013	0.002	0.	0.003	0.002	0.003	0.006	0.012
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11	122.	107.364	150.	55.	1167.255	34.165	56.4	72.	136.	148.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	5.	4.091	6.	2.	3.491	1.868	2.	2.	6.	6.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11	1.	0.682	1.5	0.	0.314	0.56	0.	0.	1.	1.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11	4.	3.545	5.	2.	1.873	1.368	2.	2.	5.	5.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.02	0.027	0.04	0.02	0.	0.01	0.02	0.02	0.04	0.04
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12	0.015	0.018	0.03	0.005	0.	0.01	0.007	0.01	0.03	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	1.615	1.63	2.09	0.94	0.1	0.317	1.063	1.49	1.9	2.072
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.3	0.325	0.5	0.2	0.009	0.097	0.2	0.3	0.375	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12	0.1	0.15	0.3	0.1	0.005	0.067	0.1	0.1	0.2	0.27
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11	3.	4.618	16.9	1.4	19.754	4.445	1.42	2.3	5.7	15.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11	136.	114.455	172.	9.	2361.873	48.599	21.2	74.	152.	168.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11	9.	9.545	15.	5.	11.673	3.417	5.2	6.	13.	14.6
00945	SULFATE, TOTAL (MG/L AS SO4)	11	13.	13.364	17.	9.	7.455	2.73	9.2	11.	16.	17.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	100.	109.091	200.	50.	3909.091	62.523	50.	50.	200.	200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	2.	1.973	2.301	1.699	0.063	0.25	1.699	1.699	2.301	2.301
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			93.893								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	8	0.135	0.138	0.2	0.06	0.003	0.058	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	14.35	15.108	28.	4.4	70.872	8.419	4.55	7.675	23.375	26.98
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	299.	298.167	404.	153.	6957.788	83.413	166.5	219.75	377.75	399.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12	10.15	10.792	15.3	8.2	4.861	2.205	8.23	9.1	12.45	14.7
00310	BOD, 5 DAY, 20 DEG C MG/L	12	1.	1.333	2.	1.	0.242	0.492	1.	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	12	8.	7.833	19.	0.5	21.924	4.682	1.1	5.	9.75	16.6
00400	PH (STANDARD UNITS)	12	8.1	8.092	8.9	7.4	0.195	0.442	7.46	7.65	8.375	8.81
00400	CONVERTED PH (STANDARD UNITS)	12	8.1	7.904	8.9	7.4	0.234	0.483	7.46	7.65	8.375	8.81
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.008	0.012	0.04	0.001	0.	0.012	0.002	0.004	0.023	0.035
00403	PH, LAB, STANDARD UNITS SU	12	8.4	8.292	8.8	6.8	0.25	0.5	7.22	8.225	8.5	8.74
00403	CONVERTED PH, LAB, STANDARD UNITS	12	8.4	7.772	8.8	6.8	0.544	0.738	7.22	8.225	8.5	8.74
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.004	0.017	0.158	0.002	0.002	0.045	0.002	0.003	0.006	0.113
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	144.5	129.583	192.	60.	1833.902	42.824	63.3	87.75	162.	186.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	5.	14.909	119.	1.5	1201.191	34.658	1.5	1.5	8.	97.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11	1.	2.364	14.	1.	14.955	3.867	1.	1.	1.5	11.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11	4.	13.091	105.	1.5	936.391	30.601	1.5	1.5	7.	85.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.03	0.037	0.08	0.02	0.	0.021	0.02	0.02	0.055	0.074
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12	0.015	0.018	0.04	0.005	0.	0.012	0.007	0.01	0.02	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	1.82	1.564	2.11	0.42	0.269	0.518	0.549	1.163	1.888	2.05
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.3	0.342	0.8	0.2	0.026	0.162	0.2	0.225	0.4	0.68
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12	0.2	0.146	0.2	0.05	0.005	0.069	0.05	0.063	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12	3.05	2.925	4.9	0.5	1.829	1.353	0.74	1.925	4.15	4.84
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	140.	136.417	179.	84.	1088.992	33.	85.8	104.	168.	178.1
00940	CHLORIDE, TOTAL IN WATER MG/L	12	11.5	11.5	19.	4.	23.909	4.89	4.6	7.25	15.75	18.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	12	13.5	14.167	19.	10.	8.697	2.949	10.3	12.	16.75	18.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12 ##	50.	487.5	4500.	50.	1630511.364	1276.915	50.	50.	100.	3360.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12 ##	1.699	2.033	3.653	1.699	0.37	0.608	1.699	1.699	2.	3.411
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12 ##	1.699	2.033	3.653	1.699	0.37	0.608	1.699	1.699	2.	3.411
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	12	0.08	0.097	0.22	0.03	0.003	0.058	0.033	0.05	0.145	0.202

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	11	13.3	13.036	25.1	1.7	73.849	8.594	2.12	5.5	23.2	25.04
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	5	2.2	3.48	9.1	0.7	10.787	3.284	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	11	333.	301.727	377.	201.	3912.618	62.551	201.2	257.	352.	372.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/17/91-12/07/98	11	12.2	11.336	15.1	7.1	8.445	2.906	7.26	8.	13.8	14.98
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	11	1.4	1.4	3.	0.5	0.42	0.648	0.6	1.	1.7	2.76
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	11	9.	8.955	18.	2.5	16.023	4.003	3.2	6.	11.	16.8
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	11	8.2	8.355	9.1	7.4	0.263	0.513	7.52	8.	8.9	9.06
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	11	8.2	8.086	9.1	7.4	0.342	0.585	7.52	8.	8.9	9.06
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	11	0.006	0.008	0.04	0.001	0.	0.011	0.001	0.001	0.01	0.034
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	11	8.	7.909	8.3	7.1	0.137	0.37	7.16	7.7	8.2	8.28
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	11	8.	7.729	8.3	7.1	0.173	0.415	7.16	7.7	8.2	8.28
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	11	0.01	0.019	0.079	0.005	0.001	0.022	0.005	0.006	0.02	0.072
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	11	131.	121.	153.	68.	916.4	30.272	69.	100.	146.	152.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	11	4.	13.727	100.	1.5	835.518	28.905	1.5	1.5	12.	82.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	11	1.5	2.182	10.	1.	6.864	2.62	1.	1.	2.	8.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	11	3.	12.091	90.	1.5	679.191	26.061	1.5	1.5	10.	74.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	11	0.04	0.046	0.12	0.02	0.001	0.033	0.02	0.02	0.07	0.112
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	11	0.02	0.025	0.05	0.01	0.	0.014	0.01	0.02	0.04	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	11	1.94	1.973	2.56	1.44	0.11	0.332	1.488	1.69	2.25	2.514
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	11	0.3	0.355	0.7	0.1	0.043	0.207	0.1	0.2	0.5	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	11	0.1	0.132	0.2	0.05	0.005	0.068	0.05	0.05	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	11	2.3	2.482	4.4	1.1	1.134	1.065	1.16	1.6	3.	4.34
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	11	145.	296.909	1900.	81.	283640.691	532.579	83.2	117.	170.	1554.6
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	11	12.	11.545	17.	7.	13.273	3.643	7.	8.	15.	16.6
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	11	13.	12.818	16.	10.	4.564	2.136	10.	11.	15.	16.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	11 ##	50.	172.727	900.	50.	68181.818	261.116	50.	50.	300.	780.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	11 ##	1.699	1.955	2.954	1.699	0.207	0.455	1.699	1.699	2.477	2.859
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	11 ##	1.699	1.955	2.954	1.699	0.207	0.455	1.699	1.699	2.477	2.859
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	11	0.09	0.091	0.19	0.03	0.002	0.047	0.032	0.05	0.12	0.18

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	11	17.5	15.855	24.4	1.4	55.249	7.433	2.6	9.4	22.5	24.18
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	12	3.6	7.142	27.	0.8	70.946	8.423	1.01	1.9	7.2	25.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	12	315.5	313.333	419.	205.	4429.879	66.557	214.	257.25	363.	414.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/17/91-12/07/98	11	9.4	9.709	15.3	6.6	5.711	2.39	6.84	7.9	10.8	14.56
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	12	1.	1.142	2.	0.5	0.366	0.605	0.5	0.5	1.875	1.97
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	12	9.	11.667	61.	2.5	256.515	16.016	2.5	2.5	11.	46.6
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	11	8.5	8.473	9.3	7.5	0.264	0.514	7.56	8.2	8.8	9.24
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	11	8.5	8.18	9.3	7.5	0.359	0.599	7.56	8.2	8.8	9.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	11	0.003	0.007	0.032	0.001	0.	0.009	0.001	0.002	0.006	0.028

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	12	8.	7.933	8.5	7.3	0.139	0.373	7.33	7.7	8.25	8.47
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	12	8.	7.787	8.5	7.3	0.162	0.403	7.33	7.7	8.25	8.47
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	12	0.01	0.016	0.05	0.003	0.	0.015	0.003	0.006	0.02	0.047
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	12	122.5	119.	159.	75.	662.727	25.743	79.2	98.	139.5	157.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	12	5.5	8.	26.	1.5	59.	7.681	1.5	1.5	13.25	23.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	12 ##	1.5	1.833	4.	1.5	0.652	0.807	1.5	1.5	1.5	3.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	12	4.5	6.75	22.	1.5	41.932	6.475	1.5	1.5	11.	19.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	12 ##	0.02	0.031	0.1	0.02	0.001	0.024	0.02	0.02	0.035	0.085
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	12	0.02	0.021	0.05	0.005	0.	0.014	0.007	0.01	0.035	0.047
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	12	1.51	1.581	2.54	0.77	0.224	0.473	0.908	1.273	1.853	2.393
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	12	0.3	0.458	2.4	0.2	0.381	0.617	0.2	0.2	0.3	1.83
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	12	0.2	0.188	0.4	0.05	0.013	0.113	0.065	0.1	0.2	0.4
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	12	3.65	5.592	25.8	1.7	44.241	6.651	1.79	2.1	5.625	20.61
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	12	129.	132.167	174.	84.	763.788	27.637	90.	111.25	157.5	171.6
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	12	12.5	12.	18.	1.	25.455	5.045	2.8	8.25	16.	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	12	12.5	12.5	17.	7.	7.909	2.812	7.6	10.5	14.75	16.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12 ##	125.	483.333	2400.	50.	498333.333	705.927	50.	50.	825.	2010.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12 ##	2.	2.26	3.38	1.699	0.414	0.643	1.699	1.699	2.91	3.279
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12		182.179								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	12	0.125	0.165	0.5	0.005	0.017	0.132	0.025	0.083	0.205	0.443

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	12	12.5	13.958	24.3	3.4	63.066	7.941	3.85	6.95	22.475	24.21
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	12	8.35	14.983	52.	2.1	254.131	15.941	2.34	3.025	20.6	47.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	12	276.	273.75	362.	154.	3847.295	62.027	157.	258.75	320.25	352.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/17/91-12/07/98	12	10.5	9.975	12.3	7.5	3.335	1.826	7.59	8.1	11.675	12.21
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	12 ##	0.5	0.792	2.	0.5	0.339	0.582	0.5	0.5	0.875	2.
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	12 ##	4.25	5.917	17.	2.5	20.856	4.567	2.5	2.5	8.5	15.2
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	12	8.	8.025	8.4	7.7	0.044	0.209	7.73	7.825	8.175	8.37
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	12	8.	7.981	8.4	7.7	0.046	0.214	7.73	7.825	8.175	8.37
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	12	0.01	0.01	0.02	0.004	0.	0.005	0.004	0.007	0.015	0.019
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	12	7.95	7.925	8.4	7.1	0.109	0.331	7.25	7.825	8.1	8.34
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	12	7.947	7.773	8.4	7.1	0.134	0.367	7.25	7.825	8.1	8.34
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	12	0.011	0.017	0.079	0.004	0.	0.02	0.005	0.008	0.015	0.063
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	12	105.	106.583	153.	54.	834.992	28.896	55.8	95.75	131.75	147.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	12	10.5	16.	72.	3.	370.	19.235	3.	3.25	20.5	57.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	12 ##	1.5	2.5	9.	1.5	4.636	2.153	1.5	1.5	3.	7.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	12	9.	13.542	63.	1.5	292.384	17.099	1.5	1.875	18.25	50.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	12 ##	0.02	0.036	0.16	0.02	0.002	0.04	0.02	0.02	0.035	0.127
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	12	0.01	0.015	0.04	0.005	0.	0.014	0.005	0.005	0.028	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	12	1.89	1.779	2.3	1.1	0.146	0.382	1.1	1.498	2.03	2.24
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	12	0.25	0.333	0.8	0.1	0.046	0.215	0.13	0.2	0.4	0.77
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	12	0.15	0.142	0.3	0.05	0.007	0.085	0.05	0.05	0.2	0.27
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	9	2.1	2.511	4.8	1.5	0.984	0.992	1.5	1.85	2.85	4.8
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	12	123.	126.667	168.	77.	768.061	27.714	79.1	116.5	152.5	164.7
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	12	10.	9.375	13.	2.5	8.506	2.916	3.55	8.25	11.	13.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	12	12.	11.417	14.	9.	2.629	1.621	9.	10.	12.75	13.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12	150.	512.5	1600.	50.	343238.636	585.866	50.	62.5	1150.	1510.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12	2.151	2.366	3.204	1.699	0.361	0.601	1.699	1.774	3.059	3.177
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12		232.508								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	12	0.075	0.088	0.17	0.03	0.002	0.048	0.033	0.05	0.133	0.167

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	16.6	14.725	27.4	1.1	71.731	8.469	1.82	7.625	21.	26.86
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12	3.4	4.958	16.9	1.	18.612	4.314	1.27	2.6	5.825	14.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	335.	321.167	394.	190.	3067.424	55.384	213.1	294.25	358.5	388.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11	12.1	11.991	16.3	8.6	6.051	2.46	8.66	10.	14.	16.02
00310	BOD, 5 DAY, 20 DEG C MG/L	12 ##	1.	1.	2.	0.5	0.273	0.522	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	12 ##	2.5	4.792	13.	2.5	11.112	3.333	2.5	2.5	6.75	11.5
00400	PH (STANDARD UNITS)	12	8.45	8.408	8.9	7.8	0.117	0.342	7.86	8.075	8.675	8.87
00400	CONVERTED PH (STANDARD UNITS)	12	8.447	8.281	8.9	7.8	0.135	0.367	7.86	8.075	8.675	8.87
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.004	0.005	0.016	0.001	0.	0.004	0.001	0.002	0.009	0.014
00403	PH, LAB, STANDARD UNITS SU	12	8.2	8.158	8.4	7.8	0.03	0.173	7.83	8.1	8.3	8.37
00403	CONVERTED PH, LAB, STANDARD UNITS	12	8.2	8.124	8.4	7.8	0.031	0.177	7.83	8.1	8.3	8.37
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.006	0.008	0.016	0.004	0.	0.003	0.004	0.005	0.008	0.015
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	134.	130.75	160.	80.	580.023	24.084	86.6	114.75	152.	158.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12	4.	5.875	25.	1.5	41.506	6.442	1.5	1.875	6.	20.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12 ##	1.5	1.625	3.	1.5	0.188	0.433	1.5	1.5	1.5	2.55
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12	3.5	4.875	22.	1.5	33.188	5.761	1.5	1.5	5.	17.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.02	0.043	0.26	0.02	0.005	0.069	0.02	0.02	0.02	0.197
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12 ##	0.005	0.012	0.04	0.005	0.	0.011	0.005	0.005	0.02	0.034
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	1.48	1.506	2.11	1.1	0.102	0.32	1.145	1.273	1.618	2.107
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.25	0.4	1.5	0.1	0.165	0.407	0.1	0.2	0.4	1.32
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12	0.2	0.179	0.3	0.05	0.008	0.089	0.065	0.1	0.275	0.3
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	144.	137.25	169.	88.	712.205	26.687	93.1	112.5	161.	169.
00940	CHLORIDE,TOTAL IN WATER MG/L	11/09/88-12/07/98	14.	12.917	19.	6.	15.538	3.942	6.6	9.25	15.75	18.4
00945	SULFATE, TOTAL (MG/L AS SO4)	12	11.5	11.917	16.	9.	3.902	1.975	9.3	10.25	13.	15.4
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12 ##	50.	75.	200.	50.	2045.455	45.227	50.	50.	100.	170.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12 ##	1.699	1.824	2.301	1.699	0.041	0.201	1.699	1.699	2.	2.211
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			66.742								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	12	0.115	0.135	0.31	0.05	0.008	0.087	0.053	0.06	0.21

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	14.3	15.383	25.4	5.8	37.94	6.16	7.06	10.4	21.775	24.98
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12	5.8	21.333	110.	2.1	1272.792	35.676	2.19	2.75	19.95	101.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	362.5	317.083	429.	168.	10193.538	100.963	169.2	229.	409.25	428.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12	10.35	10.375	13.4	6.9	2.649	1.628	7.53	9.675	11.475	13.01
00310	BOD, 5 DAY, 20 DEG C MG/L	12 ##	1.	1.417	5.	1.	1.356	1.165	1.	1.	1.	4.1
00340	COD, .25N K2CR2O7 MG/L	12	5.5	9.417	43.	2.5	127.447	11.289	2.5	2.5	12.	34.
00400	PH (STANDARD UNITS)	12	8.1	8.	8.8	7.4	0.156	0.395	7.46	7.6	8.175	8.68
00400	CONVERTED PH (STANDARD UNITS)	12	8.1	7.852	8.8	7.4	0.18	0.425	7.46	7.6	8.175	8.68
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.008	0.014	0.04	0.002	0.	0.012	0.002	0.007	0.025	0.035
00403	PH, LAB, STANDARD UNITS SU	12	7.85	7.817	8.5	6.9	0.347	0.589	6.93	7.225	8.375	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	12	7.847	7.472	8.5	6.9	0.477	0.69	6.93	7.225	8.375	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.014	0.034	0.126	0.003	0.002	0.042	0.003	0.004	0.06	0.118
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	156.	125.083	174.	54.	2378.629	48.771	56.1	73.	166.25	172.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12	7.	21.125	160.	1.5	1968.46	44.367	1.95	3.25	15.5	120.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12 ##	1.5	4.333	33.	1.5	82.015	9.056	1.5	1.5	1.5	24.3
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12	5.5	16.833	127.	1.5	1248.97	35.341	1.5	1.5	13.5	96.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.02	0.042	0.24	0.02	0.004	0.064	0.02	0.02	0.02	0.186
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12	0.01	0.013	0.03	0.005	0.	0.008	0.005	0.006	0.02	0.027
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	1.585	1.562	2.04	0.9	0.11	0.332	1.011	1.305	1.823	2.025
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.4	0.5	1.7	0.2	0.169	0.411	0.2	0.3	0.5	1.43
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12	0.2	0.233	0.5	0.1	0.017	0.13	0.1	0.1	0.3	0.47
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	137.5	138.083	232.	70.	2725.174	52.203	72.1	87.25	180.5	218.5
00940	CHLORIDE,TOTAL IN WATER MG/L	11/09/88-12/07/98	12	11.	12.125	22.	38.642	6.216	3.55	7.	16.75	21.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	12	11.	10.833	14.	8.	3.788	1.946	8.3	9.	12.	14.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12	150.	1262.5	8000.	50.	6209147.727	2491.816	50.	62.5	825.	7010.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	12	2.151	2.432	3.903	1.699	0.571	0.756	1.699	1.774	2.91	3.834
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			270.325								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	12	0.13	0.158	0.33	0.05	0.008	0.087	0.053	0.08	0.218	0.309

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	35	24.	22.723	28.	14.1	11.828	3.439	16.34	20.	24.9	26.04
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	33	362.	351.424	428.	235.	2172.939	46.615	272.6	320.5	382.5	400.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/17/91-12/07/98	25	9.1	9.26	16.3	6.6	4.175	2.043	7.02	8.	9.9	12.14
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	33	1.	1.064	2.	0.5	0.216	0.465	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	33	8.	7.409	17.	2.	16.898	4.111	2.5	2.5	10.	13.
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	35	8.3	8.314	9.1	7.5	0.116	0.34	7.8	8.16	8.5	8.8
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	35	8.3	8.178	9.1	7.5	0.135	0.367	7.8	8.16	8.5	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	35	0.005	0.007	0.032	0.001	0.	0.006	0.002	0.003	0.007	0.016
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	33	8.3	8.239	8.6	7.3	0.067	0.26	7.9	8.1	8.4	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	33	8.3	8.134	8.6	7.3	0.079	0.281	7.9	8.1	8.4	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	33	0.005	0.007	0.05	0.003	0.	0.008	0.003	0.004	0.008	0.013
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	33	152.	143.818	167.	89.	382.278	19.552	110.4	132.5	157.	162.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	33	4.	6.106	26.	0.5	36.543	6.045	1.5	3.	6.5	16.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	33 ##	1.5	1.5	5.	0.	0.828	0.91	1.	1.	1.5	2.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	33	3.	4.924	22.	0.5	27.236	5.219	1.5	1.5	5.	14.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	34 ##	0.02	0.389	12.	0.02	4.21	2.052	0.02	0.02	0.05	0.09
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	34	0.02	0.02	0.05	0.005	0.	0.014	0.005	0.01	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	34	1.795	1.734	2.56	0.42	0.196	0.443	1.26	1.483	1.993	2.305
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	34	0.4	0.406	1.1	0.2	0.031	0.177	0.25	0.3	0.5	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	33	0.2	0.285	2.	0.1	0.101	0.317	0.14	0.2	0.3	0.4
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	24	2.8	3.183	8.5	1.5	3.021	1.738	1.95	2.1	3.175	6.75
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	33	164.	206.97	1900.	77.	92907.28	304.807	117.4	144.	170.	177.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	33	14.	13.848	21.	7.	12.82	3.581	9.	11.	16.5	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	33	14.	14.121	21.	10.	8.922	2.987	10.	12.	17.	18.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	31 ##	50.	304.839	2400.	50.	308059.14	555.031	50.	50.	200.	1180.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	31 ##	1.699	2.056	3.38	1.699	0.283	0.532	1.699	1.699	2.301	3.072
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			113.845								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	26	0.165	0.182	0.5	0.04	0.01	0.101	0.064	0.11	0.228	0.316

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	43	7.6	7.988	28.1	1.1	20.428	4.52	3.28	5.3	9.8	13.24
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	39	281.	279.641	429.	148.	6215.131	78.836	164.	202.	339.	395.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/17/91-12/07/98	33	12.3	12.43	15.3	9.7	2.342	1.53	10.54	11.3	13.4	15.02
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	44	1.	1.277	5.	0.5	0.659	0.812	0.5	1.	1.875	2.
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	44	7.	8.784	43.	2.5	61.272	7.828	2.5	2.875	11.	16.
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	43	8.4	8.314	9.5	6.5	0.377	0.614	7.48	8.	8.71	8.96
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	43	8.4	7.764	9.5	6.5	0.687	0.829	7.48	8.	8.71	8.96
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	43	0.004	0.017	0.316	0.	0.003	0.05	0.001	0.002	0.01	0.034
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	44	8.	7.977	8.8	6.8	0.211	0.459	7.25	7.8	8.275	8.55
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	44	8.	7.702	8.8	6.8	0.288	0.537	7.25	7.8	8.275	8.55
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	44	0.01	0.02	0.158	0.002	0.001	0.03	0.003	0.005	0.016	0.057
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	44	109.	110.909	174.	55.	1204.782	34.71	61.5	82.75	136.75	168.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	43	3.	16.349	160.	0.5	1141.28	33.783	1.5	1.5	12.	60.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	43 ##	1.5	2.93	33.	0.	29.578	5.439	0.5	1.	1.5	8.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	43	2.	13.93	127.	0.5	811.59	28.488	1.2	1.5	10.	51.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	44 ##	0.02	0.043	0.24	0.02	0.002	0.049	0.02	0.02	0.04	0.14
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	44	0.01	0.015	0.04	0.005	0.	0.01	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	44	1.7	1.687	2.77	0.94	0.159	0.398	1.165	1.395	1.85	2.105
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	44	0.3	0.452	2.4	0.1	0.199	0.446	0.15	0.2	0.475	0.8
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	44	0.1	0.158	0.5	0.05	0.009	0.096	0.05	0.1	0.2	0.3
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	32	2.8	3.266	16.9	1.1	7.443	2.728	1.4	1.85	3.65	4.77
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	44	126.	125.659	187.	9.	1426.183	37.765	79.	96.75	155.	176.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	42	10.5	11.083	25.	1.	27.706	5.264	5.	7.	15.	18.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	42	12.5	12.41	20.	0.2	10.712	3.273	9.	10.75	14.	16.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	41	100.	765.854	8000.	50.	3464179.878	1861.231	50.	50.	250.	3860.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	41	2.	2.181	3.903	1.699	0.437	0.661	1.699	1.699	2.389	3.545
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			151.848								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	33	0.09	0.106	0.22	0.03	0.003	0.058	0.05	0.06	0.145	0.21

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0386

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/08/88-12/07/98	29	17.5	17.272	24.4	7.5	23.97	4.896	10.5	13.9	21.4	23.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/08/89-12/07/98	25	280.	276.44	370.	154.	3311.34	57.544	182.8	240.	316.5	349.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/17/91-12/07/98	20	9.6	9.52	12.	7.8	1.447	1.203	7.9	8.6	10.5	11.16
00310	BOD, 5 DAY, 20 DEG C MG/L	02/08/88-12/07/98	28	1.	1.296	3.	0.5	0.343	0.586	0.5	1.	1.95	2.
00340	COD, .25N K2CR2O7 MG/L	02/08/88-12/07/98	28	6.5	9.	61.	0.5	117.667	10.847	2.5	5.	9.	14.4
00400	PH (STANDARD UNITS)	02/08/88-12/07/98	29	8.1	8.089	8.8	7.4	0.129	0.359	7.6	7.855	8.3	8.6
00400	CONVERTED PH (STANDARD UNITS)	02/08/88-12/07/98	29	8.1	7.947	8.8	7.4	0.15	0.387	7.6	7.855	8.3	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	29	0.008	0.011	0.04	0.002	0.	0.01	0.003	0.005	0.014	0.025
00403	PH, LAB, STANDARD UNITS SU	02/08/88-12/07/98	28	8.	7.957	8.6	6.9	0.168	0.41	7.37	7.8	8.275	8.51
00403	CONVERTED PH, LAB, STANDARD UNITS	02/08/88-12/07/98	28	8.	7.731	8.6	6.9	0.221	0.47	7.37	7.8	8.275	8.51
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/08/88-12/07/98	28	0.01	0.019	0.126	0.003	0.001	0.026	0.003	0.005	0.016	0.044
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	28	118.	111.464	192.	54.	1110.628	33.326	56.7	83.25	134.75	152.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/08/88-12/07/98	28	7.	10.982	72.	1.5	175.676	13.254	3.9	5.	11.	24.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/08/88-12/07/98	28	1.5	1.982	5.	0.5	1.527	1.236	1.	1.	3.	4.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/08/88-12/07/98	28	6.	6.946	22.	0.5	27.877	5.28	1.45	4.	8.75	16.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/02/88-12/07/98	29	0.04	0.047	0.26	0.02	0.002	0.049	0.02	0.02	0.05	0.08
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	29	0.02	0.022	0.05	0.005	0.	0.013	0.01	0.01	0.035	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/02/88-12/07/98	29	1.61	1.573	2.25	0.77	0.17	0.412	0.9	1.28	1.925	2.08
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/02/88-12/07/98	29	0.3	0.352	0.8	0.1	0.03	0.172	0.2	0.2	0.5	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/02/88-12/07/98	29	0.1	0.133	0.3	0.05	0.005	0.071	0.05	0.1	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	02/08/88-09/05/96	22	2.4	3.65	25.8	0.5	25.681	5.068	1.43	1.925	3.7	4.75
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/08/88-12/07/98	28	122.	125.857	232.	68.	1189.979	34.496	82.6	105.5	145.	166.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	28	9.	9.089	14.	2.5	7.742	2.782	5.9	7.25	10.75	14.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	28	12.	12.036	17.	8.	5.962	2.442	9.	10.	13.	16.1
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	24	100.	202.083	900.	50.	59886.775	244.718	50.	50.	275.	650.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/02/88-12/07/98	24	2.	2.067	2.954	1.699	0.19	0.436	1.699	1.699	2.433	2.812
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			116.598								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/05/92-12/07/98	20	0.065	0.078	0.17	0.005	0.002	0.041	0.03	0.05	0.11	0.138

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0387

NPS Station ID: SHEN0387
 Location: VAMA523R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.485392/ -78.253810

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_NURE_05 /4090615
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE MADISON VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0387

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/20/77-01/20/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/77-01/20/77	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/20/77-01/20/77	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/20/77-01/20/77	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/20/77-01/20/77	1	0.316	0.316	0.316	0.316	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/20/77-01/20/77	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/20/77-01/20/77	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/20/77-01/20/77	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/20/77-01/20/77	1	51.	51.	51.	51.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/20/77-01/20/77	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	1	68.	68.	68.	68.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/20/77-01/20/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0387

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0388

NPS Station ID: SHEN0388
 Location: West Branch Naked Creek
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.486170/ -78.501059

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F113
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Elkton East VA 7.5 minute U.S. Geological Survey (topographic) quadrangle just inside Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0388

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/25/94-07/01/96	5	16.5	17.24	18.5	16.4	1.223	1.106	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/01/96-07/01/96	1	54.	54.	54.	54.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/96-07/01/96	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/25/94-07/01/96	4	7.67	7.553	7.72	7.15	0.074	0.271	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/25/94-07/01/96	4	7.668	7.479	7.72	7.15	0.081	0.284	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/25/94-07/01/96	4	0.021	0.033	0.071	0.019	0.001	0.025	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	07/01/96-07/01/96	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**
83509	STREAM, WIDTH METER	07/01/96-07/01/96	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	07/01/96-07/01/96	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0388

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00								
00406	PH, FIELD	Fresh Chronic	9.	4	0	0.00	4	0	0.00								
		Other-Lo Lim.	6.5	4	0	0.00	4	0	0.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0389

NPS Station ID: SHEN0389
 Location: STP SHENANDOA VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005002
 RF3 Index: 02070005003100.00
 Description:

LAT/LON: 38.486948/ -78.632504

Depth of Water: 999
 Elevation: 0
 RF1 Mile Point: 31.140
 RF3 Mile Point: 0.00

Agency: 1112A9WQ
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): UP-POT-125 /SHEN-STP 125/125 /STP-125
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0389

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	3	13.	13.	18.	8.	25.	5.	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	4	64.4	79.375	177.	11.7	5800.543	76.161	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/14/73	2	6.85	6.85	7.1	6.6	0.125	0.354	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/14/73	2	6.782	6.782	7.1	6.6	0.134	0.367	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/14/73	2	0.165	0.165	0.251	0.079	0.015	0.121	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	199.	199.	199.	199.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	58.	58.	58.	58.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	33.25	31.563	43.	16.75	118.682	10.894	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	25.997	26.126	30.33	22.18	13.507	3.675	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	0.635	0.815	1.95	0.04	0.872	0.934	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	21.12	29.32	60.05	14.99	440.844	20.996	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-09/19/72	2	66.75	66.75	79.6	53.9	330.245	18.173	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-09/19/72	2	111.05	111.05	136.5	85.6	1295.405	35.992	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	1	55.	55.	55.	55.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	30.615	30.858	46.2	16.	154.53	12.431	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0389

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0389

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	1	1.00							1	1	1.00			
	Drinking Water	2.	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0390

NPS Station ID: SHEN0390
 Location: Rapidan River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.487309/ -78.407309

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2FVA5
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Fletcher VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0390

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/10/96-07/07/98	4	16.3	16.25	16.9	15.5	0.497	0.705	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/10/96-07/07/98	4	20.5	20.	21.	18.	2.	1.414	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/10/96-07/07/98	4	9.05	9.3	10.8	8.3	1.127	1.061	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/10/96-07/07/98	4	6.73	6.555	6.85	5.91	0.189	0.434	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/10/96-07/07/98	4	6.729	6.36	6.85	5.91	0.239	0.489	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/10/96-07/07/98	4	0.187	0.436	1.23	0.141	0.281	0.53	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/18/97-07/07/98	2	13.	13.	14.	12.	2.	1.414	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	07/10/96-07/07/98	3	6.3	5.7	6.6	4.2	1.71	1.308	**	**	**
83509	STREAM, WIDTH METER	07/10/96-07/07/98	3	5.5	5.667	6.4	5.1	0.443	0.666	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	07/10/96-07/07/98	3	0.12	0.123	0.13	0.12	0.	0.006	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0390

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4	4	0	0.00	4	0	0.00	4	0	0.00						
00406	PH, FIELD	Fresh Chronic	9.	4	0	0.00	4	0	0.00									
		Other-Lo Lim.	6.5	4	1	0.25	4	1	0.25									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0391

NPS Station ID: SHEN0391
 Location: LAUREL PRONG
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.490615/ -78.421116

Depth of Water: 0
 Elevation: 2500
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA13
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA13 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT LAUREL PRONG INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.37 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0391

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.47	6.47	6.47	6.47	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.47	6.47	6.47	6.47	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.339	0.339	0.339	0.339	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.74	0.74	0.74	0.74	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0391

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0391

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0392

NPS Station ID: SHEN0392
 Location: MILL PRONG
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.492505/ -78.420809

Depth of Water: 0
 Elevation: 2540
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA12 IS LOCATED ON THE FLETCHER VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT MILL PRONG INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.34 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0392

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.92	6.92	6.92	6.92	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.92	6.92	6.92	6.92	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.85	0.85	0.85	0.85	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0392

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0392

Parameter	Std. Type	Std. Value	Total			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0393

NPS Station ID: SHEN0393
 Location: VAMA524R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.494392/ -78.366309

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_NURE_02 /4090616
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE MADISON VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0393

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/20/77-01/20/77	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/77-01/20/77	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/20/77-01/20/77	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/20/77-01/20/77	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/20/77-01/20/77	1	0.398	0.398	0.398	0.398	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/20/77-01/20/77	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/20/77-01/20/77	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/20/77-01/20/77	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/20/77-01/20/77	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/20/77-01/20/77	1	28.	28.	28.	28.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/20/77-01/20/77	1	0.017	0.017	0.017	0.017	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	1	11.	11.	11.	11.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	1	4400.	4400.	4400.	4400.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	1	72.	72.	72.	72.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/20/77-01/20/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0393

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	1	1.00				1	1	1.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0394

NPS Station ID: SHEN0394
 Location: RT. 648 (MADISON CO)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.496670/ -78.352503

Agency: 21VASWCB
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 3-ROE002.83
 Within Park Boundary: No

Date Created: 05/01/93

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANOCK
 RIVER: ROSE RIVER SECTION: 04 TOPO MAP #: 0010 TOPO MAP NAME: MADISON, VA

REGION: 3 NORTHERN

Parameter Inventory for Station: SHEN0394

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L 02/04/76-02/04/76	1	12.2	12.2	12.2	12.2	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L 02/04/76-02/04/76	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L 02/04/76-02/04/76	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS) 02/04/76-02/04/76	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS) 02/04/76-02/04/76	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH 02/04/76-02/04/76	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L) 02/04/76-02/04/76	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L) 02/04/76-02/04/76	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L) 02/04/76-02/04/76	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L) 02/04/76-02/04/76	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L) 02/04/76-02/04/76	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L) 02/04/76-02/04/76	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N) 02/04/76-02/04/76	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N) 02/04/76-02/04/76	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N) 02/04/76-02/04/76	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N) 02/04/76-02/04/76	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P) 02/04/76-02/04/76	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P) 02/04/76-02/04/76	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C) 02/04/76-02/04/76	1	1.	1.	1.	1.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C 02/04/76-02/04/76	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C 02/04/76-02/04/76	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C GEOMETRIC MEAN =			50.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0394

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0394

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00				1	0	0.00						
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00				1	0	0.00						
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0395

NPS Station ID: SHEN0395
 Location: Fultz Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.501309/ -78.559504

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F122
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Stanley VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0395

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/02/94-08/02/94	1	16.9	16.9	16.9	16.9	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/02/94-08/02/94	1	7.07	7.07	7.07	7.07	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/02/94-08/02/94	1	7.07	7.07	7.07	7.07	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/02/94-08/02/94	1	0.085	0.085	0.085	0.085	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0395

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00										
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0396

NPS Station ID: SHEN0396
 Location: FULTZ RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.501392/ -78.569392

 Depth of Water: 0
 Elevation: 1170

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_VTSS_PG05
 Within Park Boundary: No

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

 On/Off RF1:
 On/Off RF3:

STATION PG05 IS LOCATED ON THE STANLEY VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT FULTZ RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.89 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0396

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.35	6.35	6.35	6.35	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.35	6.35	6.35	6.35	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.447	0.447	0.447	0.447	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.76	0.76	0.76	0.76	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0396

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00					1	0	0.00	
	Other-Lo Lim.	6.5	1	1	1.00					1	1	1.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0396

Parameter	Std. Type	Std. Value	Total			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0397

NPS Station ID: SHEN0397
 Location: ROSE RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.504560/ -78.402226

Depth of Water: 0
 Elevation: 1900
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR17
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR17 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.15 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0397

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.61	6.61	6.61	6.61	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.61	6.61	6.61	6.61	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.245	0.245	0.245	0.245	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	74.4	74.4	74.4	74.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.35	1.35	1.35	1.35	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.29	0.29	0.29	0.29	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	4.8	4.8	4.8	4.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0397

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0398

NPS Station ID: SHEN0398
 Location: ROSE RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.504892/ -78.396754

Depth of Water: 0
 Elevation: 2210
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR18
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR18 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.40 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0398

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.04	7.04	7.04	7.04	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.04	7.04	7.04	7.04	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.091	0.091	0.091	0.091	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	54.3	54.3	54.3	54.3	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.19	1.19	1.19	1.19	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	8.	8.	8.	8.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0398

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0399

NPS Station ID: SHEN0399
 Location: ROSE RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.508003/ -78.394198

Depth of Water: 0
 Elevation: 1660
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR16
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR16 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.32 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0399

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.01	7.01	7.01	7.01	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.01	7.01	7.01	7.01	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.098	0.098	0.098	0.098	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	106.2	106.2	106.2	106.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.21	1.21	1.21	1.21	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	8.	8.	8.	8.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0399

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00				1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00				1	0	0.00							
	Fresh Acute								1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00				1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0400

NPS Station ID: SHEN0400
 Location: ROSE RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.510781/ -78.387032

 Depth of Water: 0
 Elevation: 1400
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR19
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR19 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.06 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0400

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.117	0.117	0.117	0.117	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	109.2	109.2	109.2	109.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.26	1.26	1.26	1.26	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0400

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0401

NPS Station ID: SHEN0401
 Location: Rose River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.511170/ -78.385393

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F016
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Big Meadows VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0401

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/22/95-07/13/98	4	17.5	17.725	19.1	16.8	1.056	1.028	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/22/95-07/13/98	4	30.5	31.25	36.	28.	11.583	3.403	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/22/95-07/13/98	4	8.95	9.3	10.8	8.5	1.047	1.023	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/22/95-07/13/98	4	6.645	6.415	6.72	5.65	0.261	0.511	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/22/95-07/13/98	4	6.645	6.142	6.72	5.65	0.36	0.6	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/22/95-07/13/98	4	0.226	0.721	2.239	0.191	1.025	1.012	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/22/95-07/13/98	2	19.	19.	20.	18.	2.	1.414	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	07/11/96-07/13/98	3	4.42	4.407	5.8	3.	1.96	1.4	**	**	**
83509	STREAM, WIDTH METER	07/11/96-07/13/98	3	6.7	6.967	7.7	6.5	0.413	0.643	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	07/11/96-07/13/98	3	0.07	0.07	0.09	0.05	0.	0.02	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0401

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Obs			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	4	0	0.00									
00406	PH, FIELD	Fresh Chronic	9.	4	0	0.00	4	0	0.00									
		Other-Lo Lim.	6.5	4	1	0.25	4	1	0.25									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0402

NPS Station ID: SHEN0402
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.511531/ -78.382781

Depth of Water: 0
 Elevation: 1360
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR21
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR21 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 18.80 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0402

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.117	0.117	0.117	0.117	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	96.2	96.2	96.2	96.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.24	1.24	1.24	1.24	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0402

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0403

NPS Station ID: SHEN0403
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.512087/ -78.387560

Depth of Water: 0
 Elevation: 1390
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR20
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR20 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0403

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.117	0.117	0.117	0.117	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	56.9	56.9	56.9	56.9	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.22	1.22	1.22	1.22	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0403

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00				1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00				1	0	0.00							
	Fresh Acute								1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00				1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00				1	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0404

NPS Station ID: SHEN0404
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.512115/ -78.375782

Depth of Water: 0
 Elevation: 1280
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR30
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR30 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 20.57 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0404

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.117	0.117	0.117	0.117	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	86.9	86.9	86.9	86.9	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.28	1.28	1.28	1.28	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0404

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0405

NPS Station ID: SHEN0405
 Location: Rose River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.515115/ -78.367198

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_LTEM_2L305
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0405

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	34	15.6	14.947	19.	3.7	9.124	3.021	11.7	13.	17.	18.25
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/21/95-05/22/97	3	30.	28.	30.	24.	12.	3.464	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	29	10.	10.369	21.	6.	6.107	2.471	8.5	9.1	11.	12.
00406 PH, FIELD, STANDARD UNITS SU	05/28/91-05/22/97	13	6.96	7.035	8.39	6.27	0.414	0.643	6.334	6.575	7.1	8.358
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/28/91-05/22/97	13	6.96	6.768	8.39	6.27	0.491	0.701	6.334	6.575	7.1	8.358
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/28/91-05/22/97	13	0.11	0.171	0.537	0.004	0.025	0.158	0.004	0.08	0.279	0.471
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/21/95-05/22/97	3	19.	17.667	19.	15.	5.333	2.309	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0405

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	29	0	0.00	14	0	0.00	1	0	0.00	14	0	0.00
00406 PH, FIELD	Fresh Chronic	9.	13	0	0.00	6	0	0.00	1	0	0.00	6	0	0.00
	Other-Lo Lim.	6.5	13	3	0.23	6	1	0.17	1	0	0.00	6	2	0.33

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0405

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	18	16.8	16.778	19.	14.	1.743	1.32	14.9	15.875	17.475	19.
00300 OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	14	9.1	9.243	12.	6.	1.753	1.324	7.1	8.725	10.	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0405

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	1	13.5	13.5	13.5	13.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0405

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	15	13.	13.5	17.9	10.5	3.801	1.95	10.74	12.5	14.	17.36
00300 OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	14	11.	11.271	21.	9.2	8.404	2.899	9.4	9.95	11.	16.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0406

NPS Station ID: SHEN0406
 Location: Rose River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.515115/ -78.367503

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F015
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0406

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/08/95-06/08/95	1	16.9	16.9	16.9	16.9	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/08/95-06/08/95	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/08/95-06/08/95	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/08/95-06/08/95	1	6.95	6.95	6.95	6.95	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/08/95-06/08/95	1	6.95	6.95	6.95	6.95	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/08/95-06/08/95	1	0.112	0.112	0.112	0.112	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/08/95-06/08/95	1	18.	18.	18.	18.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0406

Parameter	Std. Type	Std. Value	Total			Prop.			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.		
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00							1	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00							1	0	0.00					
	Other-Lo Lim.	6.5	1	0	0	0.00							1	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0407

NPS Station ID: SHEN0407
 Location: ROSE RIVER NEAR SYRIA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103003622.04
 Description:

LAT/LON: 38.515281/ -78.366392

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 27.48

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01665800
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.70
 Distance from RF3: 0.06

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0407

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	6	14.25	11.	18.	0.	47.9	6.921	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	6	9.5	14.333	35.	2.	145.867	12.078	**	**	**
00400	PH (STANDARD UNITS)	08/13/81-06/21/82	6	7.05	6.933	7.2	6.2	0.135	0.367	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/13/81-06/21/82	6	7.047	6.756	7.2	6.2	0.173	0.415	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.09	0.175	0.631	0.063	0.05	0.224	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	6	7.1	7.033	7.2	6.8	0.023	0.151	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/13/81-06/21/82	6	7.1	7.01	7.2	6.8	0.023	0.153	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.079	0.098	0.158	0.063	0.001	0.037	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	6	0.1	0.137	0.3	0.05	0.009	0.095	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/13/81-06/21/82	6	9.	8.667	9.	8.	0.267	0.516	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/13/81-06/21/82	6	1.95	1.933	2.1	1.8	0.015	0.121	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	6	0.9	0.917	1.	0.8	0.006	0.075	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	6	1.25	1.25	1.3	1.2	0.003	0.055	**	**	**
00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	6	0.2	0.2	0.2	0.	0.	0.	**	**	**
00932	SODIUM, PERCENT	08/13/81-06/21/82	6	24.	23.833	25.	22.	0.967	0.983	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	6	0.2	0.183	0.2	0.1	0.002	0.041	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	6	1.	0.95	1.	0.8	0.007	0.084	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	6	3.	2.667	3.	2.	0.267	0.516	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/13/81-06/21/82	6	8.85	8.883	9.9	7.9	0.658	0.811	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/25/82-05/17/82	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0407

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	1	0.50	2	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0407

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0408

NPS Station ID: SHEN0408
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.515281/ -78.367198

Depth of Water: 0
 Elevation: 1120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_VT66
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT66 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 23.73 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0408

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-07/30/97	29	10.9	10.945	19.1	2.	31.489	5.612	2.8	7.55	17.25	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/24/88-07/30/97	39	28.	29.128	36.	18.	13.167	3.629	25.	27.	32.	34.
00400	PH (STANDARD UNITS)	04/24/88-07/30/97	39	6.83	6.843	7.14	6.55	0.035	0.188	6.59	6.65	7.02	7.13
00400	CONVERTED PH (STANDARD UNITS)	04/24/88-07/30/97	39	6.83	6.804	7.14	6.55	0.037	0.192	6.59	6.65	7.02	7.13
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/24/88-07/30/97	39	0.148	0.157	0.282	0.072	0.004	0.066	0.074	0.095	0.224	0.257
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	04/24/88-07/30/97	39	28.	28.385	35.	17.	13.243	3.639	24.	26.	31.	33.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/24/88-07/30/97	39	132.5	139.418	237.2	83.7	1625.208	40.314	94.4	100.4	178.3	196.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/24/88-07/30/97	39	2.3	2.282	2.7	1.3	0.091	0.302	1.9	2.1	2.6	2.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/24/88-07/30/97	39	1.	1.056	1.3	0.3	0.028	0.168	0.9	1.	1.2	1.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/24/88-07/30/97	39	1.35	1.347	1.63	1.12	0.018	0.136	1.17	1.23	1.44	1.55
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/24/88-07/30/97	39	0.21	0.216	0.4	0.16	0.002	0.043	0.17	0.19	0.23	0.26
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/24/88-07/30/97	39	1.	1.013	2.	0.8	0.028	0.167	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/24/88-07/30/97	39	2.5	2.495	3.2	1.7	0.132	0.363	2.	2.3	2.8	3.
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/24/88-07/30/97	39	9.	9.231	11.1	7.9	0.587	0.766	8.3	8.6	9.8	10.4
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	6	4.64	4.982	8.404	1.67	8.244	2.871	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-07/30/97	15	6.213	7.321	17.31	2.666	12.044	3.47	3.67	5.49	8.717	13.722
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/24/88-07/30/97	39	1.1	1.267	4.2	0.	1.325	1.151	0.	0.06	2.2	2.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/24/88-07/30/97	39	0.15	0.159	0.28	0.07	0.004	0.066	0.08	0.1	0.23	0.26

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0408

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	39	0	0.00	10	0	0.00	18	0	0.00	11	0	0.00			
	Other-Lo Lim.	6.5	39	0	0.00	10	0	0.00	18	0	0.00	11	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	39	37	0.95	10	9	0.90	18	17	0.94	11	11	1.00			
	Fresh Acute	860.	39	0	0.00	10	0	0.00	18	0	0.00	11	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	39	0	0.00	10	0	0.00	18	0	0.00	11	0	0.00			
	Drinking Water	250.	39	0	0.00	10	0	0.00	18	0	0.00	11	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	39	0	0.00	10	0	0.00	18	0	0.00	11	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	39	0	0.00	10	0	0.00	18	0	0.00	11	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0408

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	32.	31.	36.	18.	24.889	4.989	19.1	29.75	34.	35.8
00400	PH (STANDARD UNITS)	10	6.7	6.804	7.13	6.59	0.05	0.223	6.59	6.613	7.063	7.13
00400	CONVERTED PH (STANDARD UNITS)	10	6.699	6.758	7.13	6.59	0.052	0.228	6.59	6.613	7.062	7.13
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.2	0.175	0.257	0.074	0.006	0.075	0.074	0.087	0.244	0.257
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10	32.	30.3	34.	17.	24.456	4.945	18.1	30.25	33.	33.9
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10	178.75	155.89	203.7	98.6	1674.65	40.922	98.68	114.325	188.225	202.25
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10	2.6	2.47	2.7	1.3	0.178	0.422	1.41	2.475	2.7	2.7
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10	1.2	1.11	1.3	0.3	0.083	0.288	0.38	1.175	1.2	1.29
00930	SODIUM, DISSOLVED (MG/L AS NA)	10	1.47	1.481	1.63	1.38	0.008	0.089	1.382	1.4	1.563	1.627
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10	0.235	0.253	0.4	0.21	0.003	0.054	0.212	0.23	0.255	0.387
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10	1.	0.95	1.	0.8	0.005	0.071	0.81	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10	2.25	2.33	3.	1.7	0.207	0.455	1.72	1.975	2.7	3.
00955	SILICA, DISSOLVED (MG/L AS SI02)	10	10.1	10.19	11.1	9.4	0.265	0.515	9.44	9.8	10.575	11.07
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10	1.05	1.018	2.8	0.	0.821	0.906	0.002	0.05	1.6	2.71
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10	0.205	0.178	0.26	0.08	0.006	0.075	0.08	0.087	0.245	0.26

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0408

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	18	28.	28.778	36.	24.	10.889	3.3	24.	27.	31.	35.1
00400	PH (STANDARD UNITS)	18	6.81	6.818	7.09	6.55	0.03	0.172	6.586	6.643	6.958	7.036
00400	CONVERTED PH (STANDARD UNITS)	18	6.81	6.786	7.09	6.55	0.031	0.175	6.586	6.643	6.958	7.036
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	18	0.155	0.164	0.282	0.081	0.004	0.064	0.092	0.11	0.228	0.26
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	18	27.	28.056	35.	23.	10.644	3.262	23.9	26.	30.	34.1
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	18	140.2	146.356	237.2	94.4	1837.645	42.868	94.4	101.8	179.4	200.93
00915	CALCIUM, DISSOLVED (MG/L AS CA)	18	2.2	2.222	2.6	1.8	0.064	0.253	1.89	2.075	2.5	2.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	18	1.	1.039	1.2	0.9	0.013	0.114	0.9	0.975	1.2	1.2
00930	SODIUM, DISSOLVED (MG/L AS NA)	18	1.245	1.28	1.6	1.12	0.018	0.134	1.138	1.178	1.37	1.51
00935	POTASSIUM, DISSOLVED (MG/L AS K)	18	0.19	0.203	0.27	0.16	0.001	0.036	0.16	0.17	0.233	0.261
00941	CHLORIDE, DISSOLVED IN WATER MG/L	18	1.	1.056	2.	1.	0.056	0.236	1.	1.	1.	1.1
00946	SULFATE, DISSOLVED (MG/L AS SO4)	18	2.5	2.528	3.2	2.	0.134	0.366	2.	2.275	2.825	3.11
00955	SILICA, DISSOLVED (MG/L AS SI02)	18	8.9	8.894	10.2	7.9	0.417	0.646	8.17	8.45	9.25	10.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	18	0.95	1.351	4.2	0.	1.705	1.306	0.	0.152	2.35	3.21
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	18	0.155	0.164	0.28	0.08	0.004	0.065	0.089	0.11	0.233	0.262

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0408

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	28.	28.	32.	25.	4.	2.	25.2	26.	29.	31.6
00400	PH (STANDARD UNITS)	11	6.95	6.918	7.14	6.63	0.03	0.174	6.638	6.77	7.04	7.138
00400	CONVERTED PH (STANDARD UNITS)	11	6.95	6.886	7.14	6.63	0.031	0.177	6.638	6.77	7.04	7.138
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.112	0.13	0.234	0.072	0.003	0.055	0.073	0.091	0.17	0.23
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11	27.	27.182	31.	24.	4.764	2.183	24.2	25.	29.	30.8
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11	108.5	113.091	142.8	83.7	424.221	20.597	84.7	98.7	134.7	141.74
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11	2.2	2.209	2.4	2.	0.029	0.17	2.	2.	2.4	2.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11	1.	1.036	1.2	0.9	0.007	0.081	0.92	1.	1.1	1.18
00930	SODIUM, DISSOLVED (MG/L AS NA)	11	1.35	1.335	1.44	1.18	0.006	0.078	1.186	1.3	1.38	1.43
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11	0.2	0.203	0.23	0.18	0.	0.016	0.18	0.19	0.21	0.228
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11	2.5	2.591	3.	2.4	0.049	0.221	2.4	2.4	2.8	2.98
00955	SILICA, DISSOLVED (MG/L AS SI02)	11	9.	8.909	9.2	8.5	0.047	0.217	8.52	8.8	9.1	9.18

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0408

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/24/88-07/30/97	11	1.1	1.355	3.4	0.	1.313	1.146	0.	0.005	2.3	3.22
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/24/88-07/30/97	11	0.11	0.132	0.24	0.07	0.003	0.057	0.072	0.09	0.17	0.236

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0409

NPS Station ID: SHEN0409
 Location: Rose River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.515281/ -78.367198

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_VTS66
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0409

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-10/29/97	6	11.4	11.317	19.1	3.3	27.59	5.253	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-10/29/97	6	26.	26.5	32.	19.	21.9	4.68	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/27/95-10/29/97	6	10.05	10.017	11.7	8.2	1.422	1.192	**	**	**	**
00301 OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	1	96.6	96.6	96.6	96.6	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/27/95-10/29/97	6	6.96	7.008	7.36	6.76	0.046	0.214	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/27/95-10/29/97	6	6.956	6.969	7.36	6.76	0.048	0.218	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/27/95-10/29/97	6	0.111	0.107	0.174	0.044	0.002	0.046	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-10/29/97	6	17.	17.	20.	12.	8.8	2.966	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0409

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0410

NPS Station ID: SHEN0410
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.515309/ -78.366699

 Depth of Water: 0
 Elevation: 1120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA11 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 23.65 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0410

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.98	6.98	6.98	6.98	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.98	6.98	6.98	6.98	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.105	0.105	0.105	0.105	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.01	1.01	1.01	1.01	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0410

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0411

NPS Station ID: SHEN0411
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.515309/ -78.367226

Depth of Water: 0
 Elevation: 1120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR01 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 23.74 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0411

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.03	7.03	7.03	7.03	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.03	7.03	7.03	7.03	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.093	0.093	0.093	0.093	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	91.9	91.9	91.9	91.9	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.29	1.29	1.29	1.29	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0411

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0412

NPS Station ID: SHEN0412
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.516532/ -78.391198

Depth of Water: 0
 Elevation: 1560
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR07 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 13.34 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0412

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.05	7.05	7.05	7.05	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.05	7.05	7.05	7.05	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.089	0.089	0.089	0.089	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	57.8	57.8	57.8	57.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	8.	8.	8.	8.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0412

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0413

NPS Station ID: SHEN0413 LAT/LON: 38.517392/ -78.426115
 Location: HOGCAMP BRANCH (ROSE RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 3160
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR13
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR13 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.73 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0413

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.88	6.88	6.88	6.88	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.88	6.88	6.88	6.88	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.132	0.132	0.132	0.132	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	96.2	96.2	96.2	96.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0413

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0414

NPS Station ID: SHEN0414
 Location: ROSE RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.518671/ -78.425865

Depth of Water: 0
 Elevation: 3220
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR12 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.91 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0414

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.056	0.056	0.056	0.056	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	44.	44.	44.	44.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	60.3	60.3	60.3	60.3	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.49	1.49	1.49	1.49	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0414

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0415

NPS Station ID: SHEN0415 LAT/LON: 38.519892/ -78.423338
 Location: HOGCAMP BRANCH (ROSE RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 2870
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR11 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.24 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0415

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.07	7.07	7.07	7.07	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.07	7.07	7.07	7.07	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.085	0.085	0.085	0.085	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	113.1	113.1	113.1	113.1	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	0.98	0.98	0.98	0.98	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0415

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0416

NPS Station ID: SHEN0416
 Location: Rose River & Hog Camp Branch
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.520420/ -78.422643

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_LTEM_2L304
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Big Meadows VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0416

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/08/89-05/28/97	34	13.	12.812	25.1	6.2	21.351	4.621	8.1	9.	14.	20.55
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/21/95-05/28/97	2	32.	32.	32.	32.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/08/89-05/28/97	28	10.1	10.193	13.	8.	1.005	1.003	8.89	9.5	11.	11.
00406 PH, FIELD, STANDARD UNITS SU	09/03/91-05/28/97	10	6.875	6.893	7.89	5.07	0.786	0.887	5.163	6.473	7.797	7.889
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/03/91-05/28/97	10	6.865	5.987	7.89	5.07	1.698	1.303	5.163	6.473	7.797	7.889
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/03/91-05/28/97	10	0.137	1.031	8.511	0.013	6.994	2.645	0.013	0.016	0.426	7.76
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/21/95-05/28/97	2	20.5	20.5	21.	20.	0.5	0.707	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0416

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	28	0	0.00	14	0	0.00	14	0	0.00	14	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	10	0	0.00	6	0	0.00	4	0	0.00	4	0	0.00			
	Other-Lo Lim.	6.5	10	2	0.20	6	2	0.33	4	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0416

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/08/89-05/28/97	18	13.9	15.761	25.1	12.	19.535	4.42	12.9	13.375	16.	25.1
00300 OXYGEN, DISSOLVED MG/L	06/08/89-05/28/97	14	9.65	9.664	11.	8.	0.832	0.912	8.4	8.975	10.25	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0416

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/08/89-05/28/97	16	9.	9.494	13.	6.2	2.65	1.628	7.39	8.35	10.8	11.6
00300 OXYGEN, DISSOLVED MG/L	06/08/89-05/28/97	14	10.7	10.721	13.	9.5	0.654	0.809	9.75	10.15	11.	12.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0417

NPS Station ID: SHEN0417
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.521865/ -78.399726

Depth of Water: 0
 Elevation: 1830
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR06 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.87 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0417

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.02	7.02	7.02	7.02	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.02	7.02	7.02	7.02	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.095	0.095	0.095	0.095	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	80.8	80.8	80.8	80.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.15	1.15	1.15	1.15	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0417

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0418

NPS Station ID: SHEN0418
 Location: Hogcamp Branch
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.522365/ -78.421116

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F055
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Big Meadows VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0418

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/26/95-07/13/98	4	16.3	16.35	17.1	15.7	0.357	0.597	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/26/95-07/13/98	4	32.	31.75	36.	27.	16.25	4.031	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/26/95-07/13/98	4	8.55	8.55	8.7	8.4	0.017	0.129	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/26/95-07/13/98	4	6.885	6.955	7.26	6.79	0.044	0.209	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/26/95-07/13/98	4	6.884	6.922	7.26	6.79	0.045	0.213	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/26/95-07/13/98	4	0.131	0.12	0.162	0.055	0.002	0.046	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/26/95-07/13/98	2	19.5	19.5	20.	19.	0.5	0.707	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/15/96-07/13/98	3	14.7	14.633	15.	14.2	0.163	0.404	**	**	**	**
83509 STREAM, WIDTH METER	07/15/96-07/13/98	3	3.5	3.733	4.3	3.4	0.243	0.493	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/15/96-07/13/98	2	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0418

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0	0.00	4	0	0	0.00								
00406 PH, FIELD	Fresh Chronic	9.	4	0	0	0.00	4	0	0	0.00								
	Other-Lo Lim.	6.5	4	0	0	0.00	4	0	0	0.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0419

NPS Station ID: SHEN0419 LAT/LON: 38.523226/ -78.418309
 Location: HOGCAMP BRANCH (ROSE RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 2540
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR14
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR14 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.19 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0419

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.03	7.03	7.03	7.03	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.03	7.03	7.03	7.03	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.093	0.093	0.093	0.093	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	86.	86.	86.	86.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.05	1.05	1.05	1.05	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0419

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00				1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00				1	0	0.00							
	Fresh Acute								1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00				1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00				1	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0420

NPS Station ID: SHEN0420
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.525226/ -78.406587

Depth of Water: 0
 Elevation: 2120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR05 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.90 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0420

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.02	7.02	7.02	7.02	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.02	7.02	7.02	7.02	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.095	0.095	0.095	0.095	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	97.	97.	97.	97.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.13	1.13	1.13	1.13	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0420

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Fresh Acute	860.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	44.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	44.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0421

NPS Station ID: SHEN0421
 Location: Rose River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.525253/ -78.406698

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F017
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Big Meadows VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0421

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/11/96-07/13/98	3	16.1	16.067	16.7	15.4	0.423	0.651	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/11/96-07/13/98	3	33.	32.667	36.	29.	12.333	3.512	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/11/96-07/13/98	3	8.9	9.533	10.8	8.9	1.203	1.097	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/11/96-07/13/98	3	6.67	6.337	6.73	5.61	0.397	0.63	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/11/96-07/13/98	3	6.67	6.022	6.73	5.61	0.546	0.739	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/11/96-07/13/98	3	0.214	0.952	2.455	0.186	1.695	1.302	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/13/98-07/13/98	1	13.	13.	13.	13.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/11/96-07/13/98	3	5.56	4.913	5.78	3.4	1.73	1.315	**	**	**	**
83509 STREAM, WIDTH METER	07/11/96-07/13/98	3	5.5	5.433	5.6	5.2	0.043	0.208	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/11/96-07/13/98	3	0.03	0.033	0.04	0.03	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0421

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00										
	Other-Lo Lim.	6.5	3	1	0.33	3	1	0.33										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0422

NPS Station ID: SHEN0422 LAT/LON: 38.526503/ -78.411477
 Location: HOGCAMP BRANCH (ROSE RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 2520
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR15
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR15 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0422

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.02	7.02	7.02	7.02	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	7.02	7.02	7.02	7.02	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.095	0.095	0.095	0.095	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	62.8	62.8	62.8	62.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.05	1.05	1.05	1.05	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0422

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0423

NPS Station ID: SHEN0423
 Location: VAMA526R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.527198/ -78.354893

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_NURE_07 /4090618
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE OLD RAG MOUNTAIN VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0423

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/20/77-01/20/77	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/77-01/20/77	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/20/77-01/20/77	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/20/77-01/20/77	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/20/77-01/20/77	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/20/77-01/20/77	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/20/77-01/20/77	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/20/77-01/20/77	1	1.46	1.46	1.46	1.46	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	01/20/77-01/20/77	1	4.	4.	4.	4.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/20/77-01/20/77	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/20/77-01/20/77	1	80.	80.	80.	80.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/20/77-01/20/77	1	0.019	0.019	0.019	0.019	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	1	4300.	4300.	4300.	4300.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	1	101.	101.	101.	101.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/20/77-01/20/77	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0423

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
	Drinking Water	20.	1	0	0.00				1	0	0.00							
22703 URANIUM, NATURAL DISSOLVED																		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0424

NPS Station ID: SHEN0424
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.528198/ -78.408281

Depth of Water: 0
 Elevation: 2180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR04 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.38 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0424

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.96	6.96	6.96	6.96	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.96	6.96	6.96	6.96	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	67.8	67.8	67.8	67.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.08	1.08	1.08	1.08	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0424

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0425

NPS Station ID: SHEN0425
 Location: VAPA518R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.532003/ -78.528199

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_NURE_26 /4091122
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE STANLEY VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0425

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/77-04/22/77	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/77-04/22/77	1	50.	50.	50.	50.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/22/77-04/22/77	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/22/77-04/22/77	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/77-04/22/77	1	1.259	1.259	1.259	1.259	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/22/77-04/22/77	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/77-04/22/77	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/77-04/22/77	1	2.82	2.82	2.82	2.82	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/22/77-04/22/77	1	6.	6.	6.	6.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/22/77-04/22/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/22/77-04/22/77	1	45.	45.	45.	45.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/22/77-04/22/77	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/22/77-04/22/77	1	3200.	3200.	3200.	3200.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/22/77-04/22/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0425

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0426

NPS Station ID: SHEN0426
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.532115/ -78.409698

Depth of Water: 0
 Elevation: 2180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR03 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.34 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0426

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.97	6.97	6.97	6.97	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.97	6.97	6.97	6.97	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.107	0.107	0.107	0.107	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	85.7	85.7	85.7	85.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.09	1.09	1.09	1.09	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0426

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0427

NPS Station ID: SHEN0427
 Location: RAGGED RUN NEAR ETLAN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103057900.00
 Description:

LAT/LON: 38.532226/ -78.295559

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.22

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01662190
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 3.00
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0427

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	6	16.	12.917	20.	3.	51.142	7.151	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	6	0.85	1.175	3.	0.05	1.26	1.122	**	**	**	**
00400	PH (STANDARD UNITS)	08/13/81-06/21/82	6	6.65	6.517	6.8	5.8	0.146	0.382	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/13/81-06/21/82	6	6.647	6.339	6.8	5.8	0.184	0.429	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.225	0.458	1.585	0.158	0.312	0.559	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	6	6.7	6.7	6.8	6.6	0.008	0.089	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/13/81-06/21/82	6	6.7	6.692	6.8	6.6	0.008	0.09	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.2	0.203	0.251	0.158	0.002	0.042	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	6	0.035	0.083	0.2	0.01	0.008	0.091	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/13/81-06/21/82	6	5.	4.833	6.	4.	0.567	0.753	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/13/81-06/21/82	6	1.15	1.133	1.3	0.9	0.019	0.137	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	6	0.5	0.483	0.6	0.4	0.006	0.075	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	6	1.65	1.633	1.8	1.5	0.015	0.121	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	6	0.3	0.3	0.3	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/13/81-06/21/82	6	39.	39.5	43.	38.	3.5	1.871	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	6	0.5	0.517	0.6	0.4	0.006	0.075	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	6	1.	0.967	1.	0.9	0.003	0.052	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	6	3.	2.667	3.	2.	0.267	0.516	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/13/81-06/21/82	6	10.1	10.417	12.4	8.4	2.314	1.521	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-05/17/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0427

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	2	0.33	2	1	0.50	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0427

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0428

NPS Station ID: SHEN0428
 Location: RAGGED RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.532503/ -78.298615

 Depth of Water: 0
 Elevation: 1120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA03 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT RAGGED RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.04 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0428

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.82	6.82	6.82	6.82	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.82	6.82	6.82	6.82	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.151	0.151	0.151	0.151	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.24	1.24	1.24	1.24	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0428

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0429

NPS Station ID: SHEN0429
 Location: Ragged Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.532753/ -78.299003

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F059
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0429

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/94-08/24/94	4	10.3	12.025	17.2	10.3	11.902	3.45	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/24/94-08/24/94	3	11.	10.667	11.	10.	0.333	0.577	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/24/94-08/24/94	3	9.87	9.863	9.9	9.82	0.002	0.04	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/24/94-08/24/94	3	9.87	9.862	9.9	9.82	0.002	0.04	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/24/94-08/24/94	3	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0429

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	3	3	1.00	3	3	1.00					
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0430

NPS Station ID: SHEN0430
 Location: VARA524R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.534503/ -78.245198

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_NURE_09 /4091486
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE WOODVILLE VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0430

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/77-04/11/77	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/11/77-04/11/77	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/11/77-04/11/77	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/11/77-04/11/77	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/77-04/11/77	1	2.512	2.512	2.512	2.512	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/11/77-04/11/77	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/77-04/11/77	1	2.96	2.96	2.96	2.96	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/11/77-04/11/77	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/11/77-04/11/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/11/77-04/11/77	1	42.	42.	42.	42.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/11/77-04/11/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	1	3300.	3300.	3300.	3300.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/11/77-04/11/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0430

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0431

NPS Station ID: SHEN0431
 Location: Whiteoak System - Cedar Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.536615/ -78.359892

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F062
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0431

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/14/95-08/14/95	1	19.8	19.8	19.8	19.8	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/14/95-08/14/95	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/14/95-08/14/95	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/14/95-08/14/95	1	6.79	6.79	6.79	6.79	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/14/95-08/14/95	1	6.79	6.79	6.79	6.79	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/14/95-08/14/95	1	0.162	0.162	0.162	0.162	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/14/95-08/14/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0431

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00												
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00												
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0432

NPS Station ID: SHEN0432
 Location: CEDAR RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.536698/ -78.358892

Depth of Water: 0
 Elevation: 1400
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA07 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT CEDAR RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.43 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0432

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.94	6.94	6.94	6.94	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.94	6.94	6.94	6.94	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.115	0.115	0.115	0.115	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.03	1.03	1.03	1.03	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0432

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0433

NPS Station ID: SHEN0433
 Location: ROSE RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.537003/ -78.408948

Depth of Water: 0
 Elevation: 2580
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_RR02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RR02 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE ROSE RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.70 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0433

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/14/92-03/14/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/14/92-03/14/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/14/92-03/14/92	1	6.93	6.93	6.93	6.93	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/14/92-03/14/92	1	0.117	0.117	0.117	0.117	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/14/92-03/14/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/14/92-03/14/92	1	93.7	93.7	93.7	93.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/14/92-03/14/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/14/92-03/14/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/14/92-03/14/92	1	1.14	1.14	1.14	1.14	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/14/92-03/14/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/14/92-03/14/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/14/92-03/14/92	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/14/92-03/14/92	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/14/92-03/14/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/14/92-03/14/92	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0433

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0434

NPS Station ID: SHEN0434
 Location: Ragged Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.537531/ -78.306337

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F060
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0434

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/97-08/13/97	1	18.4	18.4	18.4	18.4	0.	0.	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/13/97-08/13/97	1	21.	21.	21.	21.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/13/97-08/13/97	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/13/97-08/13/97	1	6.15	6.15	6.15	6.15	0.	0.	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/13/97-08/13/97	1	6.15	6.15	6.15	6.15	0.	0.	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/97-08/13/97	1	0.708	0.708	0.708	0.708	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	08/13/97-08/13/97	1	11.64	11.64	11.64	11.64	0.	0.	**	**	**
83509	STREAM, WIDTH METER	08/13/97-08/13/97	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	08/13/97-08/13/97	1##	0.	0.	0.	0.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0434

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00								
00406	PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	1	1.00	1	1	1.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0435

NPS Station ID: SHEN0435
 Location: Ragged Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.539337/ -78.314337

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F061
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0435

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/24/94-08/24/94	1	15.8	15.8	15.8	15.8	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0436

NPS Station ID: SHEN0436
 Location: CEDAR RUN NEAR SYRIA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103003622.04
 Description:

LAT/LON: 38.539449/ -78.350281

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 32.68

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01665730
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 6.00
 Distance from RF3: 0.46

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0436

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/21/82	6	14.75	11.583	17.	2.	41.042	6.406	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/21/82	6	1.5	4.877	18.	0.06	50.07	7.076	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-06/21/82	6	6.6	6.567	6.8	6.2	0.071	0.266	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-06/21/82	6	6.555	6.499	6.8	6.2	0.076	0.276	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/21/82	6	0.278	0.317	0.631	0.158	0.037	0.193	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/21/82	6	6.7	6.65	6.8	6.4	0.027	0.164	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-06/21/82	6	6.7	6.623	6.8	6.4	0.028	0.167	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/21/82	6	0.2	0.238	0.398	0.158	0.009	0.097	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/20/81-06/21/82	6##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/21/82	6	0.1	0.147	0.3	0.08	0.007	0.086	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/20/81-06/21/82	6	9.5	8.167	11.	1.	13.367	3.656	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/20/81-06/21/82	6	2.1	2.067	2.3	1.8	0.039	0.197	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/21/82	6	1.	1.05	1.3	0.9	0.031	0.176	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/21/82	6	1.25	1.317	1.7	1.1	0.046	0.214	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-06/21/82	6	0.2	0.2	0.2	0.	0.	0.	**	**	**
00932	SODIUM, PERCENT	08/20/81-06/21/82	6	22.5	22.833	26.	21.	2.967	1.722	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/21/82	6	0.1	0.133	0.2	0.1	0.003	0.052	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/20/81-06/21/82	6	1.	1.	1.	1.	0.	0.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/21/82	6	3.	2.833	3.	2.	0.167	0.408	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/20/81-06/21/82	6	8.55	8.833	10.2	7.7	1.183	1.088	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-06/21/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0436

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	3	0.50	2	2	1.00	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	2	0.33	2	2	1.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0436

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0437

NPS Station ID: SHEN0437
 Location: WHITE OAK CANYON TRIB NEAR SYRIA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103004111.48
 Description:

LAT/LON: 38.539726/ -78.348059

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 15.03

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01665710
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.60
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0437

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/21/82	6	15.25	11.667	17.	2.	43.767	6.616	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/21/82	6	3.	4.367	11.	0.2	17.927	4.234	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-06/21/82	6	6.95	6.85	7.1	6.3	0.083	0.288	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-06/21/82	6	6.947	6.751	7.1	6.3	0.095	0.308	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/21/82	6	0.113	0.178	0.501	0.079	0.026	0.161	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/21/82	6	7.	6.95	7.1	6.8	0.015	0.122	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-06/21/82	6	7.	6.935	7.1	6.8	0.015	0.124	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/21/82	6	0.1	0.116	0.158	0.079	0.001	0.034	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/20/81-06/21/82	6 ##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/21/82	6	0.095	0.12	0.2	0.06	0.004	0.064	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/20/81-06/21/82	6	8.5	8.833	10.	8.	0.967	0.983	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/20/81-06/21/82	6	1.95	1.95	2.1	1.8	0.019	0.138	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/21/82	6	0.95	0.967	1.1	0.8	0.015	0.121	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/21/82	6	1.15	1.15	1.3	1.	0.011	0.105	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-06/21/82	6	0.2	0.2	0.2	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-06/21/82	6	21.5	21.5	23.	20.	1.1	1.049	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/21/82	6	0.2	0.167	0.2	0.1	0.003	0.052	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/20/81-06/21/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/21/82	6	2.5	2.5	3.	2.	0.3	0.548	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/20/81-06/21/82	6	7.95	8.083	9.1	7.2	0.55	0.741	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/25/82-06/21/82	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0437

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	0	0.00	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0437

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0438

NPS Station ID: SHEN0438
 Location: Whiteoak Canyon Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.540420/ -78.350226

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_LTEM_2L301
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0438

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	34	15.15	14.621	18.3	3.3	10.156	3.187	11.35	12.75	17.	18.
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/08/95-05/22/97	4	24.5	23.75	28.	18.	21.583	4.646	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	29	10.	9.783	13.7	6.6	2.012	1.419	8.	8.65	10.95	11.
00406 PH, FIELD, STANDARD UNITS SU	05/22/91-05/22/97	13	6.66	6.684	7.06	6.22	0.051	0.226	6.296	6.59	6.82	7.04
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/22/91-05/22/97	13	6.66	6.628	7.06	6.22	0.054	0.233	6.296	6.59	6.82	7.04
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/91-05/22/97	13	0.219	0.236	0.603	0.087	0.018	0.135	0.091	0.153	0.258	0.517
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/08/95-05/22/97	4	16.	15.5	18.	12.	7.	2.646	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0438

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	29	0	0.00	14	0	0.00	1	0	0.00	14	0	0.00
00406 PH, FIELD	Fresh Chronic	9.	13	0	0.00	6	0	0.00	1	0	0.00	6	0	0.00
	Other-Lo Lim.	6.5	13	2	0.15	6	1	0.17	1	0	0.00	6	1	0.17

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0438

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	18	17.	16.511	18.3	13.	2.801	1.674	13.9	15.575	18.	18.03
00300 OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	14	9.25	9.086	11.	6.6	1.831	1.353	7.05	8.	10.	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0438

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	1	13.7	13.7	13.7	13.7	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0438

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/06/89-05/22/97	15	13.	13.107	17.	10.1	4.334	2.082	10.76	11.5	14.2	16.94
00300 OXYGEN, DISSOLVED MG/L	06/06/89-05/22/97	14	10.2	10.2	11.	8.4	0.612	0.783	8.8	9.875	11.	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0439

NPS Station ID: SHEN0439
 Location: WHITE OAK CANYON (ROBINSON RIVER)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.540615/ -78.350003

 Depth of Water: 0
 Elevation: 1120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MAI7
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA17 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITE OAK CANYON (ROBINSON RIVER) INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 14.10 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0439

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.129	0.129	0.129	0.129	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.99	0.99	0.99	0.99	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER (MG/L)	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0439

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0440

NPS Station ID: SHEN0440
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.541032/ -78.350726

Depth of Water: 0
 Elevation: 1160
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_VT75
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT75 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 14.08 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0440

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-07/30/97	29	10.	10.614	20.	1.	36.22	6.018	2.4	6.25	17.5	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/31/90-07/30/97	29	27.	27.414	37.	22.	12.608	3.551	24.	25.	29.5	33.
00400	PH (STANDARD UNITS)	07/31/90-07/30/97	29	6.76	6.753	7.01	6.4	0.032	0.178	6.48	6.61	6.905	6.98
00400	CONVERTED PH (STANDARD UNITS)	07/31/90-07/30/97	29	6.76	6.716	7.01	6.4	0.033	0.182	6.48	6.61	6.905	6.98
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/90-07/30/97	29	0.174	0.192	0.398	0.098	0.007	0.084	0.105	0.124	0.247	0.331
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/31/90-07/30/97	29	26.	27.	37.	22.	12.929	3.596	23.	24.5	29.5	32.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/31/90-07/30/97	29	129.4	130.607	206.1	72.8	1662.451	40.773	81.2	89.85	171.2	182.9
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/31/90-07/30/97	29	2.2	2.238	3.1	1.7	0.132	0.363	1.8	1.9	2.55	2.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/31/90-07/30/97	29	1.	1.021	1.4	0.8	0.024	0.154	0.9	0.9	1.1	1.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/31/90-07/30/97	29	1.17	1.186	1.53	1.01	0.016	0.127	1.03	1.085	1.275	1.36
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/31/90-07/30/97	29	0.2	0.195	0.27	0.14	0.001	0.03	0.15	0.17	0.22	0.23
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/31/90-07/30/97	29	1.	1.014	2.	0.7	0.041	0.201	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/31/90-07/30/97	29	2.5	2.545	3.6	1.9	0.17	0.412	2.	2.2	2.9	3.1
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/31/90-07/30/97	29	8.1	8.341	10.1	7.4	0.579	0.761	7.5	7.8	8.95	9.6
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	6	9.154	9.213	19.806	2.683	41.325	6.428	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-07/30/97	15	7.561	7.663	11.738	2.804	7.054	2.656	4.121	5.511	9.777	11.674
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/31/90-07/30/97	29	1.2	1.197	2.1	0.009	0.385	0.62	0.3	0.6	1.75	2.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/31/90-07/30/97	29	0.18	0.194	0.4	0.1	0.007	0.084	0.11	0.125	0.25	0.33

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0440

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	29	0	0.00	8	0	0.00	14	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	29	4	0.14	8	2	0.25	14	2	0.14	7	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	29	28	0.97	8	7	0.88	14	14	1.00	7	7	1.00			
	Fresh Acute	860.	29	0	0.00	8	0	0.00	14	0	0.00	7	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	29	0	0.00	8	0	0.00	14	0	0.00	7	0	0.00			
	Drinking Water	250.	29	0	0.00	8	0	0.00	14	0	0.00	7	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	29	0	0.00	8	0	0.00	14	0	0.00	7	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	29	0	0.00	8	0	0.00	14	0	0.00	7	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0441

NPS Station ID: SHEN0441
 Location: Whiteoak Canyon Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.541032/ -78.350726

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_VTS75
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0441

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-10/29/97	6	10.7	10.717	19.1	2.5	29.666	5.447	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-10/29/97	6	24.5	25.333	33.	17.	29.067	5.391	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/27/95-10/29/97	6	10.1	9.95	11.5	7.7	1.583	1.258	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	1	89.7	89.7	89.7	0.	0.	0.	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	04/27/95-10/29/97	6	6.835	6.76	6.93	6.39	0.039	0.197	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	04/27/95-10/29/97	6	6.834	6.717	6.93	6.39	0.041	0.203	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/27/95-10/29/97	6	0.146	0.192	0.407	0.117	0.012	0.109	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-10/29/97	6	16.	16.333	21.	11.	11.867	3.445	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0441

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	6	1	0.17	1	1	1.00	3	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0442

NPS Station ID: SHEN0442
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.541059/ -78.350726

Depth of Water: 0
 Elevation: 1120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_W001
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION W001 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 14.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0442

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	11.75	11.75	19.	4.5	105.125	10.253	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	31.	31.	31.	31.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.975	6.975	7.	6.95	0.001	0.035	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.974	6.974	7.	6.95	0.001	0.035	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.106	0.106	0.112	0.1	0.	0.009	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	30.	30.	30.	30.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	140.7	140.7	181.1	100.3	3264.32	57.134	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.4	2.4	2.5	2.3	0.02	0.141	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.28	1.28	1.33	1.23	0.005	0.071	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.185	0.185	0.22	0.15	0.002	0.049	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	2.65	2.65	3.3	2.	0.845	0.919	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	8.85	8.85	9.6	8.1	1.125	1.061	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	2.85	2.85	4.5	1.2	5.445	2.333	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.105	0.105	0.11	0.1	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0442

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0443

NPS Station ID: SHEN0443
 Location: Whiteoak Canyon Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.541115/ -78.350532

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F009
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0443

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/95-08/10/95	1	18.2	18.2	18.2	18.2	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/10/95-08/10/95	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/10/95-08/10/95	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/10/95-08/10/95	1	6.34	6.34	6.34	6.34	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/10/95-08/10/95	1	6.34	6.34	6.34	6.34	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/10/95-08/10/95	1	0.457	0.457	0.457	0.457	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/10/95-08/10/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0443

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00												
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00												
	Other-Lo Lim.	6.5	1	1	1.00	1	1	1.00												

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0444

NPS Station ID: SHEN0444
 Location: ROSSON HOLLOW RUN TRIB NEAR ETLAN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103058000.62
 Description:

LAT/LON: 38.542504/ -78.273337
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 3.79

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01662200
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 24.00
 Distance from RF3: 0.74

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0444

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	6	19.5	15.583	23.	1.	77.942	8.828	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	06/21/82-06/21/82	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	6	0.35	0.802	3.	0.01	1.281	1.132	**	**	**	**
00400	PH (STANDARD UNITS)	08/13/81-06/21/82	6	6.6	6.467	6.8	5.7	0.179	0.423	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/13/81-06/21/82	6	6.589	6.256	6.8	5.7	0.232	0.482	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.258	0.555	1.995	0.158	0.515	0.718	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	6	6.65	6.633	6.8	6.3	0.035	0.186	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/13/81-06/21/82	6	6.647	6.596	6.8	6.3	0.036	0.191	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.225	0.253	0.501	0.158	0.016	0.128	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	6##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	6	0.03	0.037	0.09	0.01	0.001	0.031	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/13/81-06/21/82	6	5.	4.833	6.	4.	0.567	0.753	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/13/81-06/21/82	6	1.2	1.2	1.4	1.	0.02	0.141	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	6	0.5	0.467	0.5	0.4	0.003	0.052	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	6	2.05	2.05	2.3	1.8	0.035	0.187	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	6	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/13/81-06/21/82	6	44.5	44.333	46.	43.	1.467	1.211	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	6	0.55	0.55	0.6	0.5	0.003	0.055	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	6	3.	3.	4.	2.	0.4	0.632	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/13/81-06/21/82	6	12.	12.267	14.2	9.6	2.683	1.638	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/28/82-05/17/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0444

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----					
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.																
00403	PH, LAB	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.																
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	CHLORIDE, TOTAL IN WATER	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Drinking Water																

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0444

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0445

NPS Station ID: SHEN0445
 Location: BERRY HOLLOW TRIB NEAR NETHERS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103003622.04
 Description:

LAT/LON: 38.545837/ -78.343616

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 27.40

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01665720
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.20
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0445

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/14/81-06/21/82	6	14.	11.75	19.	2.	40.975	6.401	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/14/81-06/21/82	6	0.5	0.853	2.	0.02	0.844	0.919	**	**	**	**
00400	PH (STANDARD UNITS)	08/14/81-06/21/82	6	6.7	6.667	6.9	6.3	0.055	0.234	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/14/81-06/21/82	6	6.7	6.611	6.9	6.3	0.058	0.242	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/14/81-06/21/82	6	0.2	0.245	0.501	0.126	0.021	0.144	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/14/81-06/21/82	6	6.75	6.75	6.9	6.6	0.011	0.105	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/14/81-06/21/82	6	6.747	6.739	6.9	6.6	0.011	0.106	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/14/81-06/21/82	6	0.179	0.182	0.251	0.126	0.002	0.044	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/14/81-06/21/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/14/81-06/21/82	6	0.065	0.07	0.1	0.04	0.001	0.025	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/14/81-06/21/82	6	5.	5.333	6.	5.	0.267	0.516	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/14/81-06/21/82	6	1.35	1.35	1.4	1.3	0.003	0.055	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	08/14/81-06/21/82	6	0.45	0.45	0.5	0.4	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	08/14/81-06/21/82	6	2.05	2.083	2.3	1.9	0.022	0.147	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/14/81-06/21/82	6	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/14/81-06/21/82	6	43.	43.167	45.	42.	1.367	1.169	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/14/81-06/21/82	6	0.6	0.583	0.6	0.5	0.002	0.041	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/14/81-06/21/82	6	1.	1.117	2.	0.8	0.194	0.44	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/14/81-06/21/82	6	3.	3.333	4.	3.	0.267	0.516	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/14/81-06/21/82	6	11.2	11.65	13.6	9.6	2.315	1.522	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-05/17/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0445

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	2	0.33	2	1	0.50	2	1	0.50	2	0	0.00
	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00403 PH, LAB	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631 NITRITE PLUS NITRATE, DISS. 1 DET.	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0445

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0446

NPS Station ID: SHEN0446
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.548338/ -78.353781

 Depth of Water: 0
 Elevation: 1280
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO02
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

On/Off RF1:
 On/Off RF3:

STATION WO02 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.00 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0446

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	12.	12.	20.	4.	128.	11.314	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	27.5	27.5	30.	25.	12.5	3.536	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.095	7.095	7.21	6.98	0.026	0.163	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.08	7.08	7.21	6.98	0.027	0.164	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.083	0.083	0.105	0.062	0.001	0.03	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	26.5	26.5	29.	24.	12.5	3.536	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	146.55	146.55	191.9	101.2	4113.245	64.135	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.2	2.2	2.5	1.9	0.18	0.424	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.	1.	1.1	0.9	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.165	1.165	1.25	1.08	0.014	0.12	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.185	0.185	0.21	0.16	0.001	0.035	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	2.25	2.25	2.7	1.8	0.405	0.636	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	8.2	8.2	9.1	7.3	1.62	1.273	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.55	1.55	1.9	1.2	0.245	0.495	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.085	0.085	0.11	0.06	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0446

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0447

NPS Station ID: SHEN0447
 Location: Little Hawksbill
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.548559/ -78.431754

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F110
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Big Meadows VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0447

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/13/94-06/25/97	5	16.5	16.76	18.	16.2	0.533	0.73	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/25/97-06/25/97	1	37.	37.	37.	37.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/13/94-06/25/97	4	9.5	9.35	10.	8.4	0.623	0.79	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/13/94-06/25/97	4	7.645	7.488	7.76	6.9	0.161	0.401	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/13/94-06/25/97	4	7.637	7.325	7.76	6.9	0.197	0.443	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/13/94-06/25/97	4	0.023	0.047	0.126	0.017	0.003	0.053	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/25/97-06/25/97	1	10.	10.	10.	10.	0.	0.	**	**	**
83509	STREAM, WIDTH METER	06/25/97-06/25/97	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/25/97-06/25/97	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0447

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00406	PH, FIELD	Fresh Chronic	4	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	0	0.00	3	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0448

NPS Station ID: SHEN0448
 Location: BERRY HOLLOW
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.548892/ -78.340616

 Depth of Water: 0
 Elevation: 1440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA10 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BERRY HOLLOW INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.40 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0448

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.59	6.59	6.59	6.59	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.59	6.59	6.59	6.59	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.257	0.257	0.257	0.257	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.47	1.47	1.47	1.47	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.43	0.43	0.43	0.43	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0448

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0449

NPS Station ID: SHEN0449
 Location: Whiteoak System - Berry Holl
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.549088/ -78.340448

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F063
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0449

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/25/94-08/25/94	2	17.4	17.4	17.4	17.4	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/25/94-08/25/94	4	11.	10.75	11.	10.	0.25	0.5	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0449

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	4	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0450

NPS Station ID: SHEN0450
 Location: ROUTE 613 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070005019900.00
 Description:

LAT/LON: 38.554170/ -78.598615

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 8.70

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH
 RIVER: CUB RUN SECTION: 02 TOPO MAP #: 0039 TOPO MAP NAME: STANLEY, VA

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BCUB000.40
 Within Park Boundary: No

Date Created: 07/13/91

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.05

On/Off RF1:
 On/Off RF3:

REGION: 6 VALLEY

Parameter Inventory for Station: SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	70	12.15	12.111	23.7	0.	42.305	6.504	3.13	6.65	18.	20.68
00070	TURBIDITY, (JACKSON CANDLE UNITS)	4	0.85	5.	18.	0.3	75.22	8.673	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	53	1.8	4.681	129.	0.2	306.471	17.506	0.5	1.	3.1	5.18
00080	COLOR (PLATINUM-COBALT UNITS)	6	9.	14.333	31.	2.	180.667	13.441	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	73	87.	103.507	209.	38.	2550.865	50.506	48.	57.5	155.5	181.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	67	10.8	11.061	15.7	6.9	4.379	2.093	8.48	9.	12.5	14.12
00300	OXYGEN, DISSOLVED MG/L	2	10.15	10.15	11.7	8.6	4.805	2.192	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	73 ##	0.5	0.925	5.	0.5	0.626	0.791	0.5	0.5	1.	1.28
00340	COD, .25N K2CR2O7 MG/L	73	5.	6.384	66.	1.	63.268	7.954	2.5	2.5	8.	12.
00400	PH (STANDARD UNITS)	70	8.2	8.078	9.4	6.9	0.228	0.478	7.5	7.7	8.3	8.6
00400	CONVERTED PH (STANDARD UNITS)	70	8.2	7.825	9.4	6.9	0.293	0.541	7.5	7.7	8.3	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	70	0.006	0.015	0.126	0.	0.	0.02	0.003	0.005	0.02	0.032
00403	PH, LAB, STANDARD UNITS SU	73	7.1	7.112	8.2	5.9	0.242	0.492	6.4	6.8	7.5	7.76
00403	CONVERTED PH, LAB, STANDARD UNITS	73	7.1	6.849	8.2	5.9	0.312	0.559	6.4	6.8	7.5	7.76
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	73	0.079	0.141	1.259	0.006	0.035	0.187	0.017	0.032	0.158	0.398
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	73	33.	42.027	96.	6.	710.471	26.655	12.	18.	69.5	82.6
00500	RESIDUE, TOTAL (MG/L)	5	58.	78.	150.	36.	1977.5	44.469	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	5	15.	16.	28.	10.	51.5	7.176	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	5	43.	62.	122.	26.	1488.5	38.581	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	73 ##	1.5	4.336	171.	1.	395.091	19.877	1.5	1.5	1.5	3.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	73 ##	1.5	2.014	38.	0.	18.444	4.295	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	73 ##	1.5	3.603	133.	1.	237.604	15.414	1.5	1.5	1.5	3.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	73 ##	0.02	0.021	0.08	0.01	0.	0.008	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	73 ##	0.005	0.007	0.03	0.005	0.	0.006	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	73	0.19	0.205	0.51	0.06	0.011	0.103	0.09	0.13	0.27	0.326
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	73	0.1	0.127	1.7	0.05	0.045	0.213	0.05	0.05	0.1	0.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	73 ##	0.05	0.063	0.6	0.05	0.004	0.066	0.05	0.05	0.05	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	4 ##	0.005	0.031	0.11	0.005	0.003	0.053	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	46	2.1	2.424	8.8	0.5	2.279	1.51	1.	1.375	2.95	4.22
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	73	42.	48.534	100.	13.	643.975	25.377	19.8	26.5	74.5	87.2
00940	CHLORIDE, TOTAL IN WATER MG/L	73	2.	1.878	10.	0.5	1.735	1.317	1.	1.	2.5	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	73	7.	6.856	12.	2.5	1.399	1.183	6.	6.	7.	7.6
00951	FLUORIDE, TOTAL (MG/L AS F)	8 ##	0.1	0.121	0.25	0.015	0.009	0.094	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/29/91-01/27/93	7	6.7	6.686	7.3	5.5	0.335	0.579	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	73	100.	441.781	8000.	50.	1311389.84	1145.159	50.	50.	300.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	73	2.	2.157	3.903	1.699	0.297	0.545	1.699	1.699	2.477
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		143.412								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	69	0.01	0.016	0.27	0.005	0.001	0.032	0.005	0.005	0.015
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	07/20/92-06/06/94	16	1.35	2.125	12.	0.4	7.698	2.775	0.47	0.625	2.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0450

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	53	1	0.02	19	0	0.00	22	1	0.05	12	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	67	0	0.00	22	0	0.00	29	0	0.00	16	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	1	0	0.00				1	0	0.00			
00400	PH	Fresh Chronic	9.	70	4	0.06	24	0	0.00	29	3	0.10	17	1	0.06			
		Other-Lo Lim.	6.5	70	0	0.00	24	0	0.00	29	0	0.00	17	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	73	0	0.00	25	0	0.00	31	0	0.00	17	0	0.00			
		Other-Lo Lim.	6.5	73	9	0.12	25	1	0.04	31	6	0.19	17	2	0.12			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	73	0	0.00	25	0	0.00	31	0	0.00	17	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	73	0	0.00	25	0	0.00	31	0	0.00	17	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	73	0	0.00	25	0	0.00	31	0	0.00	17	0	0.00			
		Drinking Water	250.	73	0	0.00	25	0	0.00	31	0	0.00	17	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	73	0	0.00	25	0	0.00	31	0	0.00	17	0	0.00			
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	73	29	0.40	25	12	0.48	31	11	0.35	17	6	0.35			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	16	0	0.00	5	0	0.00	7	0	0.00	4	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1991 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	1	18.2	18.2	18.2	18.2	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	2	101.5	101.5	114.	89.	312.5	17.678	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	2	2.5	2.5	4.	1.	4.5	2.121	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	2	8.	8.	15.	1.	98.	9.899	**	**	**	**
00400	PH (STANDARD UNITS)	07/29/91-12/07/98	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	2	7.3	7.3	7.5	7.1	0.08	0.283	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	2	7.255	7.255	7.5	7.1	0.084	0.29	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	2	0.056	0.056	0.079	0.032	0.001	0.034	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	2	41.5	41.5	50.	33.	144.5	12.021	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	2##	9.25	9.25	17.	1.5	120.125	10.96	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	2##	3.25	3.25	5.	1.5	6.125	2.475	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	2##	6.75	6.75	12.	1.5	55.125	7.425	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	2##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	2##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	2	0.16	0.16	0.17	0.15	0.	0.014	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	2##	0.425	0.425	0.8	0.05	0.281	0.53	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	2##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	2	48.	48.	58.	38.	200.	14.142	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	2	6.5	6.5	7.	6.	0.5	0.707	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	2	1800.	1800.	3300.	300.	4500000.	2121.32	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	2	2.998	2.998	3.519	2.477	0.542	0.736	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			994.987								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	4	9.5	11.4	20.9	5.7	44.447	6.667	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	4	89.5	98.5	157.	58.	1789.667	42.304	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	3	10.2	11.067	14.2	8.8	7.853	2.802	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	4##	0.75	0.75	1.	0.5	0.083	0.289	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	4	6.5	8.	16.	3.	32.667	5.715	**	**	**	**
00400	PH (STANDARD UNITS)	07/29/91-12/07/98	4	8.625	8.588	9.4	7.7	0.577	0.76	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	4	8.48	8.171	9.4	7.7	0.808	0.899	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	4	0.003	0.007	0.02	0.	0.	0.009	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	4	7.7	7.575	8.1	6.8	0.363	0.602	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	4	7.604	7.267	8.1	6.8	0.489	0.699	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	4	0.025	0.054	0.158	0.008	0.005	0.071	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	4	32.5	38.5	72.	17.	560.333	23.671	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	4##	1.25	1.25	1.5	1.	0.083	0.289	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	4##	1.25	1.	1.5	0.	0.5	0.707	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	4##	1.5	1.375	1.5	1.	0.063	0.25	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	4##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	4##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	4	0.11	0.133	0.24	0.07	0.006	0.065	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	4	0.1	0.113	0.2	0.05	0.004	0.073	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	4##	0.05	0.063	0.1	0.05	0.001	0.025	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	4	45.	48.	80.	22.	626.667	25.033	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	4	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	4	7.	6.75	7.	6.	0.25	0.5	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	4##	175.	200.	400.	50.	31666.667	177.951	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	4##	2.088	2.119	2.602	1.699	0.238	0.488	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			131.607								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	2 ##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	7	11.6	12.814	21.7	3.	41.965	6.478	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	8	110.	100.25	158.	38.	2253.357	47.47	**	**	**	**
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	7	10.4	10.657	14.8	8.2	5.016	2.24	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	8	1.	0.813	1.	0.5	0.067	0.259	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	8 ##	3.75	6.25	15.	2.5	24.357	4.935	**	**	**	**
00400 PH (STANDARD UNITS)	07/29/91-12/07/98	7	7.6	7.557	8.5	6.9	0.28	0.529	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	7	7.6	7.341	8.5	6.9	0.334	0.578	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	7	0.025	0.046	0.126	0.003	0.002	0.044	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	8	7.2	7.188	8.2	5.9	0.427	0.653	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	8	7.2	6.683	8.2	5.9	0.718	0.848	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	8	0.063	0.208	1.259	0.006	0.182	0.426	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	8	48.	41.25	73.	6.	735.929	27.128	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	8 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	8 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	8 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	8 ##	0.02	0.028	0.08	0.02	0.	0.021	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	8 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	8	0.21	0.198	0.32	0.08	0.005	0.052	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	8 ##	0.05	0.081	0.2	0.05	0.003	0.053	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	8 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	8	52.	48.5	82.	16.	671.714	25.917	**	**	**	**
00940 CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	8	1.	0.938	1.	0.7	0.014	0.119	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	8	6.5	6.5	8.	5.	0.857	0.926	**	**	**	**
31616 FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	8 ##	75.	87.5	200.	50.	2678.571	51.755	**	**	**	**
31616 LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	8 ##	1.849	1.887	2.301	1.699	0.05	0.224	**	**	**	**
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				77.111								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	8 ##	0.005	0.008	0.02	0.005	0.	0.005	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	11	10.	10.118	20.7	0.7	53.894	7.341	1.04	4.3	19.	20.6
00076 TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	5	1.	0.96	1.7	0.4	0.283	0.532	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	11	126.	107.818	174.	43.	2655.964	51.536	44.	49.	157.	171.6
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	11	11.9	11.464	15.7	6.9	6.609	2.571	7.2	9.1	13.2	15.32
00310 BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	11 ##	0.5	0.727	1.4	0.5	0.11	0.332	0.5	0.5	1.	1.34
00340 COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	11	5.	5.318	11.	2.5	10.014	3.164	2.5	2.5	7.	10.8
00400 PH (STANDARD UNITS)	07/29/91-12/07/98	11	8.2	8.336	8.7	8.1	0.041	0.201	8.12	8.2	8.5	8.68
00400 CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	11	8.2	8.298	8.7	8.1	0.042	0.205	8.12	8.2	8.5	8.68
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	11	0.006	0.005	0.008	0.002	0.	0.002	0.002	0.003	0.006	0.008
00403 PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	11	6.9	6.855	7.6	6.2	0.209	0.457	6.24	6.4	7.3	7.56
00403 CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	11	6.9	6.666	7.6	6.2	0.248	0.498	6.24	6.4	7.3	7.56
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	11	0.126	0.216	0.631	0.025	0.037	0.193	0.028	0.05	0.398	0.584
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	11	58.	44.727	81.	9.	757.618	27.525	9.6	13.	69.	79.2
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	11 ##	1.5	1.955	5.	1.5	1.223	1.106	1.5	1.5	1.5	4.6
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	11 ##	1.5	1.455	1.5	1.	0.023	0.151	1.1	1.5	1.5	1.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	11 ##	1.5	1.727	4.	1.5	0.568	0.754	1.5	1.5	1.5	3.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	11 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	11 ##	0.005	0.007	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.018
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	11	0.2	0.215	0.37	0.12	0.007	0.083	0.122	0.15	0.29	0.36
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	11	0.1	0.105	0.2	0.05	0.003	0.052	0.05	0.05	0.1	0.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	11 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	11	61.	50.909	88.	16.	776.091	27.858	16.2	19.	75.	86.4
00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	11	1.	1.6	6.	0.8	2.312	1.521	0.8	1.	2.	5.2
00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	11	7.	7.273	12.	6.	2.618	1.618	6.	7.	7.	11.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	11	100.	268.182	1500.	50.	183136.364	427.944	50.	50.	300.	1280.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	11	2.	2.112	3.176	1.699	0.252	0.502	1.699	1.699	2.477	3.061
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			129.291								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	11	0.01	0.01	0.02	0.005	0.	0.004	0.005	0.01	0.01	0.018

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	11	13.5	12.445	19.5	0.	42.133	6.491	1.	5.2	18.	19.2
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	12	1.1	1.858	7.2	0.3	3.624	1.904	0.36	0.8	2.7	5.97
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	12	77.5	99.333	187.	55.	2129.333	46.145	55.6	64.75	148.25	179.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	11	10.3	10.582	14.6	8.6	3.896	1.974	8.66	9.	12.1	14.28
00310	BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	12 ##	0.5	0.833	1.9	0.5	0.226	0.475	0.5	0.5	1.075	1.78
00340	COD, 25N K2CR2O7 MG/L	07/29/91-12/07/98	12	5.5	6.125	12.	2.5	14.369	3.791	2.5	2.5	9.5	12.
00400	PH (STANDARD UNITS)	07/29/91-12/07/98	11	8.3	8.409	9.2	7.7	0.169	0.411	7.78	8.2	8.6	9.16
00400	CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	11	8.3	8.254	9.2	7.7	0.196	0.442	7.78	8.2	8.6	9.16
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	11	0.005	0.006	0.02	0.001	0.	0.005	0.001	0.003	0.006	0.018
00403	PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	12	7.	7.058	7.7	6.4	0.179	0.423	6.46	6.725	7.45	7.7
00403	CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	12	6.989	6.892	7.7	6.4	0.209	0.457	6.46	6.725	7.45	7.7
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	12	0.103	0.128	0.398	0.02	0.013	0.112	0.02	0.036	0.189	0.354
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	12	27.5	38.417	78.	18.	500.265	22.367	18.3	20.	62.75	76.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	12 ##	1.5	1.708	4.	1.5	0.521	0.722	1.5	1.5	1.5	3.25
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	12 ##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	12 ##	1.5	1.625	3.	1.5	0.188	0.433	1.5	1.5	1.5	2.55
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	12 ##	0.005	0.009	0.03	0.005	0.	0.008	0.005	0.005	0.009	0.027
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	12	0.115	0.129	0.29	0.06	0.004	0.065	0.063	0.075	0.14	0.266
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	12 ##	0.075	0.083	0.2	0.05	0.002	0.044	0.05	0.05	0.1	0.17
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	12 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	12	38.	45.5	86.	23.	513.364	22.658	23.	26.5	69.	83.6
00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	12	1.	1.792	10.	0.5	6.794	2.606	0.65	1.	1.	7.6
00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	12	7.	7.083	12.	6.	2.811	1.676	6.	6.	7.	10.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	12	150.	587.5	4600.	50.	1660965.909	1288.785	50.	50.	450.	3490.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	12	2.151	2.241	3.663	1.699	0.394	0.627	1.699	1.699	2.644	3.45
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			174.114								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	12	0.01	0.016	0.05	0.005	0.	0.013	0.005	0.01	0.02	0.044

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	12	13.3	12.017	19.1	1.3	41.334	6.429	2.41	6.7	18.725	19.1
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	12	2.8	2.567	4.9	0.2	1.601	1.265	0.5	1.475	3.325	4.54

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	12	67.5	69.333	124.	41.	559.697	23.658	42.2	48.5	85.75	112.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	12	10.25	10.6	13.7	8.4	3.235	1.798	8.43	8.925	12.075	13.37
00310	BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	12###	0.5	0.667	2.	0.5	0.197	0.444	0.5	0.5	0.5	1.7
00340	COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	12###	3.75	5.167	12.	2.5	11.288	3.36	2.5	2.5	7.75	11.4
00400	PH (STANDARD UNITS)	07/29/91-12/07/98	12	8.1	8.033	8.8	7.2	0.168	0.41	7.35	7.8	8.275	8.68
00400	CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	12	8.089	7.848	8.8	7.2	0.205	0.453	7.35	7.8	8.275	8.68
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	12	0.008	0.014	0.063	0.002	0.	0.016	0.002	0.005	0.016	0.05
00403	PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	12	7.	7.	7.5	6.4	0.098	0.313	6.49	6.725	7.2	7.47
00403	CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	12	7.	6.894	7.5	6.4	0.111	0.332	6.49	6.725	7.2	7.47
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	12	0.1	0.128	0.398	0.032	0.01	0.102	0.034	0.063	0.189	0.339
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	12	22.	24.5	53.	9.	197.909	14.068	9.3	12.	32.	50.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	12###	1.5	2.25	6.	1.5	1.841	1.357	1.5	1.5	3.	5.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	12###	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	12###	1.5	1.792	5.	1.5	1.021	1.01	1.5	1.5	1.5	3.95
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	12###	0.02	0.019	0.02	0.01	0.	0.003	0.013	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	12###	0.005	0.01	0.03	0.005	0.	0.01	0.005	0.005	0.009	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	12	0.205	0.204	0.37	0.06	0.006	0.08	0.081	0.138	0.253	0.343
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	12###	0.075	0.108	0.3	0.05	0.007	0.082	0.05	0.05	0.175	0.27
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	12###	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	12	29.5	31.5	56.	13.	137.909	11.743	14.8	23.	40.75	51.8
00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	12###	2.5	2.167	2.5	0.5	0.47	0.685	0.65	2.125	2.5	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	12	7.	6.292	7.	2.5	1.657	1.287	3.55	6.	7.	7.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	12###	75.	325.	2200.	50.	393409.091	627.223	50.	50.	200.	1780.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	12###	1.849	2.087	3.342	1.699	0.296	0.544	1.699	1.699	2.301	3.211
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			122.119								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	12	0.01	0.015	0.03	0.005	0.	0.008	0.007	0.01	0.02	0.03

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	12	12.85	11.9	23.4	0.	56.976	7.548	0.84	6.05	16.975	23.31
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	12	1.9	2.775	9.2	0.3	6.622	2.573	0.36	0.875	4.55	7.94
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	12	107.	117.833	184.	55.	2497.97	49.98	55.	72.	172.5	181.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	11	12.1	12.3	15.6	10.1	3.854	1.963	10.12	10.3	14.1	15.3
00310	BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	12###	0.5	0.917	4.	0.5	0.992	0.996	0.5	0.5	1.	3.1
00340	COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	12###	2.5	4.375	9.	2.5	5.915	2.432	2.5	2.5	6.75	8.4
00400	PH (STANDARD UNITS)	07/29/91-12/07/98	12	7.85	7.95	8.6	7.5	0.119	0.345	7.53	7.7	8.2	8.54
00400	CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	12	7.847	7.843	8.6	7.5	0.131	0.363	7.53	7.7	8.2	8.54
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	12	0.014	0.014	0.032	0.003	0.	0.009	0.003	0.006	0.02	0.03
00403	PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	12	7.5	7.425	7.9	6.8	0.16	0.4	6.83	7.1	7.875	7.9
00403	CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	12	7.5	7.263	7.9	6.8	0.189	0.435	6.83	7.1	7.875	7.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	12	0.032	0.055	0.158	0.013	0.002	0.048	0.013	0.013	0.079	0.149
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	12	41.5	49.667	83.	15.	758.788	27.546	15.6	23.5	80.5	83.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	12###	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	12###	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	12###	1.5	1.625	3.	1.5	0.188	0.433	1.5	1.5	1.5	2.55
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	12###	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	12###	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	12	0.2	0.228	0.5	0.13	0.011	0.105	0.13	0.153	0.288	0.44
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	12###	0.05	0.071	0.2	0.05	0.002	0.045	0.05	0.05	0.088	0.17
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	12###	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.085
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	12	49.5	55.25	90.	22.	676.205	26.004	22.3	30.5	80.25	89.7
00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	12###	2.5	2.375	2.5	2.	0.051	0.226	2.	2.125	2.5	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	12	7.	7.25	9.	7.	0.386	0.622	7.	7.	7.	8.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	12###	50.	112.5	600.	50.	24147.727	155.395	50.	50.	100.	450.

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	12 ##	1.699	1.889	2.778	1.699	0.099	0.315	1.699	1.699	2.	2.545
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				77.49								
70507 PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	12 ##	0.005	0.009	0.02	0.005	0.	0.006	0.005	0.005	0.01	0.02

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	12	12.75	13.258	23.7	5.4	35.299	5.941	5.82	7.45	19.275	22.74
00076 TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	12	2.05	13.075	129.	0.5	1336.131	36.553	0.53	1.1	5.075	92.16
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	12	145.5	127.75	209.	41.	4950.386	70.359	42.5	51.25	192.5	207.2
00299 OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	12	10.8	10.692	14.2	8.	3.414	1.848	8.12	8.9	12.025	13.69
00310 BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	12 ##	1.	1.333	5.	1.	1.333	1.155	1.	1.	1.	3.8
00340 COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	12	5.5	10.125	66.	2.5	316.188	17.782	2.5	2.5	8.5	48.9
00400 PH (STANDARD UNITS)	07/29/91-12/07/98	12	7.9	7.842	8.3	7.3	0.121	0.348	7.3	7.525	8.175	8.27
00400 CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	12	7.9	7.711	8.3	7.3	0.14	0.374	7.3	7.525	8.175	8.27
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	12	0.013	0.019	0.05	0.005	0.	0.016	0.005	0.007	0.03	0.05
00403 PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	12	6.9	6.967	7.7	6.3	0.277	0.526	6.33	6.45	7.55	7.7
00403 CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	12	6.9	6.73	7.7	6.3	0.338	0.582	6.33	6.45	7.55	7.7
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	12	0.126	0.186	0.501	0.02	0.029	0.17	0.02	0.029	0.361	0.47
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	12	62.5	54.833	96.	9.	1266.152	35.583	9.9	18.	89.25	94.5
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	12 ##	1.5	16.167	171.	1.5	2378.515	48.77	1.5	1.5	3.75	120.9
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	12 ##	1.5	4.542	38.	1.5	111.021	10.537	1.5	1.5	1.5	27.05
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	12 ##	1.5	12.708	133.	1.5	1435.384	37.886	1.5	1.5	2.625	94.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	12 ##	0.02	0.023	0.05	0.02	0.	0.009	0.02	0.02	0.02	0.041
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	12 ##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	12	0.285	0.286	0.51	0.09	0.02	0.14	0.093	0.19	0.428	0.498
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	12	0.1	0.25	1.7	0.05	0.215	0.463	0.05	0.05	0.2	1.28
00665 PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	12 ##	0.05	0.108	0.6	0.05	0.024	0.156	0.05	0.05	0.1	0.45
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	12	66.5	60.	100.	18.	1040.545	32.257	18.9	27.75	91.25	98.5
00940 CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	12 ##	2.5	2.5	2.5	2.5	0.	0.	2.5	2.5	2.5	2.5
00945 SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	12	7.	6.75	8.	6.	0.386	0.622	6.	6.	7.	7.7
31616 FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	12	300.	991.667	8000.	50.	4954924.242	2225.966	50.	125.	675.	5900.
31616 LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	12	2.452	2.503	3.903	1.699	0.372	0.61	1.699	2.075	2.828	3.632
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				318.144								
70507 PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	12	0.01	0.033	0.27	0.005	0.006	0.075	0.005	0.005	0.02	0.198

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	24	19.1	18.612	23.7	10.5	10.987	3.315	13.3	16.925	20.7	23.25
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	25	157.	142.48	209.	55.	1863.677	43.17	71.2	114.5	175.	195.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	22	8.85	9.2	13.6	6.9	1.848	1.359	8.06	8.4	10.025	10.74
00310	BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	25 ##	0.5	0.72	1.	0.5	0.064	0.253	0.5	0.5	1.	1.
00340	COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	25	5.	5.84	15.	2.5	13.786	3.713	2.5	2.5	8.	12.
00400	PH (STANDARD UNITS)	07/29/91-12/07/98	24	8.	7.965	8.5	7.1	0.104	0.322	7.6	7.725	8.2	8.3
00400	CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	24	7.989	7.832	8.5	7.1	0.122	0.349	7.6	7.725	8.2	8.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	24	0.01	0.015	0.079	0.003	0.	0.016	0.005	0.006	0.019	0.026
00403	PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	25	7.5	7.432	8.2	6.4	0.18	0.424	6.9	7.1	7.75	7.94
00403	CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	25	7.5	7.219	8.2	6.4	0.227	0.477	6.9	7.1	7.75	7.94
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	25	0.032	0.06	0.398	0.006	0.006	0.079	0.012	0.018	0.079	0.126
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	25	72.	63.76	96.	19.	466.19	21.591	25.4	50.5	81.5	88.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	25 ##	1.5	2.34	17.	1.5	9.723	3.118	1.5	1.5	1.5	3.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	25 ##	1.5	1.64	5.	1.5	0.49	0.7	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	25 ##	1.5	2.04	12.	1.5	4.478	2.116	1.5	1.5	1.5	3.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	25 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	25 ##	0.005	0.008	0.03	0.005	0.	0.007	0.005	0.005	0.005	0.024
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	25	0.24	0.259	0.51	0.07	0.01	0.098	0.14	0.205	0.31	0.41
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	25	0.1	0.13	0.8	0.05	0.024	0.155	0.05	0.05	0.15	0.24
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	25 ##	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	25	76.	68.32	100.	23.	498.727	22.332	29.8	56.	85.	92.
00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	25	2.	1.92	6.	0.5	1.285	1.134	1.	1.	2.5	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	25	6.	6.54	12.	2.5	2.165	1.471	6.	6.	7.	7.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	25	100.	622.	4600.	50.	1253766.667	1119.717	50.	100.	600.	2640.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	25	2.	2.345	3.663	1.699	0.349	0.59	1.699	2.	2.778	3.413
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	25	2.	2.345	3.663	1.699	0.349	0.59	1.699	2.	2.778	3.413
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-12/07/98	24	0.01	0.014	0.03	0.005	0.	0.008	0.005	0.01	0.02	0.03

** - Less than 9 observations # - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/91-12/07/98	29	5.7	6.038	12.6	0.	12.922	3.595	0.7	3.65	7.7	11.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/29/91-12/07/98	31	72.	87.71	193.	38.	2220.213	47.119	43.4	51.	105.	182.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-12/07/98	29	12.6	12.797	15.7	10.2	2.262	1.504	10.8	11.7	14.1	14.8
00310	BOD, 5 DAY, 20 DEG C MG/L	07/29/91-12/07/98	31 ##	1.	1.197	5.	0.5	1.241	1.114	0.5	0.5	1.1	3.6
00340	COD, .25N K2CR2O7 MG/L	07/29/91-12/07/98	31	3.	7.097	66.	1.	132.24	11.5	2.5	2.5	8.	12.
00400	PH (STANDARD UNITS)	07/29/91-12/07/98	29	8.2	8.179	9.2	7.2	0.3	0.547	7.3	7.75	8.6	9.
00400	CONVERTED PH (STANDARD UNITS)	07/29/91-12/07/98	29	8.2	7.862	9.2	7.2	0.404	0.636	7.3	7.75	8.6	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	29	0.006	0.014	0.063	0.001	0.	0.018	0.001	0.003	0.018	0.05
00403	PH, LAB, STANDARD UNITS SU	07/29/91-12/07/98	31	7.	6.994	8.1	5.9	0.243	0.493	6.32	6.7	7.4	7.58
00403	CONVERTED PH, LAB, STANDARD UNITS	07/29/91-12/07/98	31	7.	6.725	8.1	5.9	0.318	0.564	6.32	6.7	7.4	7.58
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/29/91-12/07/98	31	0.1	0.188	1.259	0.008	0.064	0.252	0.026	0.04	0.2	0.481
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	31	24.	32.645	90.	6.	599.903	24.493	9.2	14.	43.	76.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/29/91-12/07/98	31 ##	1.5	7.161	171.	1.	925.456	30.421	1.5	1.5	1.5	3.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/29/91-12/07/98	31 ##	1.5	2.613	38.	0.	43.212	6.574	1.5	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/29/91-12/07/98	31 ##	1.5	5.887	133.	1.	557.012	23.601	1.5	1.5	1.5	2.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/91-12/07/98	31 ##	0.02	0.023	0.08	0.02	0.	0.012	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	31 ##	0.005	0.005	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.009
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/29/91-12/07/98	31	0.17	0.179	0.5	0.06	0.008	0.09	0.072	0.12	0.21	0.288
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/91-12/07/98	31 ##	0.05	0.131	1.7	0.05	0.086	0.294	0.05	0.05	0.1	0.18
00665	PHOSPHORUS, TOTAL (MG/L AS P)	07/29/91-12/07/98	31 ##	0.05	0.068	0.6	0.05	0.01	0.099	0.05	0.05	0.05	0.05
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/29/91-12/07/98	31	32.	40.903	92.	16.	524.29	22.897	17.2	23.	54.	81.4
00940	CHLORIDE, TOTAL IN WATER MG/L	07/29/91-12/07/98	31	1.	1.89	10.	0.5	2.863	1.692	0.8	1.	2.5	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	07/29/91-12/07/98	31	7.	7.161	12.	5.	1.273	1.128	6.	7.	7.	8.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/29/91-12/07/98	31 ##	50.	417.742	8000.	50.	2052758.065	1432.745	50.	50.	200.	460.

** - Less than 9 observations # - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	31 ##	1.699	2.046	3.903	1.699	0.266	0.515	1.699	1.699	2.301	2.655
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			111.132								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	29	0.01	0.018	0.27	0.005	0.002	0.049	0.005	0.005	0.01	0.02

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0450

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	17	13.4	13.294	19.	7.2	12.291	3.506	8.	10.7	15.9	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	17	68.	75.	134.	41.	800.25	28.289	46.6	51.	97.5	127.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	16	10.3	10.475	12.5	9.	1.191	1.091	9.	9.65	11.175	12.29
00310	BOD, 5 DAY, 20 DEG C MG/L	17 ##	0.5	0.729	1.9	0.5	0.145	0.38	0.5	0.5	1.	1.18
00340	COD, .25N K2CR2O7 MG/L	17	6.	5.882	15.	2.5	14.36	3.789	2.5	2.5	8.5	11.
00400	PH (STANDARD UNITS)	17	8.2	8.065	9.4	6.9	0.274	0.523	7.38	7.7	8.3	8.6
00400	CONVERTED PH (STANDARD UNITS)	17	8.2	7.761	9.4	6.9	0.372	0.61	7.38	7.7	8.3	8.6
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	17	0.006	0.017	0.126	0.	0.001	0.029	0.003	0.005	0.02	0.05
00403	PH, LAB, STANDARD UNITS SU	17	6.8	6.859	7.5	6.4	0.108	0.328	6.4	6.6	7.1	7.42
00403	CONVERTED PH, LAB, STANDARD UNITS	17	6.8	6.757	7.5	6.4	0.119	0.344	6.4	6.6	7.1	7.42
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	17	0.158	0.175	0.398	0.032	0.013	0.113	0.038	0.079	0.251	0.398
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	17	25.	27.176	58.	9.	230.154	15.171	11.4	14.5	40.	56.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	17 ##	1.5	2.118	5.	1.5	1.173	1.083	1.5	1.5	3.	4.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	17 ##	1.5	1.471	1.5	1.	0.015	0.121	1.4	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	17 ##	1.5	1.735	4.	1.5	0.472	0.687	1.5	1.5	1.5	3.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	17 ##	0.02	0.019	0.02	0.01	0.	0.002	0.018	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	17 ##	0.005	0.008	0.03	0.005	0.	0.007	0.005	0.005	0.008	0.022
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	17	0.14	0.173	0.46	0.06	0.011	0.104	0.084	0.115	0.18	0.388
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	17	0.1	0.115	0.3	0.05	0.006	0.077	0.05	0.05	0.2	0.22
00665	PHOSPHORUS, TOTAL (MG/L AS P)	17 ##	0.05	0.062	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	17	32.	33.353	61.	13.	197.368	14.049	17.8	22.	44.	60.2
00940	CHLORIDE, TOTAL IN WATER MG/L	17	2.	1.794	2.5	1.	0.502	0.708	1.	1.	2.5	2.5
00945	SULFATE, TOTAL (MG/L AS SO4)	17	7.	6.765	8.	6.	0.316	0.562	6.	6.	7.	7.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	17 ##	50.	220.588	900.	50.	67830.882	260.444	50.	50.	400.	740.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	17 ##	1.699	2.081	2.954	1.699	0.228	0.477	1.699	1.699	2.602	2.867
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			120.444								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	16	0.01	0.014	0.05	0.005	0.	0.012	0.005	0.006	0.02	0.036

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0451

NPS Station ID: SHEN0451
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.554670/ -78.352226

Depth of Water: 0
 Elevation: 1450
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_W004
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION W004 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 11.23 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0451

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	12.25	12.25	20.	4.5	120.125	10.96	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	27.	27.	30.	24.	18.	4.243	**	**	**	**
00400 PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.105	7.105	7.21	7.	0.022	0.148	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.092	7.092	7.21	7.	0.022	0.15	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.081	0.081	0.1	0.062	0.001	0.027	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	26.	26.	29.	23.	18.	4.243	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	122.4	122.4	151.1	93.7	1647.38	40.588	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.15	2.15	2.5	1.8	0.245	0.495	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.	1.	1.1	0.9	0.02	0.141	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.125	1.125	1.2	1.05	0.011	0.106	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.19	0.19	0.21	0.17	0.001	0.028	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	2.25	2.25	2.7	1.8	0.405	0.636	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	8.1	8.1	9.	7.2	1.62	1.273	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.5	1.5	1.8	1.2	0.18	0.424	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.08	0.08	0.1	0.06	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0451

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0452

NPS Station ID: SHEN0452
 Location: ROUTE 707 (RAPPAHANNOCK COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANNOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.555281/ -78.255838

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-HUE007.31
 Within Park Boundary: No

Date Created: 05/01/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANNOCK REGION: 3 NORTHERN
 RIVER: HUGHES RIVER SECTION: 04 TOPO MAP #: 0009 TOPO MAP NAME: OLD RAG MTN, VA

Parameter Inventory for Station: SHEN0452

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300 OXYGEN, DISSOLVED MG/L	10/23/75-10/23/75	1	9.9	9.9	9.9	9.9	0.	0.	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	10/23/75-10/23/75	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	10/23/75-10/23/75	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	10/23/75-10/23/75	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	10/23/75-10/23/75	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/23/75-10/23/75	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	10/23/75-10/23/75	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	10/23/75-10/23/75	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	10/23/75-10/23/75	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/23/75-10/23/75	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/23/75-10/23/75	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	10/23/75-10/23/75	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/23/75-10/23/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	10/23/75-10/23/75	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	10/23/75-10/23/75	1##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/23/75-10/23/75	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	10/23/75-10/23/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/23/75-10/23/75	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	10/23/75-10/23/75	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00940 CHLORIDE, TOTAL IN WATER MG/L	10/23/75-10/23/75	1	2.	2.	2.	2.	0.	0.	**	**	**	**
31616 FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/23/75-10/23/75	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616 LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/23/75-10/23/75	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/23/75-10/23/75	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
	GEOMETRIC MEAN =											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0452

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00				1	0	0.00						
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00				1	0	0.00						
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00				1	0	0.00						
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0453

NPS Station ID: SHEN0453
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.555531/ -78.353059

Depth of Water: 0
 Elevation: 1490
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_W003
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION W003 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.87 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0453

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	12.5	12.5	20.	5.	112.5	10.607	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	27.	27.	30.	24.	18.	4.243	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.105	7.105	7.28	6.93	0.061	0.247	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.071	7.071	7.28	6.93	0.064	0.252	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.085	0.085	0.117	0.052	0.002	0.046	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	26.5	26.5	30.	23.	24.5	4.95	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	149.45	149.45	196.1	102.8	4352.445	65.973	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.25	2.25	2.6	1.9	0.245	0.495	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.05	1.05	1.2	0.9	0.045	0.212	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.07	1.07	1.15	0.99	0.013	0.113	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.17	0.17	0.2	0.14	0.002	0.042	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	1.9	1.9	2.3	1.5	0.32	0.566	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.8	7.8	8.7	6.9	1.62	1.273	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.55	1.55	1.9	1.2	0.245	0.495	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.085	0.085	0.12	0.05	0.002	0.049	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0453

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0454

NPS Station ID: SHEN0454
 Location: WHITEOAK CANYON (ROBINSON RIVER)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.555615/ -78.353615

Depth of Water: 0
 Elevation: 1540
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA01 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON (ROBINSON RIVER) INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.85 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0454

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER (MG/L)	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0454

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0455

NPS Station ID: SHEN0455
 Location: NEGRO RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.555809/ -78.352198

Depth of Water: 0
 Elevation: 1111
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION AB01 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NEGRO RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.43 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0455

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/89-04/25/89	1	6.95	6.95	6.95	6.95	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/89-04/25/89	1	6.95	6.95	6.95	6.95	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/89-04/25/89	1	0.112	0.112	0.112	0.112	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/89-04/25/89	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/89-04/25/89	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/25/89-04/25/89	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/89-04/25/89	1	1.17	1.17	1.17	1.17	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/89-04/25/89	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/89-04/25/89	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/89-04/25/89	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/89-04/25/89	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0455

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0456

NPS Station ID: SHEN0456 LAT/LON: 38.555948/ -78.352365
 Location: NEGRO RUN (WHITEOAK CANYON RUN TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 1485
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO05 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.33 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0456

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	12.25	12.25	19.	5.5	91.125	9.546	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	25.	25.	29.	21.	32.	5.657	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.96	6.96	7.05	6.87	0.016	0.127	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.951	6.951	7.05	6.87	0.016	0.128	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.112	0.112	0.135	0.089	0.001	0.032	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	24.	24.	28.	20.	32.	5.657	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	160.2	160.2	219.2	101.2	6962.	83.439	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	1.85	1.85	2.1	1.6	0.125	0.354	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	0.9	0.9	1.	0.8	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.315	1.315	1.4	1.23	0.014	0.12	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.23	0.23	0.25	0.21	0.001	0.028	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	3.1	3.1	3.5	2.7	0.32	0.566	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	9.	9.	10.	8.	2.	1.414	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.15	1.15	1.4	0.9	0.125	0.354	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.115	0.115	0.14	0.09	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0456

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	1	0.50	1	0	0.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0457

NPS Station ID: SHEN0457 LAT/LON: 38.556392/ -78.431948
 Location: LITTLE HAWKSBILL CREEK TRIB NEAR IDA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005009100.00 RF3 Mile Point: 1.26
 Description:

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01629920
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 12.30
 Distance from RF3: 0.05

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0457

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/21/81-06/24/82	6	14.25	11.25	15.5	1.	32.475	5.699	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/21/81-06/24/82	6	0.35	0.743	3.	0.07	1.262	1.123	**	**	**	**
00400	PH (STANDARD UNITS)	08/21/81-06/24/82	6	6.75	6.617	6.8	6.2	0.066	0.256	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/21/81-06/24/82	6	6.747	6.547	6.8	6.2	0.072	0.267	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/21/81-06/24/82	6	0.179	0.284	0.631	0.158	0.038	0.194	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/21/81-06/24/82	6	6.8	6.733	6.9	6.5	0.023	0.151	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/21/81-06/24/82	6	6.8	6.71	6.9	6.5	0.023	0.153	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/21/81-06/24/82	6	0.158	0.195	0.316	0.126	0.005	0.073	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/21/81-06/24/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/21/81-06/24/82	6	0.2	0.183	0.3	0.005	0.014	0.117	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/21/81-06/24/82	6	7.	6.5	8.	2.	5.1	2.258	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/21/81-06/24/82	6	1.95	1.983	2.1	1.9	0.01	0.098	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/21/81-06/24/82	6	0.6	0.617	0.7	0.6	0.002	0.041	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/21/81-06/24/82	6	1.6	1.633	1.9	1.4	0.051	0.225	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/21/81-06/24/82	6	0.3	0.267	0.3	0.2	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/21/81-06/24/82	6	31.	31.333	36.	28.	8.667	2.944	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/21/81-06/24/82	6	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/21/81-06/24/82	6	0.9	0.917	1.	0.8	0.006	0.075	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/21/81-06/24/82	6	4.	4.	5.	3.	0.4	0.632	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/21/81-06/24/82	6	10.45	10.783	13.8	8.5	4.118	2.029	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-06/24/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0457

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	2	0.33	2	1	0.50	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	0	0.00	2	1	0.50	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0457

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0458

NPS Station ID: SHEN0458
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.560531/ -78.359865

Depth of Water: 0
 Elevation: 2260
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO20
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO20 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.89 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0458

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	12.25	12.25	19.	5.5	91.125	9.546	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	27.	27.	30.	24.	18.	4.243	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.225	7.225	7.37	7.08	0.042	0.205	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.201	7.201	7.37	7.08	0.043	0.208	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.063	0.063	0.083	0.043	0.001	0.029	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	26.	26.	29.	23.	18.	4.243	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	111.3	111.3	147.2	75.4	2577.62	50.77	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.3	2.3	2.7	1.9	0.32	0.566	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.	1.	1.1	0.9	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.04	1.04	1.11	0.97	0.01	0.099	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.165	0.165	0.18	0.15	0.	0.021	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	1.8	1.8	2.2	1.4	0.32	0.566	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.6	7.6	8.5	6.7	1.62	1.273	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.5	1.5	1.9	1.1	0.32	0.566	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.06	0.06	0.08	0.04	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0458

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0459

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0460

NPS Station ID: SHEN0460
 Location: Whiteoak Canyon Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:

LAT/LON: 38.563809/ -78.364449

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_LTEM_2L300
 Within Park Boundary: Yes

Date Created: 10/13/99

RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak

Parameter Inventory for Station: SHEN0460

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/89-05/28/97	32	12.2	11.938	17.	6.	9.74	3.121	7.72	10.025	14.75	16.35
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/28/95-05/28/97	2	27.	27.	27.	27.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/31/89-05/28/97	29	10.	10.09	11.9	8.5	0.912	0.955	8.7	9.2	11.	11.
00406 PH, FIELD, STANDARD UNITS SU	09/03/91-05/28/97	9	7.08	6.978	7.13	6.77	0.021	0.147	6.77	6.825	7.1	7.13
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/03/91-05/28/97	9	7.08	6.955	7.13	6.77	0.022	0.149	6.77	6.825	7.1	7.13
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/03/91-05/28/97	9	0.083	0.111	0.17	0.074	0.001	0.038	0.074	0.079	0.15	0.17
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/28/95-05/28/97	2	17.	17.	17.	17.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0460

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	29	0	0.00	14	0	0.00	15	0	0.00	15	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	9	0	0.00	6	0	0.00	3	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	9	0	0.00	6	0	0.00	3	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0460

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/89-05/28/97	17	14.	14.253	17.	11.9	3.155	1.776	12.14	12.6	15.75	17.
00300 OXYGEN, DISSOLVED MG/L	05/31/89-05/28/97	14	9.25	9.571	11.	8.5	0.867	0.931	8.55	8.7	10.25	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0460

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/31/89-05/28/97	15	10.	9.313	12.6	6.	4.074	2.018	6.3	8.	11.	12.24
00300 OXYGEN, DISSOLVED MG/L	05/31/89-05/28/97	15	10.8	10.573	11.9	9.4	0.501	0.708	9.64	10.	11.	11.66

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0461

NPS Station ID: SHEN0461
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.565948/ -78.365670

Depth of Water: 0
 Elevation: 2700
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO21
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO21 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.45 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0461

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	11.	11.	17.	5.	72.	8.485	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	26.5	26.5	30.	23.	24.5	4.95	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.185	7.185	7.35	7.02	0.054	0.233	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.154	7.154	7.35	7.02	0.056	0.237	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.07	0.07	0.095	0.045	0.001	0.036	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	25.5	25.5	29.	22.	24.5	4.95	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	90.4	90.4	105.4	75.4	450.	21.213	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.3	2.3	2.6	2.	0.18	0.424	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.	1.	1.1	0.9	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.065	1.065	1.13	1.	0.008	0.092	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.165	0.165	0.19	0.14	0.001	0.035	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	1.6	1.6	2.	1.2	0.32	0.566	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.65	7.65	8.5	6.8	1.445	1.202	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.5	1.5	1.9	1.1	0.32	0.566	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0461

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0462

NPS Station ID: SHEN0462
 Location: OLD RAG RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103027800.00

LAT/LON: 38.566115/ -78.317782

Depth of Water: 0
 Elevation: 439

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.69

Agency: 12NSS
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 2B047920L /SI02B047920L
 Within Park Boundary: Yes

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 32.50
 Distance from RF3: 0.86

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS, AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS. EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988) WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN; (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0462

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/86-04/11/86	2	8.85	8.85	10.2	7.5	3.645	1.909	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/31/86-04/11/86	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/31/86-04/11/86	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/86-04/11/86	2	11.5	11.5	12.	11.	0.5	0.707	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/31/86-04/11/86	2	10.45	10.45	10.9	10.	0.405	0.636	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/31/86-04/11/86	2	6.75	6.75	6.8	6.7	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/31/86-04/11/86	2	6.747	6.747	6.8	6.7	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/86-04/11/86	2	0.179	0.179	0.2	0.158	0.001	0.029	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/86-04/11/86	2	61.1	61.1	62.1	60.1	2.	1.414	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/31/86-04/11/86	2	3.	3.	3.	3.	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/31/86-04/11/86	2	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/31/86-04/11/86	2	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/31/86-04/11/86	2	0.85	0.85	0.9	0.8	0.005	0.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/86-04/11/86	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/86-04/11/86	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/86-04/11/86	2	1.345	1.345	1.35	1.34	0.	0.007	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/86-04/11/86	2	0.375	0.375	0.38	0.37	0.	0.007	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/86-04/11/86	2	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/86-04/11/86	2	1.75	1.75	1.9	1.6	0.045	0.212	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0462

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/31/86-04/11/86	2	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/86-04/11/86	2	9.45	9.45	9.7	9.2	0.125	0.354	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/31/86-04/11/86	2	10.	10.	12.	8.	8.	2.828	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/31/86-04/11/86	2	31.5	31.5	41.	22.	180.5	13.435	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/86-04/11/86	2	0.06	0.06	0.08	0.04	0.001	0.028	**	**	**	**
71885	IRON (UG/L AS FE)	03/31/86-04/11/86	2	3.995	3.995	7.99	0.	31.92	5.65	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/31/86-04/11/86	2	1440.	1440.	1440.	1440.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/31/86-04/11/86	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
83509	STREAM, WIDTH METER	03/31/86-04/11/86	2	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0462

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00						2	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0463

NPS Station ID: SHEN0463
 Location: BROKENBACK RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.566642/ -78.317420

Depth of Water: 0
 Elevation: 1490
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB06 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.42 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0463

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	12.5	11.2	18.5	3.	51.7	7.19	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	18.	16.8	19.	14.	4.7	2.168	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.74	6.612	6.89	6.31	0.072	0.268	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.74	6.546	6.89	6.31	0.077	0.278	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.182	0.285	0.49	0.129	0.03	0.174	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	18.	16.6	18.	14.	3.8	1.949	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	81.	77.26	105.	49.4	673.588	25.954	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.1	0.98	1.1	0.8	0.027	0.164	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.4	0.36	0.4	0.3	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.58	1.47	1.62	1.23	0.034	0.185	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.53	0.474	0.56	0.35	0.01	0.101	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.9	0.86	0.9	0.8	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	1.5	1.5	1.8	1.2	0.045	0.212	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	11.3	10.44	11.8	8.6	2.423	1.557	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.01	0.184	0.6	0.004	0.07	0.265	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.18	0.286	0.49	0.13	0.03	0.174	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0463

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00							
	Other-Lo Lim.	6.5	5	2	0.40	3	2	0.67	2	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	3	3	1.00	2	2	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	3	0	0.00	2	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	3	0	0.00	2	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	3	0	0.00	2	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0464

NPS Station ID: SHEN0464
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.567365/ -78.317616

Depth of Water: 0
 Elevation: 1440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB07 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.88 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0464

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	13.	11.4	18.	3.	44.3	6.656	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	20.	19.4	21.	17.	2.3	1.517	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.75	6.636	6.76	6.3	0.039	0.197	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.75	6.595	6.76	6.3	0.041	0.202	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.178	0.254	0.501	0.174	0.02	0.141	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	20.	18.8	20.	16.	3.2	1.789	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	92.2	80.	106.9	47.8	728.585	26.992	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.4	1.32	1.5	1.1	0.027	0.164	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.5	0.5	0.6	0.4	0.005	0.071	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.3	1.274	1.38	1.13	0.01	0.1	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.34	0.33	0.38	0.27	0.002	0.048	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.8	0.78	0.8	0.7	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	2.	2.06	2.3	1.8	0.038	0.195	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	9.3	8.7	9.7	7.5	1.125	1.061	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.4	0.701	1.6	0.005	0.498	0.706	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.18	0.258	0.51	0.18	0.021	0.143	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0464

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00							
	Other-Lo Lim.	6.5	5	1	0.20	3	1	0.33	2	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	5	5	1.00	3	3	1.00	2	2	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	5	0	0.00	3	0	0.00	2	0	0.00							
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	5	0	0.00	3	0	0.00	2	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0465

NPS Station ID: SHEN0465
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.568087/ -78.315920

Depth of Water: 0
 Elevation: 1370
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB05 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.87 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0465

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	4	15.25	12.25	18.5	0.	72.417	8.51	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	20.	18.6	20.	16.	3.8	1.949	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.66	6.616	6.93	6.32	0.06	0.244	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.66	6.563	6.93	6.32	0.063	0.251	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.219	0.274	0.479	0.117	0.022	0.148	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	19.	18.2	20.	15.	4.7	2.168	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	102.9	84.06	107.5	49.2	825.983	28.74	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.4	1.26	1.4	1.	0.038	0.195	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.5	0.46	0.5	0.4	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.35	1.34	1.47	1.18	0.014	0.118	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.39	0.376	0.44	0.31	0.003	0.059	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.8	0.82	0.9	0.8	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	1.9	1.92	2.1	1.7	0.022	0.148	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	9.8	9.2	10.3	8.	1.145	1.07	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.2	0.486	1.2	0.03	0.28	0.529	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.22	0.276	0.48	0.12	0.022	0.149	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0465

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00						
	Other-Lo Lim.	6.5	5	2	0.40	3	2	0.67	2	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	5	5	1.00	3	3	1.00	2	2	1.00						
	Fresh Acute	860.	5	0	0.00	3	0	0.00	2	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	5	0	0.00	3	0	0.00	2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0466

NPS Station ID: SHEN0466
 Location: BROKENBACK RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.569642/ -78.306948

Depth of Water: 0
 Elevation: 1160
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB02 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.78 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0466

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	13.	11.6	18.	3.	41.8	6.465	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	19.	18.4	20.	16.	2.3	1.517	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.56	6.51	6.65	6.29	0.021	0.146	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.56	6.489	6.65	6.29	0.022	0.148	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.275	0.324	0.513	0.224	0.014	0.118	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	18.	18.	20.	16.	2.5	1.581	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	66.9	61.12	79.4	36.2	394.297	19.857	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.2	1.22	1.4	1.1	0.017	0.13	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.4	0.38	0.4	0.3	0.002	0.045	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.36	1.324	1.45	1.13	0.019	0.137	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.3	0.3	0.34	0.25	0.001	0.037	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.7	0.74	0.8	0.7	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	3.2	3.16	3.5	2.8	0.123	0.351	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	9.1	8.56	9.4	7.4	0.873	0.934	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.3	0.244	0.4	0.02	0.021	0.144	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.28	0.33	0.52	0.23	0.014	0.119	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0466

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00						
	Other-Lo Lim.	6.5	5	2	0.40	3	2	0.67	2	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	5	5	1.00	3	3	1.00	2	2	1.00						
	Fresh Acute	860.	5	0	0.00	3	0	0.00	2	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	5	0	0.00	3	0	0.00	2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0467

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0468

NPS Station ID: SHEN0468
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.570309/ -78.303615

 Depth of Water: 0
 Elevation: 1080
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA04 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.84 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0468

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.78	6.78	6.78	6.78	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.78	6.78	6.78	6.78	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.166	0.166	0.166	0.166	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.31	0.31	0.31	0.31	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0468

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0469

NPS Station ID: SHEN0469
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.570365/ -78.304559

Depth of Water: 0
 Elevation: 1100
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB01 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.86 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0469

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	6	9.	10.083	19.	3.	52.342	7.235	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	6	18.5	17.833	20.	15.	6.167	2.483	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	6	6.705	6.655	6.94	6.3	0.05	0.224	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	6	6.705	6.604	6.94	6.3	0.053	0.231	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	6	0.197	0.249	0.501	0.115	0.02	0.14	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	6	18.	17.667	20.	15.	5.467	2.338	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	6	84.55	84.35	116.2	52.8	1022.155	31.971	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	6	1.2	1.2	1.4	1.	0.048	0.219	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	6	0.45	0.467	0.6	0.4	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	6	1.36	1.352	1.52	1.19	0.021	0.146	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	6	0.385	0.392	0.48	0.31	0.007	0.084	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	6	0.8	0.817	0.9	0.8	0.002	0.041	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	6	1.8	1.85	2.2	1.5	0.055	0.235	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	6	9.25	9.317	10.6	8.2	1.342	1.158	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	6	0.4	0.487	1.1	0.01	0.258	0.508	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	6	0.2	0.253	0.51	0.12	0.02	0.142	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0469

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	6	0	0.00	3	0	0.00	3	0	0.00							
	Other-Lo Lim.	6.5	6	2	0.33	3	2	0.67	3	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	6	6	1.00	3	3	1.00	3	3	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	6	0	0.00	3	0	0.00	3	0	0.00							
	Drinking Water	250.	6	0	0.00	3	0	0.00	3	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	6	0	0.00	3	0	0.00	3	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	6	0	0.00	3	0	0.00	3	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0470

NPS Station ID: SHEN0470
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.570420/ -78.313503

Depth of Water: 0
 Elevation: 1320
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB04 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.14 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0470

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	10.	10.8	19.	2.	54.575	7.387	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	20.	18.8	20.	16.	3.2	1.789	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.7	6.634	6.91	6.33	0.055	0.235	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.7	6.583	6.91	6.33	0.059	0.242	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.2	0.261	0.468	0.123	0.02	0.142	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	19.	18.2	20.	15.	4.7	2.168	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	94.	83.74	111.2	48.7	937.398	30.617	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.4	1.28	1.5	1.	0.047	0.217	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.5	0.46	0.5	0.4	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.38	1.348	1.46	1.17	0.016	0.126	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.4	0.388	0.45	0.31	0.004	0.066	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.8	0.82	0.9	0.8	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	1.9	1.92	2.1	1.7	0.032	0.179	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	10.	9.28	10.3	8.	1.277	1.13	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.2	0.443	1.1	0.005	0.27	0.519	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.2	0.262	0.47	0.12	0.021	0.144	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0470

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00							
	Other-Lo Lim.	6.5	5	2	0.40	3	2	0.67	2	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	5	5	1.00	3	3	1.00	2	2	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	5	0	0.00	3	0	0.00	2	0	0.00							
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	5	0	0.00	3	0	0.00	2	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0471

NPS Station ID: SHEN0471
 Location: ROUTE 600 (MADISON COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.570559/ -78.303337

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 3-BKK000.60
 Within Park Boundary: Yes

Date Created: 05/01/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANOCK REGION: 3 NORTHERN
 RIVER: BROCKENBACK RUN SECTION: 04 TOPO MAP #: 0009 TOPO MAP NAME: OLD RAG MTN, VA

Parameter Inventory for Station: SHEN0471

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	10/23/75-10/23/75	1	10.3	10.3	10.3	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	10/23/75-10/23/75	1	1.	1.	1.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	10/23/75-10/23/75	1##	2.	2.	2.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/23/75-10/23/75	1	7.	7.	7.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/23/75-10/23/75	1	7.	7.	7.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/23/75-10/23/75	1	0.1	0.1	0.1	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	10/23/75-10/23/75	1	43.	43.	43.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/23/75-10/23/75	1	26.	26.	26.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	10/23/75-10/23/75	1	17.	17.	17.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10/23/75-10/23/75	1	2.	2.	2.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10/23/75-10/23/75	1	2.	2.	2.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10/23/75-10/23/75	1	0.	0.	0.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10/23/75-10/23/75	1##	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10/23/75-10/23/75	1##	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10/23/75-10/23/75	1##	0.025	0.025	0.025	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10/23/75-10/23/75	1##	0.05	0.05	0.05	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10/23/75-10/23/75	1##	0.05	0.05	0.05	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/23/75-10/23/75	1##	0.005	0.005	0.005	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10/23/75-10/23/75	1	1.	1.	1.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	10/23/75-10/23/75	1	1.	1.	1.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/23/75-10/23/75	1##	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/23/75-10/23/75	1##	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10/23/75-10/23/75		GEOMETRIC MEAN =	50.							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0471

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00				1	0	0.00						
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00				1	0	0.00						
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00				1	0	0.00						
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0472

NPS Station ID: SHEN0472
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.570587/ -78.301476

Depth of Water: 0
 Elevation: 1080
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_VT58
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT58 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.86 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0472

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-07/30/97	29	10.	10.8	20.	2.	34.547	5.878	2.5	6.8	18.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/12/87-07/30/97	42	18.	18.714	24.	15.	4.794	2.19	16.3	17.	20.	22.7
00400	PH (STANDARD UNITS)	08/12/87-07/30/97	42	6.715	6.641	6.97	6.08	0.058	0.24	6.259	6.413	6.833	6.894
00400	CONVERTED PH (STANDARD UNITS)	08/12/87-07/30/97	42	6.715	6.57	6.97	6.08	0.063	0.25	6.259	6.412	6.833	6.894
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/87-07/30/97	42	0.193	0.269	0.832	0.107	0.03	0.172	0.128	0.147	0.387	0.551
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/12/87-07/30/97	42	18.	18.286	24.	15.	4.892	2.212	16.	17.	20.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/12/87-07/30/97	42	81.5	87.145	189.4	44.4	877.545	29.623	49.54	68.725	105.7	122.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/87-07/30/97	42	1.2	1.221	1.6	0.9	0.035	0.188	1.	1.1	1.4	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/87-07/30/97	42	0.4	0.457	0.6	0.3	0.006	0.077	0.4	0.4	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/87-07/30/97	42	1.375	1.384	1.79	1.14	0.019	0.14	1.203	1.315	1.443	1.581
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/87-07/30/97	42	0.39	0.415	0.65	0.28	0.007	0.085	0.323	0.358	0.48	0.521
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/12/87-07/30/97	42	0.8	0.838	1.	0.7	0.004	0.066	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/12/87-07/30/97	42	2.	2.021	3.1	1.5	0.094	0.307	1.7	1.8	2.2	2.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/87-07/30/97	42	9.05	9.36	11.4	7.9	0.925	0.962	8.23	8.6	10.125	10.87
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	6	11.27	10.954	17.682	4.017	23.844	4.883	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-07/30/97	15	10.76	10.781	15.016	6.22	8.408	2.9	6.851	8.147	13.097	14.707
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-07/30/97	42	0.025	0.261	1.6	0.	0.134	0.366	0.	0.001	0.5	0.84
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-07/30/97	42	0.195	0.272	0.84	0.11	0.03	0.173	0.13	0.15	0.388	0.558

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0472

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	42	0	0.00	11	0	0.00	20	0	0.00	11	0	0.00			
	Other-Lo Lim.	6.5	42	12	0.29	11	4	0.36	20	7	0.35	11	1	0.09			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	42	42	1.00	11	11	1.00	20	20	1.00	11	11	1.00			
	Fresh Acute	860.	42	0	0.00	11	0	0.00	20	0	0.00	11	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	42	0	0.00	11	0	0.00	20	0	0.00	11	0	0.00			
	Drinking Water	250.	42	0	0.00	11	0	0.00	20	0	0.00	11	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	42	0	0.00	11	0	0.00	20	0	0.00	11	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	42	0	0.00	11	0	0.00	20	0	0.00	11	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0472

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	20.	20.455	23.	18.	3.473	1.864	18.	19.	22.	23.
00400	PH (STANDARD UNITS)	11	6.63	6.58	6.95	6.25	0.051	0.225	6.264	6.36	6.77	6.916
00400	CONVERTED PH (STANDARD UNITS)	11	6.63	6.528	6.95	6.25	0.054	0.232	6.264	6.36	6.77	6.916
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.234	0.297	0.562	0.112	0.023	0.15	0.123	0.17	0.437	0.546
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11	20.	20.182	22.	18.	2.164	1.471	18.2	19.	22.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11	86.6	90.173	122.9	67.3	324.766	18.021	68.48	74.7	104.7	120.06
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11	1.4	1.409	1.5	1.3	0.009	0.094	1.3	1.3	1.5	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11	0.5	0.491	0.6	0.3	0.007	0.083	0.32	0.5	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	11	1.42	1.475	1.65	1.34	0.01	0.099	1.35	1.4	1.56	1.638
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11	0.48	0.471	0.53	0.41	0.001	0.036	0.412	0.44	0.49	0.524
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11	0.8	0.782	0.9	0.7	0.004	0.06	0.7	0.7	0.8	0.88
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11	1.9	2.027	3.1	1.5	0.214	0.463	1.5	1.7	2.3	2.96
00955	SILICA, DISSOLVED (MG/L AS SI02)	11	10.4	10.391	11.4	9.2	0.381	0.617	9.34	10.1	10.9	11.36
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11	0.01	0.129	0.4	0.	0.028	0.166	0.	0.	0.3	0.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11	0.24	0.3	0.57	0.11	0.023	0.151	0.122	0.17	0.44	0.552

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0472

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	20	18.	18.5	24.	15.	5.316	2.306	16.	17.	19.75	22.8
00400	PH (STANDARD UNITS)	20	6.7	6.608	6.97	6.08	0.067	0.259	6.222	6.36	6.807	6.876
00400	CONVERTED PH (STANDARD UNITS)	20	6.7	6.528	6.97	6.08	0.074	0.272	6.222	6.36	6.807	6.876
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	20	0.2	0.296	0.832	0.107	0.04	0.201	0.133	0.156	0.438	0.6
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	20	17.	17.95	24.	15.	5.734	2.395	15.1	16.25	19.5	22.7
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	20	90.9	91.47	189.4	44.4	1506.247	38.81	45.47	54.85	116.025	152.48
00915	CALCIUM, DISSOLVED (MG/L AS CA)	20	1.15	1.185	1.6	0.9	0.038	0.195	1.	1.	1.3	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	20	0.4	0.465	0.6	0.4	0.007	0.081	0.4	0.4	0.5	0.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	20	1.33	1.351	1.79	1.14	0.027	0.163	1.182	1.223	1.41	1.663
00935	POTASSIUM, DISSOLVED (MG/L AS K)	20	0.365	0.403	0.65	0.28	0.012	0.109	0.3	0.33	0.475	0.632
00941	CHLORIDE, DISSOLVED IN WATER MG/L	20	0.9	0.875	1.	0.8	0.003	0.055	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	20	2.1	2.07	2.6	1.6	0.067	0.26	1.71	1.9	2.2	2.49
00955	SILICA, DISSOLVED (MG/L AS SI02)	20	8.95	9.155	11.4	7.9	0.833	0.913	8.02	8.6	9.575	10.74
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	20	0.015	0.33	1.6	0.	0.217	0.465	0.	0.002	0.575	0.99
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	20	0.2	0.3	0.84	0.11	0.041	0.202	0.132	0.16	0.44	0.607

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0472

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	17.	17.364	19.	16.	0.655	0.809	16.2	17.	18.	18.8
00400	PH (STANDARD UNITS)	11	6.84	6.763	6.91	6.29	0.035	0.187	6.356	6.64	6.88	6.908
00400	CONVERTED PH (STANDARD UNITS)	11	6.84	6.718	6.91	6.29	0.037	0.193	6.356	6.64	6.88	6.908
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.145	0.192	0.513	0.123	0.013	0.114	0.124	0.132	0.229	0.458
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11	17.	17.	18.	15.	1.	1.	15.2	16.	18.	18.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11	72.8	76.255	113.7	53.6	233.343	15.276	55.96	66.2	81.8	107.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11	1.1	1.1	1.2	1.	0.006	0.077	1.	1.	1.2	1.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11	0.4	0.409	0.5	0.4	0.001	0.03	0.4	0.4	0.4	0.48
00930	SODIUM, DISSOLVED (MG/L AS NA)	11	1.37	1.355	1.45	1.19	0.007	0.085	1.196	1.3	1.42	1.448
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11	0.37	0.38	0.44	0.34	0.001	0.029	0.344	0.36	0.39	0.436
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11	0.8	0.827	0.9	0.8	0.002	0.047	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11	1.9	1.927	2.3	1.7	0.03	0.174	1.72	1.8	2.	2.26
00955	SILICA, DISSOLVED (MG/L AS SI02)	11	8.8	8.7	9.1	8.2	0.096	0.31	8.22	8.3	8.9	9.08

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0472

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-07/30/97	11	0.2	0.267	0.7	0.	0.08	0.284	0.	0.005	0.6	0.68
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-07/30/97	11	0.15	0.194	0.52	0.12	0.013	0.116	0.122	0.13	0.23	0.464

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0473

NPS Station ID: SHEN0473
 Location: Brokenback Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.570587/ -78.301476

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_VTS58
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0473

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-10/29/97	8	12.5	12.125	18.9	3.5	24.999	5.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-10/29/97	8	17.	16.625	19.	11.	6.839	2.615	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/27/95-10/29/97	8	9.9	9.887	12.	8.2	1.438	1.199	**	**	**	**
00301 OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	1	96.5	96.5	96.5	96.5	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/27/95-10/29/97	8	6.71	6.715	6.98	6.47	0.026	0.161	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/27/95-10/29/97	8	6.71	6.689	6.98	6.47	0.027	0.163	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/27/95-10/29/97	8	0.195	0.205	0.339	0.105	0.006	0.076	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-10/29/97	8	10.5	10.375	12.	7.	2.554	1.598	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0473

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	8	0	0.00	2	0	0.00	3	0	0.00	3	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	8	0	0.00	2	0	0.00	3	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	8	1	0.13	2	1	0.50	3	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0474

NPS Station ID: SHEN0474
 Location: Brokenback Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.570754/ -78.301031

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F032
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0474

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/09/95-08/09/95	1	17.8	17.8	17.8	17.8	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/09/95-08/09/95	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/09/95-08/09/95	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/09/95-08/09/95	1	6.48	6.48	6.48	6.48	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/09/95-08/09/95	1	6.48	6.48	6.48	6.48	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/09/95-08/09/95	1	0.331	0.331	0.331	0.331	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/09/95-08/09/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0474

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard	Exceed	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00	1	0	0.00											
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00	1	0	0.00											
	Other-Lo Lim.	6.5	1	1	1	1.00	1	1	1.00											

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0475

NPS Station ID: SHEN0475
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.570892/ -78.306698

Depth of Water: 0
 Elevation: 1160
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB03 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.92 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0475

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	13.	11.4	19.	2.	58.3	7.635	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	20.	18.8	20.	16.	3.2	1.789	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.72	6.6	6.85	6.31	0.061	0.247	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.72	6.543	6.85	6.31	0.065	0.255	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.191	0.286	0.49	0.141	0.027	0.163	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	19.	18.	20.	15.	4.	2.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	114.4	91.84	116.9	54.3	1058.233	32.53	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.4	1.26	1.4	1.	0.038	0.195	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.5	0.46	0.5	0.4	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.43	1.374	1.51	1.18	0.018	0.136	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.43	0.404	0.47	0.31	0.006	0.075	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.8	0.82	0.9	0.8	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	1.8	1.82	2.1	1.5	0.047	0.217	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	10.1	9.52	10.6	8.2	1.377	1.173	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.2	0.422	1.	0.01	0.2	0.447	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.19	0.288	0.49	0.14	0.027	0.164	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0475

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00							
	Other-Lo Lim.	6.5	5	2	0.40	3	2	0.67	2	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	5	5	1.00	3	3	1.00	2	2	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	5	0	0.00	3	0	0.00	2	0	0.00							
	Fresh Acute																	
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	5	0	0.00	3	0	0.00	2	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	5	0	0.00	3	0	0.00	2	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0476

NPS Station ID: SHEN0476
 Location: BROKENBACK RUN NEAR NETHERS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103002509.43
 Description:

LAT/LON: 38.571115/ -78.300281

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.44

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01662160
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.50
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0476

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	6	14.25	11.917	18.	1.	41.742	6.461	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	6	3.	5.9	17.	0.4	40.86	6.392	**	**	**	**
00400	PH (STANDARD UNITS)	08/13/81-06/21/82	6	6.7	6.633	6.9	6.2	0.063	0.25	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/13/81-06/21/82	6	6.7	6.566	6.9	6.2	0.068	0.261	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.2	0.272	0.631	0.126	0.035	0.187	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	6	6.75	6.733	6.9	6.6	0.015	0.121	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/13/81-06/21/82	6	6.747	6.719	6.9	6.6	0.015	0.122	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.179	0.191	0.251	0.126	0.003	0.052	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	6 ##	0.008	0.008	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	6	0.08	0.082	0.2	0.01	0.004	0.066	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/13/81-06/21/82	6	4.5	4.5	5.	4.	0.3	0.548	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/13/81-06/21/82	6	1.1	1.133	1.3	1.	0.011	0.103	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	6	0.4	0.433	0.5	0.4	0.003	0.052	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	6	1.35	1.367	1.5	1.3	0.007	0.082	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	6	0.3	0.3	0.3	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/13/81-06/21/82	6	37.	36.833	38.	36.	0.567	0.753	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	6	0.4	0.367	0.4	0.3	0.003	0.052	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	6	0.9	0.867	1.	0.7	0.011	0.103	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	6	2.5	2.5	3.	2.	0.3	0.548	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/13/81-06/21/82	6	8.5	8.783	10.	7.8	0.826	0.909	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/28/82-05/17/82	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0476

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	2	0.33	2	1	0.50	2	1	0.50	2	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0476

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0477

NPS Station ID: SHEN0477
 Location: Brokenback Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.571198/ -78.307253

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F033
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0477

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/98-08/03/98	1	17.3	17.3	17.3	17.3	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/03/98-08/03/98	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/03/98-08/03/98	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/03/98-08/03/98	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/03/98-08/03/98	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/03/98-08/03/98	1	0.316	0.316	0.316	0.316	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/03/98-08/03/98	1	13.	13.	13.	13.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	08/03/98-08/03/98	1	5.22	5.22	5.22	5.22	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	08/03/98-08/03/98	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	08/03/98-08/03/98	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0477

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00									
	Other-Lo Lim.	6.5	1	1	1.00	1	1	1.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0478

NPS Station ID: SHEN0478
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.571503/ -78.368949

Depth of Water: 0
 Elevation: 2920
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO22
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO22 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.83 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0478

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	11.25	11.25	17.5	5.	78.125	8.839	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	28.	28.	31.	25.	18.	4.243	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.185	7.185	7.32	7.05	0.036	0.191	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.164	7.164	7.32	7.05	0.037	0.193	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.068	0.068	0.089	0.048	0.001	0.029	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	27.	27.	30.	24.	18.	4.243	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	62.55	62.55	91.1	34.	1630.205	40.376	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.45	2.45	2.8	2.1	0.245	0.495	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.	1.	1.1	0.9	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.06	1.06	1.12	1.	0.007	0.085	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.175	0.175	0.19	0.16	0.	0.021	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	1.6	1.6	2.	1.2	0.32	0.566	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.55	7.55	8.4	6.7	1.445	1.202	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.5	1.5	1.9	1.1	0.32	0.566	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.07	0.07	0.09	0.05	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0478

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0479

NPS Station ID: SHEN0479
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.571698/ -78.325559

Depth of Water: 0
 Elevation: 1780
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB08 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.07 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0479

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	11.	10.6	17.5	3.	42.925	6.552	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	20.	19.2	20.	17.	1.7	1.304	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.68	6.674	6.9	6.37	0.039	0.197	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.68	6.636	6.9	6.37	0.041	0.202	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.209	0.231	0.427	0.126	0.014	0.116	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	19.	18.6	20.	16.	2.8	1.673	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	96.9	80.86	108.7	45.3	792.993	28.16	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.4	1.32	1.5	1.1	0.027	0.164	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.6	0.56	0.6	0.5	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.26	1.24	1.34	1.09	0.01	0.102	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.31	0.32	0.39	0.27	0.002	0.05	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.8	0.78	0.8	0.7	0.002	0.045	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	2.	1.98	2.2	1.7	0.037	0.192	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	9.1	8.46	9.4	7.2	1.138	1.067	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.3	0.76	1.7	0.1	0.538	0.733	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.21	0.234	0.43	0.13	0.013	0.116	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0479

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00							
	Other-Lo Lim.	6.5	5	1	0.20	3	1	0.33	2	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	5	5	1.00	3	3	1.00	2	2	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	5	0	0.00	3	0	0.00	2	0	0.00							
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	5	0	0.00	3	0	0.00	2	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0480

NPS Station ID: SHEN0480
 Location: VAMA528R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.572504/ -78.294809

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_NURE_06 /4090620
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE OLD RAG MOUNTAIN VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0480

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	01/20/77-01/20/77	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/77-01/20/77	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/20/77-01/20/77	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/20/77-01/20/77	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/20/77-01/20/77	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	01/20/77-01/20/77	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	01/20/77-01/20/77	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	01/20/77-01/20/77	1	0.91	0.91	0.91	0.91	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	01/20/77-01/20/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	01/20/77-01/20/77	1	24.	24.	24.	24.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	01/20/77-01/20/77	1	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	1	4800.	4800.	4800.	4800.	0.	0.	**	**	**	**
50761	BROMINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	01/20/77-01/20/77	1	39.	39.	39.	39.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	01/20/77-01/20/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0480

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
	Drinking Water	20.	1	0	0.00				1	0	0.00						
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0481

NPS Station ID: SHEN0481
 Location: HUGHES RIVER NEAR NETHERS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103008503.86
 Description:

LAT/LON: 38.574170/ -78.296949

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 5.51

Agency: 112WRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): 01662150
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 24.50
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0481

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/81-06/21/82	6	15.	12.5	18.	1.5	38.8	6.229	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/13/81-06/21/82	6	8.	14.5	41.	1.	230.3	15.176	**	**	**	**
00400	PH (STANDARD UNITS)	08/13/81-06/21/82	5	6.8	6.76	7.	6.2	0.108	0.329	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/13/81-06/21/82	5	6.8	6.639	7.	6.2	0.126	0.355	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	5	0.158	0.23	0.631	0.1	0.051	0.226	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/13/81-06/21/82	6	6.85	6.817	6.9	6.7	0.01	0.098	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/13/81-06/21/82	6	6.847	6.807	6.9	6.7	0.01	0.099	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/13/81-06/21/82	6	0.142	0.156	0.2	0.126	0.001	0.036	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/13/81-06/21/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/13/81-06/21/82	6	0.15	0.147	0.2	0.09	0.003	0.059	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/13/81-06/21/82	6	6.	6.	6.	6.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/13/81-06/21/82	6	1.4	1.367	1.4	1.3	0.003	0.052	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/13/81-06/21/82	6	0.6	0.567	0.6	0.5	0.003	0.052	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/13/81-06/21/82	6	1.5	1.483	1.6	1.4	0.006	0.075	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/13/81-06/21/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/13/81-06/21/82	6	34.5	34.333	35.	33.	0.667	0.816	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/13/81-06/21/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/13/81-06/21/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/13/81-06/21/82	6	2.5	2.5	3.	2.	0.3	0.548	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/13/81-06/21/82	6	8.95	9.317	10.6	8.2	0.93	0.964	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/17/82-06/21/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0481

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	1	0.20	2	1	0.50	1	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0481

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0482

NPS Station ID: SHEN0482
 Location: East Hawksbill Creek
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.574170/ -78.403866

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F119
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Big Meadows VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0482

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/14/94-06/25/97	5	17.	17.2	19.	15.7	1.415	1.19	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/25/97-06/25/97	1	26.	26.	26.	26.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/14/94-06/25/97	4	9.	9.2	10.	8.8	0.293	0.542	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/14/94-06/25/97	4	10.11	9.375	10.81	6.47	3.875	1.968	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/14/94-06/25/97	4	10.085	7.072	10.81	6.47	10.947	3.309	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/14/94-06/25/97	4	0.	0.085	0.339	0.	0.029	0.169	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/25/97-06/25/97	1	6.18	6.18	6.18	6.18	0.	0.	**	**	**
83509	STREAM, WIDTH METER	06/25/97-06/25/97	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/25/97-06/25/97	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0482

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00406	PH, FIELD	Fresh Chronic	4	3	0.75	3	3	1.00	1	0	0.00						
		Other-Lo Lim.	6.5	4	0.25	3	0	0.00	1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0483

NPS Station ID: SHEN0483
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.575199/ -78.332809

Depth of Water: 0
 Elevation: 2050
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB09 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.98 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0483

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	11.	10.3	17.	2.	45.2	6.723	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	19.	18.2	20.	16.	2.7	1.643	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.63	6.62	6.84	6.36	0.044	0.211	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.63	6.579	6.84	6.36	0.047	0.216	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.234	0.263	0.437	0.145	0.016	0.126	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	19.	17.8	19.	15.	3.2	1.789	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	95.3	81.66	106.5	47.8	819.023	28.619	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.4	1.28	1.4	1.1	0.027	0.164	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.6	0.56	0.6	0.5	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.17	1.118	1.25	0.96	0.014	0.119	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.3	0.292	0.35	0.25	0.002	0.043	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.8	0.76	0.8	0.7	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	1.9	1.8	2.	1.5	0.04	0.2	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	8.8	8.04	8.9	6.7	1.193	1.092	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.09	0.621	1.9	0.005	0.725	0.851	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.24	0.268	0.44	0.15	0.016	0.125	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0483

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00							
	Other-Lo Lim.	6.5	5	2	0.40	3	2	0.67	2	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	5	5	1.00	3	3	1.00	2	2	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	5	0	0.00	3	0	0.00	2	0	0.00							
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	5	0	0.00	3	0	0.00	2	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0484

NPS Station ID: SHEN0484
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.575698/ -78.370948

Depth of Water: 0
 Elevation: 3080
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO23
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO23 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.49 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0484

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	11.	11.	17.	5.	72.	8.485	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	27.5	27.5	31.	24.	24.5	4.95	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.135	7.135	7.23	7.04	0.018	0.134	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.125	7.125	7.23	7.04	0.018	0.135	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.075	0.075	0.091	0.059	0.001	0.023	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	27.	27.	31.	23.	32.	5.657	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	15.	15.	15.	15.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.5	2.5	2.9	2.1	0.32	0.566	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.	1.	1.1	0.9	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.055	1.055	1.11	1.	0.006	0.078	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.175	0.175	0.19	0.16	0.	0.021	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	1.55	1.55	2.	1.1	0.405	0.636	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.4	7.4	8.2	6.6	1.28	1.131	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.55	1.55	1.8	1.3	0.125	0.354	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.075	0.075	0.09	0.06	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0484

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0485

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00			
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0486

NPS Station ID: SHEN0486
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.576616/ -78.348726

 Depth of Water: 0
 Elevation: 2680
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB11 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0486

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	10.5	9.6	17.	1.	58.675	7.66	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	22.	21.	22.	19.	2.	1.414	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.76	6.716	6.95	6.36	0.048	0.219	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.76	6.667	6.95	6.36	0.051	0.226	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.174	0.215	0.437	0.112	0.016	0.128	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	21.	20.4	22.	18.	3.3	1.817	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	131.2	111.5	141.9	71.9	1212.835	34.826	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.8	1.62	1.8	1.3	0.062	0.249	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.8	0.8	0.9	0.7	0.01	0.1	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.04	1.01	1.09	0.92	0.005	0.072	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.28	0.254	0.28	0.2	0.001	0.037	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.8	0.8	0.9	0.7	0.005	0.071	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	1.5	1.54	1.7	1.3	0.028	0.167	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	8.5	8.3	9.4	7.2	1.025	1.012	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.6	0.933	2.5	0.005	1.128	1.062	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.18	0.218	0.44	0.11	0.017	0.129	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0486

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00						
	Other-Lo Lim.	6.5	5	1	0.20	3	1	0.33	2	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	5	5	1.00	3	3	1.00	2	2	1.00						
	Fresh Acute	860.	5	0	0.00	3	0	0.00	2	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	5	0	0.00	3	0	0.00	2	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0487

NPS Station ID: SHEN0487
 Location: BROKENBACK RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.577059/ -78.341698

Depth of Water: 0
 Elevation: 2440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_BB10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION BB10 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROKENBACK RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.06 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0487

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/18/92-10/10/94	5	11.5	10.2	16.5	3.	41.325	6.428	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/18/92-10/10/94	5	18.	17.4	20.	15.	3.8	1.949	**	**	**	**
00400	PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.74	6.708	6.89	6.36	0.043	0.206	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/18/92-10/10/94	5	6.74	6.663	6.89	6.36	0.045	0.212	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/18/92-10/10/94	5	0.182	0.217	0.437	0.129	0.016	0.125	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/18/92-10/10/94	5	17.	17.	19.	15.	2.5	1.581	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/18/92-10/10/94	5	95.	80.58	107.9	50.3	693.317	26.331	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/18/92-10/10/94	5	1.3	1.26	1.4	1.1	0.023	0.152	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/18/92-10/10/94	5	0.6	0.56	0.6	0.5	0.003	0.055	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/18/92-10/10/94	5	1.03	1.01	1.11	0.87	0.011	0.104	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/18/92-10/10/94	5	0.28	0.272	0.32	0.23	0.001	0.037	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/18/92-10/10/94	5	0.8	0.76	0.8	0.7	0.003	0.055	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/18/92-10/10/94	5	1.4	1.42	1.6	1.3	0.017	0.13	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/18/92-10/10/94	5	8.2	7.78	8.7	6.5	1.027	1.013	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/18/92-10/10/94	5	0.2	0.663	2.	0.005	0.763	0.874	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/18/92-10/10/94	5	0.18	0.218	0.44	0.13	0.016	0.126	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0487

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	5	0	0.00	3	0	0.00	2	0	0.00							
	Other-Lo Lim.	6.5	5	1	0.20	3	1	0.33	2	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	5	5	1.00	3	3	1.00	2	2	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	5	0	0.00	3	0	0.00	2	0	0.00							
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	5	0	0.00	3	0	0.00	2	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	5	0	0.00	3	0	0.00	2	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0488

NPS Station ID: SHEN0488
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.577087/ -78.371559

Depth of Water: 0
 Elevation: 3110
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO25
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO25 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.35 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0488

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	10.75	10.75	17.	4.5	78.125	8.839	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	29.	29.	34.	24.	50.	7.071	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.16	7.16	7.32	7.	0.051	0.226	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.131	7.131	7.32	7.	0.053	0.23	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.074	0.074	0.1	0.048	0.001	0.037	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	28.5	28.5	34.	23.	60.5	7.778	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	18.25	18.25	22.5	14.	36.125	6.01	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.7	2.7	3.3	2.1	0.72	0.849	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.1	1.1	1.3	0.9	0.08	0.283	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.05	1.05	1.11	0.99	0.007	0.085	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.165	0.165	0.18	0.15	0.	0.021	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	1.6	1.6	2.	1.2	0.32	0.566	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.1	7.1	7.8	6.4	0.98	0.99	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.4	1.4	1.8	1.	0.32	0.566	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0488

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0489

NPS Station ID: SHEN0489
 Location: Whiteoak Canyon Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.577170/ -78.371587

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_PARK_LIM1
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0489

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/16/95-09/23/97	5	11.7	11.7	14.6	9.5	3.925	1.981	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/16/95-09/23/97	5	27.	28.8	34.	26.	10.7	3.271	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/16/95-09/23/97	5	9.4	9.48	10.1	9.1	0.157	0.396	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/16/95-09/23/97	5	6.92	6.876	7.16	6.54	0.054	0.232	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/16/95-09/23/97	5	6.92	6.825	7.16	6.54	0.057	0.239	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/16/95-09/23/97	5	0.12	0.15	0.288	0.069	0.007	0.085	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/16/95-09/23/97	5	17.	17.8	20.	16.	2.7	1.643	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0489

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	1	0	0.00				4	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	5	0	0.00	1	0	0.00				4	0	0.00			
	Other-Lo Lim.	6.5	5	0	0.00	1	0	0.00				4	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0490

NPS Station ID: SHEN0490
 Location: Hughes River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.577476/ -78.300253

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F038
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0490

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/95-07/21/98	4	19.3	19.025	21.	16.5	4.282	2.069	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/15/95-07/21/98	4	22.5	22.75	24.	22.	0.917	0.957	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/15/95-07/21/98	4	8.7	8.725	9.2	8.3	0.142	0.377	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/15/95-07/21/98	4	6.705	6.78	7.14	6.57	0.063	0.251	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/15/95-07/21/98	4	6.703	6.734	7.14	6.57	0.066	0.257	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/95-07/21/98	4	0.198	0.185	0.269	0.072	0.007	0.084	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/15/95-07/21/98	2	12.5	12.5	15.	10.	12.5	3.536	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/30/96-07/21/98	3	4.6	4.567	5.6	3.5	1.103	1.05	**	**	**	**
83509 STREAM, WIDTH METER	07/30/96-07/21/98	3	7.8	7.7	8.2	7.1	0.31	0.557	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/30/96-07/21/98	3	0.13	0.2	0.36	0.11	0.019	0.139	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0490

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Obs			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	4	0	0.00	4	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	4	4	0	0.00	4	0	0.00									
	Other-Lo Lim.	6.5	4	4	0	0.00	4	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0491

NPS Station ID: SHEN0491
 Location: ROCKY RUN AT NETHERS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103002404.06
 Description:

LAT/LON: 38.577504/ -78.282503

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 12.27

Agency: 112WRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 01662170
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.40
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0491

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/21/82	6	15.5	12.417	16.5	1.	38.242	6.184	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/21/82	6	0.35	0.79	3.	0.01	1.309	1.144	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/21/82	6	6.5	6.467	6.8	5.7	0.163	0.403	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/21/82	6	6.5	6.265	6.8	5.7	0.212	0.46	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/21/82	6	0.316	0.543	1.995	0.158	0.512	0.715	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/21/82	6	6.55	6.617	6.8	6.5	0.022	0.147	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/21/82	6	6.547	6.597	6.8	6.5	0.022	0.149	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/21/82	6	0.284	0.253	0.316	0.158	0.006	0.077	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/21/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/21/82	6	0.06	0.057	0.09	0.01	0.001	0.029	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/21/82	6	5.5	5.667	7.	5.	0.667	0.816	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/21/82	6	1.25	1.267	1.5	1.1	0.027	0.163	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/21/82	6	0.55	0.583	0.7	0.5	0.01	0.098	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/21/82	6	2.15	2.167	2.5	1.8	0.095	0.308	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/21/82	6	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/21/82	6	43.	42.833	44.	42.	0.567	0.753	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/21/82	6	0.55	0.55	0.6	0.5	0.003	0.055	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/21/82	6	1.	0.983	1.	0.9	0.002	0.041	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/21/82	6	3.	3.333	4.	3.	0.267	0.516	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/21/82	6	11.35	11.6	13.9	9.3	3.128	1.769	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-05/18/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0491

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	4	0.67	2	2	1.00	2	2	1.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	3	0.50	2	2	1.00	2	1	0.50	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0491

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0492

NPS Station ID: SHEN0492
 Location: VARA525R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.577698/ -78.251115

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_NURE_10 /4091487
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE OLD RAG MOUNTAIN VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0492

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/77-04/11/77	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/11/77-04/11/77	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/11/77-04/11/77	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/11/77-04/11/77	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/77-04/11/77	1	0.631	0.631	0.631	0.631	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/11/77-04/11/77	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/77-04/11/77	1	2.25	2.25	2.25	2.25	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/11/77-04/11/77	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/11/77-04/11/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/11/77-04/11/77	1	45.	45.	45.	45.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/11/77-04/11/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	1	12.	12.	12.	12.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	1	3300.	3300.	3300.	3300.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/11/77-04/11/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0492

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0493

NPS Station ID: SHEN0493
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.578587/ -78.371892

Depth of Water: 0
 Elevation: 3160
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO26
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO26 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.13 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0493

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	9.75	9.75	16.5	3.	91.125	9.546	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	28.5	28.5	33.	24.	40.5	6.364	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.07	7.07	7.26	6.88	0.072	0.269	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	7.03	7.03	7.26	6.88	0.075	0.275	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.093	0.093	0.132	0.055	0.003	0.054	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	27.5	27.5	32.	23.	40.5	6.364	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	21.	21.	27.	15.	72.	8.485	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.6	2.6	3.1	2.1	0.5	0.707	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	1.05	1.05	1.2	0.9	0.045	0.212	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.04	1.04	1.11	0.97	0.01	0.099	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.17	0.17	0.2	0.14	0.002	0.042	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	1.6	1.6	1.9	1.3	0.18	0.424	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.05	7.05	7.7	6.4	0.845	0.919	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.4	1.4	1.7	1.1	0.18	0.424	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.095	0.095	0.13	0.06	0.002	0.049	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0493

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0494

NPS Station ID: SHEN0494
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.579837/ -78.373588

Depth of Water: 0
 Elevation: 3200
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO28
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO28 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.02 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0494

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	10.75	10.75	18.	3.5	105.125	10.253	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	26.5	26.5	29.	24.	12.5	3.536	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.91	6.91	7.05	6.77	0.039	0.198	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.888	6.888	7.05	6.77	0.04	0.2	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.129	0.129	0.17	0.089	0.003	0.057	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	25.5	25.5	28.	23.	12.5	3.536	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	19.75	19.75	20.	19.5	0.125	0.354	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.35	2.35	2.6	2.1	0.125	0.354	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	0.8	0.8	0.9	0.7	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.09	1.09	1.19	0.99	0.02	0.141	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.215	0.215	0.24	0.19	0.001	0.035	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.5	1.5	2.	1.	0.5	0.707	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	1.85	1.85	2.4	1.3	0.605	0.778	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.05	7.05	8.	6.1	1.805	1.344	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	1.5	1.5	1.9	1.1	0.32	0.566	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.13	0.13	0.17	0.09	0.003	0.057	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0494

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0495

NPS Station ID: SHEN0495 LAT/LON: 38.579976/ -78.375976
 Location: NEGRO RUN (WHITEOAK CANYON RUN TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103 Depth of Water: 0
 Major Basin: NORTH ATLANTIC Elevation: 3295
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO29
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO29 IS LOCATED ON THE BIG MEADOWS VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.29 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0495

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	8.5	8.5	17.	0.	144.5	12.021	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	29.	29.	31.	27.	8.	2.828	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.925	6.925	7.02	6.83	0.018	0.134	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.915	6.915	7.02	6.83	0.018	0.135	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.122	0.122	0.148	0.095	0.001	0.037	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	28.	28.	30.	26.	8.	2.828	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	16.25	16.25	17.5	15.	3.125	1.768	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.5	2.5	2.7	2.3	0.08	0.283	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	0.75	0.75	0.8	0.7	0.005	0.071	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.15	1.15	1.24	1.06	0.016	0.127	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.315	0.315	0.34	0.29	0.001	0.035	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	0.85	0.85	1.2	0.5	0.245	0.495	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	5.8	5.8	6.2	5.4	0.32	0.566	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	3.9	3.9	4.	3.8	0.02	0.141	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.125	0.125	0.15	0.1	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0495

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0496

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0497

NPS Station ID: SHEN0497
 Location: WHITEOAK CANYON RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.580781/ -78.373226

Depth of Water: 0
 Elevation: 3240
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_SWAS_WO27
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION WO27 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT WHITEOAK CANYON RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.11 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0497

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/19/92-07/15/92	2	10.5	10.5	18.	3.	112.5	10.607	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/19/92-07/15/92	2	26.5	26.5	29.	24.	12.5	3.536	**	**	**	**
00400	PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.925	6.925	7.05	6.8	0.031	0.177	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/19/92-07/15/92	2	6.907	6.907	7.05	6.8	0.032	0.179	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/19/92-07/15/92	2	0.124	0.124	0.158	0.089	0.002	0.049	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/19/92-07/15/92	2	25.5	25.5	28.	23.	12.5	3.536	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/19/92-07/15/92	2	15.5	15.5	16.	15.	0.5	0.707	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/19/92-07/15/92	2	2.25	2.25	2.6	1.9	0.245	0.495	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/19/92-07/15/92	2	0.9	0.9	1.	0.8	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/19/92-07/15/92	2	1.125	1.125	1.2	1.05	0.011	0.106	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/19/92-07/15/92	2	0.16	0.16	0.19	0.13	0.002	0.042	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/19/92-07/15/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/19/92-07/15/92	2	2.2	2.2	2.8	1.6	0.72	0.849	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/19/92-07/15/92	2	7.55	7.55	8.5	6.6	1.805	1.344	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/19/92-07/15/92	2	0.95	0.95	1.1	0.8	0.045	0.212	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/19/92-07/15/92	2	0.125	0.125	0.16	0.09	0.002	0.049	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0497

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00	1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00							
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0498

NPS Station ID: SHEN0498
 Location: EAST HAWKSBILL CREEK NEAR IDA, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005019800.00
 Description:

LAT/LON: 38.581392/ -78.414449

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.13

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01629950
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 23.60
 Distance from RF3: 0.44

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0498

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/21/81-06/24/82	6	14.	11.417	15.	3.	23.642	4.862	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/21/81-06/24/82	6	2.	3.883	16.	0.1	36.514	6.043	**	**	**	**
00400	PH (STANDARD UNITS)	08/21/81-06/24/82	6	6.55	6.517	6.8	6.1	0.062	0.248	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/21/81-06/24/82	6	6.547	6.452	6.8	6.1	0.067	0.258	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/21/81-06/24/82	6	0.284	0.353	0.794	0.158	0.054	0.232	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/21/81-06/24/82	6	6.55	6.583	6.7	6.5	0.01	0.098	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/21/81-06/24/82	6	6.547	6.574	6.7	6.5	0.01	0.099	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/21/81-06/24/82	6	0.284	0.266	0.316	0.2	0.003	0.058	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/21/81-06/24/82	6 ##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/21/81-06/24/82	6	0.2	0.233	0.4	0.1	0.011	0.103	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/21/81-06/24/82	6	9.	9.333	10.	9.	0.267	0.516	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/21/81-06/24/82	6	2.5	2.5	2.6	2.4	0.004	0.063	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/21/81-06/24/82	6	0.7	0.733	0.8	0.7	0.003	0.052	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/21/81-06/24/82	6	1.5	1.533	1.8	1.3	0.035	0.186	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/21/81-06/24/82	6	0.2	0.217	0.3	0.2	0.002	0.041	**	**	**	**
00932	SODIUM, PERCENT	08/21/81-06/24/82	6	26.	25.667	28.	23.	2.667	1.633	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/21/81-06/24/82	6	0.2	0.25	0.4	0.2	0.007	0.084	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/21/81-06/24/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/21/81-06/24/82	6	5.	5.	6.	4.	0.4	0.632	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/21/81-06/24/82	6	8.8	9.233	11.7	6.4	3.691	1.921	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/20/82-06/24/82	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0498

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	3	0.50	2	1	0.50	2	1	0.50	2	1	0.50			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	3	0.50	2	2	1.00	2	1	0.50	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0498

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0499

NPS Station ID: SHEN0499
 Location: NEWPORT DGIF BOAT LAUNCH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.582781/ -78.594726

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

VIRGINIA STATE WATER CONTROL BOARD
 RIVER: SOUTH FORK SHENANDOAH RIVER

AMBIENT MONITORING
 SECTION: 02

BASIN: 1B SHENANDOAH
 TOPO MAP #: 199D TOPO MAP NAME: STANLEY, VA

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BSSF063.17
 Within Park Boundary: No

Date Created: 05/18/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0499

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	1	27.5	27.5	27.5	27.5	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	1	363.	363.	363.	363.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	1	196.	196.	196.	196.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	1##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01000	ARSENIC, DISSOLVED (UG/L AS AS)	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01025	CADMIUM, DISSOLVED (UG/L AS CD)	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01040	COPPER, DISSOLVED (UG/L AS CU)	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
01049	LEAD, DISSOLVED (UG/L AS PB)	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	1	10.8	10.8	10.8	10.8	0.	0.	**	**	**	**
01057	THALLIUM, DISSOLVED (UG/L AS TL)	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
01075	SILVER, DISSOLVED (UG/L AS AG)	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01090	ZINC, DISSOLVED (UG/L AS ZN)	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	1	3.	3.	3.	3.	0.	0.	**	**	**	**
01145	SELENIUM, DISSOLVED (UG/L AS SE)	1##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
71890	MERCURY, DISSOLVED (UG/L AS HG)	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0499

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE																	
00400	PH																	
	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00				
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
01000	ARSENIC, DISSOLVED																	
	Fresh Acute	360.	1	0	0.00							1	0	0.00				
	Drinking Water	50.	1	0	0.00							1	0	0.00				
01025	CADMIUM, DISSOLVED																	
	Fresh Acute	3.9	1	0	0.00							1	0	0.00				
	Drinking Water	5.	1	0	0.00							1	0	0.00				
01030	CHROMIUM, DISSOLVED																	
	Drinking Water	100.	1	0	0.00							1	0	0.00				
01040	COPPER, DISSOLVED																	
	Fresh Acute	18.	1	0	0.00							1	0	0.00				
	Drinking Water	1300.	1	0	0.00							1	0	0.00				
01049	LEAD, DISSOLVED																	
	Fresh Acute	82.	1	0	0.00							1	0	0.00				
	Drinking Water	15.	1	0	0.00							1	0	0.00				
01057	THALLIUM, DISSOLVED																	
	Fresh Acute	1400.	1	0	0.00							1	0	0.00				
	Drinking Water	2.	1	0	0.00							1	0	0.00				
01065	NICKEL, DISSOLVED																	
	Fresh Acute	1400.	1	0	0.00							1	0	0.00				
	Drinking Water	100.	1	0	0.00							1	0	0.00				
01075	SILVER, DISSOLVED																	
	Fresh Acute	4.1	1	0	0.00							1	0	0.00				
	Drinking Water	100.	1	0	0.00							1	0	0.00				
01090	ZINC, DISSOLVED																	
	Fresh Acute	120.	1	0	0.00							1	0	0.00				
	Drinking Water	5000.	1	0	0.00							1	0	0.00				
01095	ANTIMONY, DISSOLVED																	
	Fresh Acute	88.	1	0	0.00							1	0	0.00				
	Drinking Water	6.	1	0	0.00							1	0	0.00				
01145	SELENIUM, DISSOLVED																	
	Fresh Acute	20.	1	0	0.00							1	0	0.00				
	Drinking Water	50.	1	0	0.00							1	0	0.00				
71890	MERCURY, DISSOLVED																	
	Fresh Acute	2.4	1	0	0.00							1	0	0.00				
	Drinking Water	2.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0500

NPS Station ID: SHEN0500
 Location: RT. 618
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02070005
 RF3 Index: 02080103002206.01
 Description:

LAT/LON: 38.583615/ -78.221392

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 6.31

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-HAZ039.26 /VA3-04-X0072/VA3-3X0072
 Within Park Boundary: No

Date Created: 04/19/76

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN VIRGINIA
 RIVER: HAZEL RIVER SECTION: 04 TOPO MAP #: 0075 TOPO MAP NAME: WOODVILLE, VA

Parameter Inventory for Station: SHEN0500

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/76-06/06/79	19	15.6	13.	26.	0.2	73.774	8.589	0.2	1.3	18.	23.
00300	OXYGEN, DISSOLVED MG/L	04/26/76-06/06/79	19	10.	10.326	14.6	8.	3.898	1.974	8.4	8.4	12.1	13.8
00400	PH (STANDARD UNITS)	04/26/76-06/06/79	19	7.3	7.307	9.	6.8	0.205	0.453	6.9	7.04	7.4	7.5
00400	CONVERTED PH (STANDARD UNITS)	04/26/76-06/06/79	19	7.3	7.192	9.	6.8	0.219	0.468	6.9	7.04	7.4	7.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/76-06/06/79	19	0.05	0.064	0.158	0.001	0.001	0.037	0.032	0.04	0.091	0.126
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/26/76-06/06/79	19 ##	0.05	0.053	0.1	0.05	0.	0.011	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/26/76-06/06/79	18 ##	0.005	0.011	0.11	0.005	0.001	0.025	0.005	0.005	0.005	0.016
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/26/76-06/06/79	19	0.2	0.213	0.9	0.05	0.038	0.196	0.05	0.05	0.3	0.4
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/26/76-06/06/79	19	0.15	0.153	0.5	0.005	0.014	0.119	0.025	0.06	0.23	0.3
01002	ARSENIC, TOTAL (UG/L AS AS)	04/11/77-04/12/79	5 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/11/77-04/12/79	5 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/11/77-04/12/79	5 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/11/77-04/12/79	5 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	04/12/79-04/12/79	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/11/77-04/12/79	5	5.	11.8	46.	1.	370.7	19.254	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/12/79-04/12/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/11/77-04/12/79	5 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/11/77-04/12/79	5 ##	5.	6.	10.	5.	5.	2.236	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/26/76-06/06/79	18 ##	75.	747.222	6000.	50.	2697197.712	1642.315	50.	50.	450.	4470.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/26/76-06/06/79	18 ##	1.849	2.236	3.778	1.699	0.469	0.685	1.699	1.699	2.646	3.648
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				172.031								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/26/76-06/06/79	19 ##	0.05	0.053	0.1	0.05	0.	0.011	0.05	0.05	0.05	0.05
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/26/76-06/06/79	19 ##	0.005	0.011	0.07	0.005	0.	0.015	0.005	0.005	0.01	0.02
71900	MERCURY, TOTAL (UG/L AS HG)	04/11/77-04/12/79	4 ##	0.25	0.225	0.25	0.15	0.003	0.05	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0500

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	4.	19	0	0.00	5	0	0.00	6	0	0.00	8	0	0.00			
00400	PH	9.	19	1	0.05	5	1	0.20	6	0	0.00	8	0	0.00			
	Other-Lo Lim.	6.5	19	0	0.00	5	0	0.00	6	0	0.00	8	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	18	0	0.00	5	0	0.00	6	0	0.00	7	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	10.	19	0	0.00	5	0	0.00	6	0	0.00	8	0	0.00			
01002	ARSENIC, TOTAL	360.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	50.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
01027	CADMIUM, TOTAL	3.9	0 &	0	0.00												
	Drinking Water	5.	0 &	0	0.00												
01034	CHROMIUM, TOTAL	100.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
01042	COPPER, TOTAL	18.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	1300.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
01051	LEAD, TOTAL	82.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	15.	5	1	0.20	1	0	0.00	1	0	0.00	3	1	0.33			
01065	NICKEL, DISSOLVED	1400.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	100.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
01092	ZINC, TOTAL	120.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	5000.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	18	8	0.44	5	4	0.80	5	0	0.00	8	4	0.50			
71900	MERCURY, TOTAL	2.4	4	0	0.00				1	0	0.00	3	0	0.00			
	Drinking Water	2.	4	0	0.00				1	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0501

NPS Station ID: SHEN0501
 Location: VAPA515R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.585698/ -78.416699

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_NURE_24 /4091119
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE BIG MEADOWS VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0501

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/22/77-04/22/77	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/22/77-04/22/77	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/22/77-04/22/77	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/22/77-04/22/77	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/22/77-04/22/77	1	0.501	0.501	0.501	0.501	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/22/77-04/22/77	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/22/77-04/22/77	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/22/77-04/22/77	1	1.62	1.62	1.62	1.62	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/22/77-04/22/77	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/22/77-04/22/77	1	30.	30.	30.	30.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/22/77-04/22/77	1	0.029	0.029	0.029	0.029	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/22/77-04/22/77	1	36.	36.	36.	36.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/22/77-04/22/77	1	3400.	3400.	3400.	3400.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/22/77-04/22/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0501

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0502

NPS Station ID: SHEN0502
 Location: Hughes River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.587559/ -78.313726

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F039
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0502

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/25/96-07/21/98	3	16.2	16.833	18.3	16.	1.623	1.274	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/25/96-07/21/98	3	23.	23.333	25.	22.	2.333	1.528	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/25/96-07/21/98	3	9.	9.067	9.3	8.9	0.043	0.208	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/25/96-07/21/98	3	6.53	6.717	7.16	6.46	0.149	0.386	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/25/96-07/21/98	3	6.53	6.625	7.16	6.46	0.161	0.401	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/25/96-07/21/98	3	0.295	0.237	0.347	0.069	0.022	0.148	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/21/98-07/21/98	1	16.	16.	16.	16.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/25/96-07/21/98	3	3.3	3.367	3.5	3.3	0.013	0.115	**	**	**	**
83509 STREAM, WIDTH METER	07/25/96-07/21/98	3	6.7	6.733	6.8	6.7	0.003	0.058	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/25/96-07/21/98	3	0.15	0.143	0.17	0.11	0.001	0.031	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0502

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00										
	Other-Lo Lim.	6.5	3	1	0.33	3	1	0.33										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0503

NPS Station ID: SHEN0503
 Location: HANNAH RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.589198/ -78.313615

Depth of Water: 0
 Elevation: 1260
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA05 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT HANNAH RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.49 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0503

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.129	0.129	0.129	0.129	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	1	1.45	1.45	1.45	1.45	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0503

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0504

NPS Station ID: SHEN0504
 Location: HUGHES RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.589198/ -78.315003

Depth of Water: 0
 Elevation: 1240
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_VTSSS_MA06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION MA06 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT HUGHES RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 13.76 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0504

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.129	0.129	0.129	0.129	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.13	1.13	1.13	1.13	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0504

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0505

NPS Station ID: SHEN0505
 Location: Hughes River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.591643/ -78.317253

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F040
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0505

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/24/96-07/20/98	3	18.1	17.6	18.4	16.3	1.29	1.136	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/24/96-07/20/98	3	22.	22.	23.	21.	1.	1.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/24/96-07/20/98	3	9.	8.967	9.1	8.8	0.023	0.153	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/24/96-07/20/98	3	6.62	6.78	7.15	6.57	0.103	0.321	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/24/96-07/20/98	3	6.62	6.714	7.15	6.57	0.11	0.331	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/24/96-07/20/98	3	0.24	0.193	0.269	0.071	0.011	0.107	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/20/98-07/20/98	1	15.	15.	15.	15.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/24/96-07/20/98	3	4.73	4.47	5.18	3.5	0.756	0.87	**	**	**	**
83509 STREAM, WIDTH METER	07/24/96-07/20/98	3	6.4	6.667	7.3	6.3	0.303	0.551	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/24/96-07/20/98	3	0.09	0.083	0.12	0.04	0.002	0.04	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0505

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00									
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0506

NPS Station ID: SHEN0506
 Location: BROAD HOLLOW
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.594392/ -78.275003

 Depth of Water: 0
 Elevation: 1180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_VTSSS_RA07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RA07 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BROAD HOLLOW INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.35 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0506

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0506

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0507

NPS Station ID: SHEN0507
 Location: Broad Hollow Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.594560/ -78.275116

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F067
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0507

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/17/95-07/16/98	2	19.85	19.85	21.1	18.6	3.125	1.768	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/17/95-07/16/98	2	19.	19.	19.	19.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/17/95-07/16/98	2	8.05	8.05	8.4	7.7	0.245	0.495	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/17/95-07/16/98	2	6.245	6.245	6.29	6.2	0.004	0.064	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/17/95-07/16/98	2	6.243	6.243	6.29	6.2	0.004	0.064	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/17/95-07/16/98	2	0.572	0.572	0.631	0.513	0.007	0.084	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/17/95-07/16/98	2	11.	11.	12.	10.	2.	1.414	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/16/98-07/16/98	1	13.58	13.58	13.58	13.58	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	07/16/98-07/16/98	1	4.	4.	4.	4.	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/16/98-07/16/98	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0507

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	2	0	0.00	2	0	0.00										
	Other-Lo Lim.	6.5	2	2	1.00	2	2	1.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0508

NPS Station ID: SHEN0508
 Location: Hannah Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.595227/ -78.316838

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51113 VIRGINIA/MADISON
 STORET Station ID(s): SHEN_FISH_2F050
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0508

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/24/96-07/20/98	3	18.5	17.733	18.5	16.2	1.763	1.328	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/24/96-07/20/98	3	24.	24.	24.	24.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/24/96-07/20/98	3	8.7	8.4	8.8	7.7	0.37	0.608	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/24/96-07/20/98	3	6.55	6.713	7.11	6.48	0.119	0.345	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/24/96-07/20/98	3	6.55	6.638	7.11	6.48	0.128	0.357	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/24/96-07/20/98	3	0.282	0.23	0.331	0.078	0.018	0.134	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/20/98-07/20/98	1	16.	16.	16.	16.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/24/96-07/20/98	3	10.27	9.753	11.09	7.9	2.744	1.657	**	**	**	**
83509 STREAM, WIDTH METER	07/24/96-07/20/98	3	3.8	3.633	3.9	3.2	0.143	0.379	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/24/96-07/20/98	3	0.02	0.017	0.02	0.01	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0508

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Obs			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	3	0	0.00	3	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	3	3	0	0.00	3	0	0.00									
	Other-Lo Lim.	6.5	3	3	1	0.33	3	1	0.33									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0509

NPS Station ID: SHEN0509
 Location: ROUTE 681 - RAPPAHANNOCK COUNTY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH-ATLANTIC
 Minor Basin: 3-RAPPAHANNOCK
 RF1 Index: 02080103
 RF3 Index: 02080103053800.00
 Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: HAZEL RIVER

LAT/LON: 38.603337/ -78.252781

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 3.30

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-HAZ042.43
 Within Park Boundary: No

Date Created: 04/08/89

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 11.70
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

SECTION: 04 AMBIENT MONITORING BASIN: 3 RAPPAHANNOCK REGION: 3 NORTHERN VIRGINIA
 TOPO MAP #: 0009 TOPO MAP NAME: OLD RAG MTN, VA

Parameter Inventory for Station: SHEN0509

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0510

NPS Station ID: SHEN0510
 Location: SAMS RUN (HAZEL RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.613420/ -78.275031

Depth of Water: 0
 Elevation: 1700
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR03 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.34 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0510

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.74	6.74	6.74	6.74	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.74	6.74	6.74	6.74	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.182	0.182	0.182	0.182	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	64.4	64.4	64.4	64.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.14	1.14	1.14	1.14	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.1	8.1	8.1	8.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0510

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0511

NPS Station ID: SHEN0511
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.614948/ -78.262531

Depth of Water: 0
 Elevation: 1080
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR01
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR01 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 13.24 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0511

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.141	0.141	0.141	0.141	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	63.7	63.7	63.7	63.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.36	1.36	1.36	1.36	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0511

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0512

NPS Station ID: SHEN0512
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.614948/ -78.262531

Depth of Water: 0
 Elevation: 1080
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_VT62
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT62 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 13.24 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0512

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/90-07/30/97	29	9.5	10.221	20.	1.	36.729	6.06	2.	6.	17.25	18.7
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/12/87-07/30/97	41	19.	19.439	24.	16.	5.052	2.248	17.	18.	21.5	23.
00400	PH (STANDARD UNITS)	08/12/87-07/30/97	41	6.71	6.686	7.01	6.23	0.053	0.231	6.322	6.495	6.88	6.97
00400	CONVERTED PH (STANDARD UNITS)	08/12/87-07/30/97	41	6.71	6.624	7.01	6.23	0.057	0.24	6.322	6.495	6.88	6.97
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/87-07/30/97	41	0.195	0.237	0.589	0.098	0.018	0.134	0.107	0.132	0.32	0.477
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/12/87-07/30/97	41	19.	19.049	24.	16.	4.948	2.224	16.2	17.	21.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/12/87-07/30/97	41	108.6	115.005	229.2	54.4	1851.544	43.03	59.26	84.9	133.2	177.92
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/87-07/30/97	41	1.2	1.227	1.5	0.9	0.032	0.178	1.	1.1	1.4	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/87-07/30/97	41	0.5	0.541	0.7	0.4	0.006	0.077	0.5	0.5	0.6	0.68
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/87-07/30/97	41	1.43	1.445	1.81	1.22	0.018	0.135	1.262	1.345	1.53	1.62
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/87-07/30/97	41	0.43	0.442	0.7	0.31	0.009	0.094	0.324	0.375	0.495	0.574
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/12/87-07/30/97	41	0.9	0.907	1.	0.8	0.004	0.065	0.8	0.9	0.95	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/12/87-07/30/97	41	1.8	1.861	3.	1.4	0.102	0.32	1.5	1.6	2.	2.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/87-07/30/97	41	10.	10.322	12.9	8.8	1.206	1.098	9.2	9.45	11.35	11.7
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	02/01/94-04/27/95	6	11.878	13.332	26.461	4.722	72.803	8.532	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	02/01/94-07/30/97	15	10.933	10.678	17.694	4.381	14.282	3.779	5.33	7.855	12.669	16.696
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-07/30/97	41	0.1	0.242	0.9	0.	0.086	0.294	0.	0.002	0.4	0.76
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-07/30/97	41	0.2	0.24	0.59	0.1	0.018	0.135	0.11	0.13	0.325	0.478

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0512

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
	Other-Lo Lim.	6.5	41	11	0.27	11	4	0.36	20	5	0.25	10	2	0.20			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	41	38	0.93	11	9	0.82	20	20	1.00	10	9	0.90			
	Fresh Acute	860.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
	Drinking Water	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0512

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	21.	21.182	24.	18.	3.364	1.834	18.2	20.	23.	23.8
00400	PH (STANDARD UNITS)	11	6.63	6.66	7.01	6.31	0.066	0.257	6.326	6.41	6.96	7.002
00400	CONVERTED PH (STANDARD UNITS)	11	6.63	6.595	7.01	6.31	0.071	0.266	6.326	6.41	6.96	7.002
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.234	0.254	0.49	0.098	0.019	0.138	0.1	0.11	0.389	0.473
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11	20.	20.727	24.	17.	3.418	1.849	17.6	20.	22.	23.8
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11	122.8	134.773	229.2	88.6	1884.086	43.406	89.96	108.6	139.3	224.12
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11	1.4	1.391	1.5	1.2	0.013	0.114	1.2	1.3	1.5	1.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11	0.6	0.591	0.7	0.5	0.003	0.054	0.5	0.6	0.6	0.68
00930	SODIUM, DISSOLVED (MG/L AS NA)	11	1.53	1.532	1.65	1.42	0.006	0.079	1.424	1.46	1.6	1.644
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11	0.49	0.489	0.55	0.44	0.001	0.038	0.44	0.46	0.51	0.55
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11	0.9	0.873	0.9	0.8	0.002	0.047	0.8	0.8	0.9	0.9
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11	1.6	1.764	3.	1.4	0.199	0.446	1.4	1.5	1.9	2.78
00955	SILICA, DISSOLVED (MG/L AS SI02)	11	11.5	11.445	12.9	10.	0.617	0.785	10.14	10.8	11.7	12.78
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11	0.01	0.085	0.3	0.	0.013	0.114	0.	0.	0.2	0.28
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11	0.24	0.257	0.49	0.1	0.019	0.138	0.102	0.11	0.39	0.474

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0512

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	20	18.	19.15	23.	16.	5.292	2.3	17.	17.25	21.75	23.
00400	PH (STANDARD UNITS)	20	6.77	6.696	6.97	6.23	0.061	0.248	6.292	6.503	6.918	6.969
00400	CONVERTED PH (STANDARD UNITS)	20	6.768	6.624	6.97	6.23	0.067	0.259	6.292	6.503	6.917	6.969
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	20	0.171	0.238	0.589	0.107	0.023	0.152	0.107	0.121	0.315	0.511
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	20	18.	18.85	24.	16.	5.187	2.277	16.1	17.	21.	22.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	20	103.95	104.755	163.6	54.4	1108.997	33.302	55.31	72.025	132.7	142.15
00915	CALCIUM, DISSOLVED (MG/L AS CA)	20	1.2	1.18	1.5	0.9	0.034	0.185	1.	1.	1.375	1.49
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	20	0.5	0.535	0.7	0.4	0.008	0.088	0.41	0.5	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	20	1.385	1.416	1.81	1.22	0.025	0.157	1.251	1.285	1.475	1.656
00935	POTASSIUM, DISSOLVED (MG/L AS K)	20	0.375	0.435	0.7	0.31	0.016	0.125	0.31	0.343	0.543	0.647
00941	CHLORIDE, DISSOLVED IN WATER MG/L	20	0.9	0.935	1.	0.8	0.004	0.067	0.81	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	20	1.9	1.93	2.7	1.5	0.087	0.296	1.51	1.7	2.1	2.29
00955	SILICA, DISSOLVED (MG/L AS SI02)	20	9.8	10.065	12.6	8.8	1.081	1.04	8.81	9.325	10.725	11.59
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	20	0.015	0.303	0.9	0.	0.137	0.37	0.	0.001	0.6	0.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	20	0.175	0.241	0.59	0.11	0.023	0.153	0.11	0.123	0.32	0.517

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0512

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	18.	18.1	20.	16.	1.656	1.287	16.1	17.	19.25	20.
00400	PH (STANDARD UNITS)	10	6.705	6.696	6.98	6.37	0.033	0.182	6.383	6.583	6.858	6.97
00400	CONVERTED PH (STANDARD UNITS)	10	6.705	6.661	6.98	6.37	0.035	0.186	6.383	6.583	6.857	6.97
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.197	0.218	0.427	0.105	0.009	0.096	0.107	0.139	0.263	0.416
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10	17.5	17.6	19.	16.	1.378	1.174	16.	16.75	19.	19.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10	92.	113.76	219.	61.5	3081.647	55.513	61.64	74.75	174.95	215.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10	1.1	1.14	1.3	1.	0.007	0.084	1.01	1.1	1.2	1.29
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10	0.5	0.5	0.6	0.4	0.002	0.047	0.41	0.5	0.5	0.59
00930	SODIUM, DISSOLVED (MG/L AS NA)	10	1.43	1.409	1.53	1.24	0.01	0.099	1.243	1.315	1.5	1.527
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10	0.4	0.405	0.45	0.38	0.001	0.023	0.38	0.388	0.423	0.448
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10	0.9	0.89	1.	0.8	0.003	0.057	0.8	0.875	0.9	0.99
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10	1.8	1.83	2.2	1.6	0.027	0.164	1.61	1.7	1.9	2.17
00955	SILICA, DISSOLVED (MG/L AS SI02)	10	9.7	9.6	10.2	9.2	0.124	0.353	9.2	9.2	9.825	10.17

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0512

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-07/30/97	10	0.35	0.291	0.6	0.	0.038	0.196	0.001	0.076	0.4	0.58
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-07/30/97	10	0.2	0.22	0.43	0.11	0.009	0.097	0.112	0.138	0.268	0.419

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0513

NPS Station ID: SHEN0513
 Location: Hazel River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.614948/ -78.262531

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_VTS62
 Within Park Boundary: No

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle outside Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0513

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/27/95-10/29/97	6	9.9	10.567	18.7	3.3	29.867	5.465	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/27/95-10/29/97	6	17.	16.833	20.	12.	7.767	2.787	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/27/95-10/29/97	6	10.55	10.483	12.	9.	1.098	1.048	**	**	**
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	1	99.4	99.4	99.4	99.4	0.	0.	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	04/27/95-10/29/97	6	6.725	6.727	6.93	6.55	0.015	0.124	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	04/27/95-10/29/97	6	6.725	6.712	6.93	6.55	0.016	0.125	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/27/95-10/29/97	6	0.188	0.194	0.282	0.117	0.003	0.054	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/27/95-10/29/97	6	11.	11.	13.	8.	2.8	1.673	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0513

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0514

NPS Station ID: SHEN0514
 Location: HAZEL RIVER NEAR NETHERS, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103054000.00
 Description:

LAT/LON: 38.615004/ -78.262226

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 2.00

Agency: 112WRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 01662100
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 10.60
 Distance from RF3: 0.30

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0514

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/22/82	6	14.	11.667	16.	1.5	32.767	5.724	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/22/82	6	4.5	7.5	18.	1.	52.3	7.232	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/22/82	5	6.9	6.76	7.	6.4	0.083	0.288	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/22/82	5	6.9	6.682	7.	6.4	0.091	0.301	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/22/82	5	0.126	0.208	0.398	0.1	0.019	0.14	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/22/82	6	6.9	6.833	7.	6.6	0.023	0.151	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/22/82	6	6.9	6.81	7.	6.6	0.023	0.153	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/22/82	6	0.126	0.155	0.251	0.1	0.003	0.058	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/22/82	6 ##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/22/82	6	0.08	0.092	0.2	0.04	0.003	0.057	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/22/82	6	5.	5.167	6.	5.	0.167	0.408	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/22/82	6	1.2	1.233	1.5	1.1	0.023	0.151	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/22/82	6	0.5	0.517	0.6	0.5	0.002	0.041	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/22/82	6	1.4	1.467	1.6	1.4	0.011	0.103	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/22/82	6	0.3	0.3	0.3	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/22/82	6	35.5	35.667	38.	34.	1.867	1.366	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/22/82	6	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/22/82	6	0.9	0.917	1.	0.8	0.006	0.075	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/22/82	6	2.	2.167	3.	2.	0.167	0.408	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/22/82	6	9.6	9.733	11.5	8.1	1.315	1.147	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/28/82-06/22/82	3	0.01	0.017	0.03	0.01	0.	0.012	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0514

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	2	0.40	2	1	0.50	1	1	1.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0514

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0515

NPS Station ID: SHEN0515
 Location: Hazel River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.615087/ -78.262392

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F071
 Within Park Boundary: No

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle outside Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0515

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/94-07/08/96	6	15.7	15.933	18.5	13.8	5.087	2.255	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/23/95-07/08/96	2	20.	20.	22.	18.	8.	2.828	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/23/95-07/08/96	2	9.55	9.55	10.4	8.7	1.445	1.202	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/10/94-07/08/96	5	7.3	7.158	7.47	6.57	0.146	0.382	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/10/94-07/08/96	5	7.3	7.009	7.47	6.57	0.174	0.417	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/10/94-07/08/96	5	0.05	0.098	0.269	0.034	0.01	0.1	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/23/95-08/23/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/08/96-07/08/96	1	10.	10.	10.	10.	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	07/08/96-07/08/96	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/08/96-07/08/96	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0515

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	5	0	0.00	5	0	0.00									
	Other-Lo Lim.	6.5	5	0	0.00	5	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0516

NPS Station ID: SHEN0516
 Location: SAMS RUN (HAZEL RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.615255/ -78.265671

Depth of Water: 0
 Elevation: 1160
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR02 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.73 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0516

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.74	6.74	6.74	6.74	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.74	6.74	6.74	6.74	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.182	0.182	0.182	0.182	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	67.	67.	67.	67.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.22	1.22	1.22	1.22	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0516

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0517

NPS Station ID: SHEN0517
 Location: SAMS RUN (HAZEL RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.615281/ -78.278199

 Depth of Water: 0
 Elevation: 2000
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR04 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.78 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0517

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.75	6.75	6.75	6.75	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.75	6.75	6.75	6.75	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.178	0.178	0.178	0.178	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	61.9	61.9	61.9	61.9	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.18	1.18	1.18	1.18	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0517

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0518

NPS Station ID: SHEN0518
 Location: Hazel River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.615448/ -78.262505

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_LTEM_2L303
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Old Rag Mountain VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0518

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/89-05/27/97	35	15.1	14.94	20.	3.2	8.19	2.862	12.1	14.	16.	18.16
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/27/95-05/27/97	3	17.	17.	18.	16.	1.	1.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/20/89-05/27/97	29	10.	10.152	13.8	8.	1.298	1.139	9.	9.35	11.	11.
00406 PH, FIELD, STANDARD UNITS SU	05/23/91-05/27/97	12	6.7	6.895	7.95	5.75	0.43	0.656	5.978	6.547	7.525	7.947
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/23/91-05/27/97	12	6.7	6.524	7.95	5.75	0.58	0.761	5.978	6.547	7.525	7.947
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/91-05/27/97	12	0.2	0.299	1.778	0.011	0.228	0.477	0.011	0.045	0.285	1.338
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/27/95-05/27/97	3	11.	10.667	11.	10.	0.333	0.577	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0518

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	29	0	0.00	14	0	0.00	1	0	0.00	14	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	12	0	0.00	6	0	0.00	1	0	0.00	5	0	0.00			
	Other-Lo Lim.	6.5	12	1	0.08	6	1	0.17	1	0	0.00	5	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0518

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/89-05/27/97	18	14.9	15.622	19.	13.4	3.258	1.805	13.76	14.	17.625	18.46
00300 OXYGEN, DISSOLVED MG/L	06/20/89-05/27/97	14	9.9	9.843	11.	8.	0.852	0.923	8.5	9.15	11.	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0518

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/89-05/27/97	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/20/89-05/27/97	1	13.8	13.8	13.8	13.8	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0518

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/89-05/27/97	16	15.5	14.906	20.	10.5	5.123	2.263	11.2	13.625	15.925	17.9
00300 OXYGEN, DISSOLVED MG/L	06/20/89-05/27/97	14	10.25	10.2	11.	8.	0.815	0.903	8.55	9.775	11.	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0519

NPS Station ID: SHEN0519
 Location: South Fork Dry Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.615559/ -78.379366

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F140
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Big Meadows VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0519

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/01/94-06/30/97	4	15.8	16.5	19.	15.4	2.813	1.677	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/30/97-06/30/97	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/01/94-06/30/97	4	10.	9.725	10.	8.9	0.302	0.55	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/01/94-06/30/97	3	8.21	7.727	8.54	6.43	1.288	1.135	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/01/94-06/30/97	3	8.21	6.897	8.54	6.43	2.322	1.524	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/01/94-06/30/97	3	0.006	0.127	0.372	0.003	0.045	0.212	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/30/97-06/30/97	1	8.36	8.36	8.36	8.36	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	06/30/97-06/30/97	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/30/97-06/30/97	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0519

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	2	0	0.00	1	0	0.00						
	Other-Lo Lim.	6.5	3	1	0.33	2	0	0.00	1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0520

NPS Station ID: SHEN0520
 Location: SAMS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.615809/ -78.264698

 Depth of Water: 0
 Elevation: 1160
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_VTSSS_RA06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RA06 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT SAMS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.89 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0520

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.15	1.15	1.15	1.15	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0520

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0521

NPS Station ID: SHEN0521
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.616698/ -78.264698

Depth of Water: 0
 Elevation: 1120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_VTSSS_RA05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RA05 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 11.27 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0521

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.79	6.79	6.79	6.79	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	6.79	6.79	6.79	6.79	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.162	0.162	0.162	0.162	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	04/26/87-04/26/87	1	1.22	1.22	1.22	1.22	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.31	0.31	0.31	0.31	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0521

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0522

NPS Station ID: SHEN0522
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.617505/ -78.265699

 Depth of Water: 0
 Elevation: 1140
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR20
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR20 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 11.05 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0522

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	113.7	113.7	113.7	113.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.37	1.37	1.37	1.37	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	9.3	9.3	9.3	9.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0522

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0523

NPS Station ID: SHEN0523
 Location: SAMS RUN (HAZEL RIVER TRIBUTARY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.617643/ -78.279976

Depth of Water: 0
 Elevation: 2220
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR05 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.65 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0523

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.186	0.186	0.186	0.186	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	54.4	54.4	54.4	54.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.16	1.16	1.16	1.16	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0523

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0524

NPS Station ID: SHEN0524
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.619088/ -78.294142

Depth of Water: 0
 Elevation: 2330
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR06 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.84 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0524

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.78	6.78	6.78	6.78	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.78	6.78	6.78	6.78	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.166	0.166	0.166	0.166	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	66.2	66.2	66.2	66.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.19	1.19	1.19	1.19	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0524

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00						1	0	0.00				
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00						1	1	1.00				
	Fresh Acute	860.	1	0	0.00						1	0	0.00				
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0525

NPS Station ID: SHEN0525
 Location: NORTH FORK DRY RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.619254/ -78.354670

Depth of Water: 0
 Elevation: 2500
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF08 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.37 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0525

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	2	10.25	10.25	10.5	10.	0.125	0.354	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	2	21.5	21.5	22.	21.	0.5	0.707	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-10/31/94	2	6.42	6.42	6.54	6.3	0.029	0.17	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-10/31/94	2	6.404	6.404	6.54	6.3	0.029	0.171	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-10/31/94	2	0.395	0.395	0.501	0.288	0.023	0.15	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-10/31/94	2	20.5	20.5	21.	20.	0.5	0.707	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-10/31/94	2	55.75	55.75	57.9	53.6	9.245	3.041	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	2	1.2	1.2	1.3	1.1	0.02	0.141	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	2	1.6	1.6	1.67	1.53	0.01	0.099	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	2	0.395	0.395	0.4	0.39	0.	0.007	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	2	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	2	3.2	3.2	3.3	3.1	0.02	0.141	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	2	7.95	7.95	8.1	7.8	0.045	0.212	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	2	1.05	1.05	2.	0.1	1.805	1.344	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	2	0.4	0.4	0.51	0.29	0.024	0.156	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0525

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	2	1	0.50	1	0	0.00	1	1	1.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0526

NPS Station ID: SHEN0526
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.620892/ -78.351337

Depth of Water: 0
 Elevation: 2340
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF10 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.16 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0526

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-04/23/94	2	8.	8.	11.	5.	18.	4.243	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-04/23/94	2	27.5	27.5	28.	27.	0.5	0.707	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-04/23/94	2	6.56	6.56	6.69	6.43	0.034	0.184	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-04/23/94	2	6.541	6.541	6.69	6.43	0.035	0.186	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-04/23/94	2	0.288	0.288	0.372	0.204	0.014	0.118	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-04/23/94	2	26.5	26.5	27.	26.	0.5	0.707	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-04/23/94	2	68.8	68.8	72.5	65.1	27.38	5.233	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-04/23/94	2	1.95	1.95	2.	1.9	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-04/23/94	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-04/23/94	2	1.305	1.305	1.36	1.25	0.006	0.078	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-04/23/94	2	0.185	0.185	0.19	0.18	0.	0.007	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-04/23/94	2	0.85	0.85	1.	0.7	0.045	0.212	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-04/23/94	2	5.6	5.6	5.7	5.5	0.02	0.141	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-04/23/94	2	8.25	8.25	9.1	7.4	1.445	1.202	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-04/23/94	2	1.9	1.9	2.8	1.	1.62	1.273	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-04/23/94	2	0.295	0.295	0.38	0.21	0.014	0.12	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0526

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	2	0	0.00	1	0	0.00				1	0	0.00			
	Other-Lo Lim.	6.5	2	1	0.50	1	0	0.00				1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00	1	1	1.00				1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	250.	2	0	0.00	1	0	0.00				1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00				1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00	1	0	0.00				1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0527

NPS Station ID: SHEN0527
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.621255/ -78.352170

Depth of Water: 0
 Elevation: 2290
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF09 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.18 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0527

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-04/23/94	3	11.	10.333	15.	5.	25.333	5.033	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-04/23/94	3	27.	28.333	31.	27.	5.333	2.309	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-04/23/94	3	6.46	6.507	6.61	6.45	0.008	0.09	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-04/23/94	3	6.46	6.501	6.61	6.45	0.008	0.09	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-04/23/94	3	0.347	0.316	0.355	0.245	0.004	0.061	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-04/23/94	3	26.	27.333	30.	26.	5.333	2.309	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-04/23/94	3	52.	52.3	54.6	50.3	4.69	2.166	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-04/23/94	3	2.	2.	2.	2.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-04/23/94	3	0.7	0.733	0.8	0.7	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-04/23/94	3	1.42	1.437	1.59	1.3	0.021	0.146	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-04/23/94	3	0.23	0.223	0.23	0.21	0.	0.012	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-04/23/94	3	0.7	0.767	0.9	0.7	0.013	0.115	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-04/23/94	3	5.6	5.633	5.8	5.5	0.023	0.153	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-04/23/94	3	9.	8.667	9.5	7.5	1.083	1.041	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-04/23/94	3	1.3	1.667	2.5	1.2	0.523	0.723	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-04/23/94	3	0.35	0.32	0.36	0.25	0.004	0.061	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0527

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	3	0	0.00	2	0	0.00				1	0	0.00			
	Other-Lo Lim.	6.5	3	2	0.67	2	1	0.50				1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	3	3	1.00	2	2	1.00				1	1	1.00			
	Fresh Acute	860.	3	0	0.00	2	0	0.00				1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
	Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	3	0	0.00	2	0	0.00				1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	3	0	0.00	2	0	0.00				1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0528

NPS Station ID: SHEN0528
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.621338/ -78.353170

Depth of Water: 0
 Elevation: 2260
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF07 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.44 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0528

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	4	11.5	11.5	16.	7.	15.	3.873	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	4	21.5	21.75	23.	21.	0.917	0.957	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.175	6.185	6.25	6.14	0.002	0.048	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.175	6.183	6.25	6.14	0.002	0.048	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-10/31/94	4	0.669	0.656	0.724	0.562	0.005	0.07	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-10/31/94	4	21.	21.25	23.	20.	2.25	1.5	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-10/31/94	4	44.2	41.1	47.	29.	68.74	8.291	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	4	1.3	1.275	1.3	1.2	0.003	0.05	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	4	0.4	0.425	0.5	0.4	0.002	0.05	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	4	1.54	1.528	1.63	1.4	0.01	0.098	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	4	0.365	0.372	0.42	0.34	0.001	0.036	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	4	2.	1.75	2.	1.	0.25	0.5	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	4	3.35	3.375	3.5	3.3	0.009	0.096	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	4	7.95	7.8	8.5	6.8	0.513	0.716	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	4	2.	1.775	2.2	0.9	0.376	0.613	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	4	0.675	0.663	0.73	0.57	0.005	0.07	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0528

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0529

NPS Station ID: SHEN0529
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.622115/ -78.353170

Depth of Water: 0
 Elevation: 2220
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF06 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.99 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0529

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	4	11.5	11.375	16.	6.5	16.563	4.07	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	4	24.	24.25	26.	23.	1.583	1.258	**	**	**	**
00400 PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.335	6.315	6.5	6.09	0.029	0.17	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.334	6.289	6.5	6.09	0.03	0.173	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-10/31/94	4	0.463	0.514	0.813	0.316	0.045	0.212	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-10/31/94	4	23.5	24.	26.	23.	2.	1.414	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-10/31/94	4	35.75	36.6	42.6	32.3	21.727	4.661	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	4	1.6	1.6	1.7	1.5	0.007	0.082	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	4	0.55	0.55	0.6	0.5	0.003	0.058	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	4	1.53	1.5	1.58	1.36	0.011	0.105	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	4	0.315	0.315	0.33	0.3	0.	0.017	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	4	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	4	4.4	4.375	4.6	4.1	0.049	0.222	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	4	8.45	8.225	8.9	7.1	0.609	0.78	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	4	1.85	1.7	2.1	1.	0.273	0.523	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	4	0.465	0.518	0.82	0.32	0.046	0.214	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0529

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0530

NPS Station ID: SHEN0530
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.622337/ -78.267226

Depth of Water: 0
 Elevation: 1280
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR21
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR21 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.48 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0530

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.83	6.83	6.83	6.83	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.83	6.83	6.83	6.83	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.148	0.148	0.148	0.148	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	16.2	16.2	16.2	16.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.35	1.35	1.35	1.35	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	9.1	9.1	9.1	9.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0530

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0531

NPS Station ID: SHEN0531
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.622531/ -78.353670

Depth of Water: 0
 Elevation: 2180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION NF05 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.01 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0531

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	4	11.75	11.625	16.	7.	14.563	3.816	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	4	25.	25.25	27.	24.	1.583	1.258	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.395	6.352	6.47	6.15	0.02	0.141	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.394	6.334	6.47	6.15	0.02	0.143	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-10/31/94	4	0.403	0.463	0.708	0.339	0.028	0.167	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-10/31/94	4	24.5	24.75	27.	23.	2.917	1.708	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-10/31/94	4	32.	36.925	53.7	30.	127.883	11.309	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	4	1.7	1.7	1.8	1.6	0.007	0.082	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	4	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	4	1.57	1.538	1.64	1.37	0.015	0.121	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	4	0.31	0.308	0.32	0.29	0.	0.015	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	4	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	4	4.6	4.55	4.8	4.2	0.07	0.265	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	4	8.7	8.525	9.4	7.3	0.776	0.881	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	4	1.85	1.675	2.	1.	0.223	0.472	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	4	0.405	0.465	0.71	0.34	0.028	0.167	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0531

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Other-Lo Lim.	6.5	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00941	CHLORIDE, DISSOLVED IN WATER	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0532

NPS Station ID: SHEN0532
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.623726/ -78.300781

Depth of Water: 0
 Elevation: 2210
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR09 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.96 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0532

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.73	6.73	6.73	6.73	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.186	0.186	0.186	0.186	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	50.4	50.4	50.4	50.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.12	1.12	1.12	1.12	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0532

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0533

NPS Station ID: SHEN0533
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.624170/ -78.296031

Depth of Water: 0
 Elevation: 2180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR07 IS LOCATED ON THE OLD RAG MOUNTAIN VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.37 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0533

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.84	6.84	6.84	6.84	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.84	6.84	6.84	6.84	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.145	0.145	0.145	0.145	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	67.	67.	67.	67.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.19	1.19	1.19	1.19	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0533

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0534

NPS Station ID: SHEN0534
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.625115/ -78.297782

Depth of Water: 0
 Elevation: 2200
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR08 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.20 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0534

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.83	6.83	6.83	6.83	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.83	6.83	6.83	6.83	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.148	0.148	0.148	0.148	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	45.4	45.4	45.4	45.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.13	1.13	1.13	1.13	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.34	0.34	0.34	0.34	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0534

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0535

NPS Station ID: SHEN0535
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.625226/ -78.355782

Depth of Water: 0
 Elevation: 1920
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF04 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.24 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0535

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	4	12.25	12.125	17.	7.	17.063	4.131	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	4	26.5	26.5	28.	25.	1.667	1.291	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.495	6.523	6.7	6.4	0.017	0.13	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.494	6.509	6.7	6.4	0.017	0.131	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-10/31/94	4	0.321	0.31	0.398	0.2	0.007	0.085	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-10/31/94	4	25.5	25.75	28.	24.	2.917	1.708	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-10/31/94	4	45.75	47.625	78.7	20.3	714.249	26.725	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	4	1.75	1.775	1.9	1.7	0.009	0.096	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	4	0.6	0.625	0.7	0.6	0.002	0.05	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	4	1.58	1.555	1.68	1.38	0.017	0.13	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	4	0.33	0.33	0.34	0.32	0.	0.008	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	4	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	4	4.8	4.875	5.4	4.5	0.149	0.386	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	4	8.75	8.625	9.7	7.3	0.982	0.991	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	4	2.1	1.85	2.2	1.	0.323	0.569	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	4	0.325	0.313	0.4	0.2	0.007	0.085	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0535

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	4	2	0.50	2	1	0.50	1	0	0.00	1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0536

NPS Station ID: SHEN0536
 Location: Hazel River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.625309/ -78.269059

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F089
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0536

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/94-08/11/94	4	14.3	15.25	18.5	13.9	4.73	2.175	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/11/94-08/11/94	3	11.	10.667	11.	10.	0.333	0.577	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/11/94-08/11/94	3	8.1	8.247	8.89	7.75	0.341	0.584	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/11/94-08/11/94	3	8.1	8.046	8.89	7.75	0.402	0.634	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/94-08/11/94	3	0.008	0.009	0.018	0.001	0.	0.008	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0536

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00					
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0537

NPS Station ID: SHEN0537
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.625476/ -78.296727

Depth of Water: 0
 Elevation: 2180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR10 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.28 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0537

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.86	6.86	6.86	6.86	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.86	6.86	6.86	6.86	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.138	0.138	0.138	0.138	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	58.7	58.7	58.7	58.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.16	1.16	1.16	1.16	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0537

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0538

NPS Station ID: SHEN0538
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.625587/ -78.269892

Depth of Water: 0
 Elevation: 1380
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR22
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR22 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.99 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0538

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.155	0.155	0.155	0.155	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	12.8	12.8	12.8	12.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.31	1.31	1.31	1.31	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0538

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0539

NPS Station ID: SHEN0539
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.626809/ -78.290753

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F139
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0539

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/22/94-08/22/94	8	9.95	11.55	16.4	9.9	8.963	2.994	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/22/94-08/22/94	6	9.	9.	9.	9.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/22/94-08/22/94	6	8.01	7.937	8.02	7.78	0.015	0.121	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/22/94-08/22/94	6	8.01	7.922	8.02	7.78	0.015	0.123	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/22/94-08/22/94	6	0.01	0.012	0.017	0.01	0.	0.004	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0539

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	6	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	6	0	0.00	6	0	0.00					
	Other-Lo Lim.	6.5	6	0	0.00	6	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0540

NPS Station ID: SHEN0540
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.626837/ -78.357031

Depth of Water: 0
 Elevation: 1820
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF03 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.41 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0540

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	4	12.75	12.625	18.	7.	21.229	4.608	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	4	25.5	26.	29.	24.	4.667	2.16	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.485	6.37	6.53	5.98	0.068	0.261	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.485	6.302	6.53	5.98	0.074	0.273	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-10/31/94	4	0.327	0.499	1.047	0.295	0.134	0.366	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-10/31/94	4	25.	25.5	29.	23.	7.	2.646	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-10/31/94	4	23.6	24.225	32.8	16.9	49.916	7.065	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	4	1.75	1.75	1.9	1.6	0.017	0.129	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	4	0.6	0.625	0.7	0.6	0.002	0.05	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	4	1.63	1.605	1.73	1.43	0.017	0.13	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	4	0.355	0.353	0.37	0.33	0.	0.017	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	4	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	4	4.65	4.7	5.1	4.4	0.087	0.294	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	4	9.35	9.2	10.3	7.8	1.073	1.036	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	4	1.45	1.45	2.	0.9	0.337	0.58	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	4	0.33	0.505	1.06	0.3	0.137	0.37	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0540

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Other-Lo Lim.	6.5	4	3	0.75	2	1	0.50	1	1	1.00	1	1	1.00	1	1	1.00	
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00	1	1	1.00	
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0541

NPS Station ID: SHEN0541
 Location: S F DRY RUN NEAR FAIRVIEW, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005005600.00
 Description:

LAT/LON: 38.626948/ -78.389727

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 10.86

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01630100
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0541

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/81-06/24/82	6	14.	11.667	19.5	2.	47.267	6.875	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/10/81-06/24/82	6	0.35	0.937	4.	0.02	2.303	1.518	**	**	**	**
00400	PH (STANDARD UNITS)	08/10/81-06/24/82	5	6.6	6.7	7.2	6.3	0.11	0.332	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/10/81-06/24/82	5	6.6	6.611	7.2	6.3	0.12	0.346	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/10/81-06/24/82	5	0.251	0.245	0.501	0.063	0.027	0.163	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/10/81-06/24/82	6	6.55	6.583	7.	6.3	0.062	0.248	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/10/81-06/24/82	6	6.547	6.531	7.	6.3	0.065	0.255	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/10/81-06/24/82	6	0.284	0.294	0.501	0.1	0.021	0.143	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/10/81-06/24/82	6##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/10/81-06/24/82	6	0.2	0.317	0.6	0.2	0.034	0.183	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/10/81-06/24/82	6	10.	9.833	15.	2.	18.567	4.309	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/10/81-06/24/82	6	2.75	2.95	3.9	2.5	0.255	0.505	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/10/81-06/24/82	6	0.8	0.933	1.3	0.8	0.047	0.216	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/10/81-06/24/82	6	1.75	1.817	2.2	1.5	0.078	0.279	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/10/81-06/24/82	6	0.2	0.217	0.3	0.2	0.002	0.041	**	**	**	**
00932	SODIUM, PERCENT	08/10/81-06/24/82	6	25.5	25.167	27.	22.	2.967	1.722	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/10/81-06/24/82	6	0.35	0.517	1.4	0.3	0.19	0.436	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/10/81-06/24/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/10/81-06/24/82	6	6.	6.167	7.	5.	0.567	0.753	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/10/81-06/24/82	6	9.6	10.2	13.	8.4	3.676	1.917	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	08/10/81-05/20/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0541

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	5	1	0.20	2	1	0.50	1	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	3	0.50	2	1	0.50	2	2	1.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0541

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0542

NPS Station ID: SHEN0542
 Location: RT. 640 BRIDGE (PAGE COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070005005000.00

LAT/LON: 38.627781/ -78.468616

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BHKS009.58
 Within Park Boundary: No

Date Created: 07/27/91

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 3.50
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: HAWKSVILLE CREEK SECTION: 02 TOPO MAP #: 0035 TOPO MAP NAME: LURAY, VIRGINIA

Parameter Inventory for Station: SHEN0542

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12/18/91-07/21/97	16	10.45	13.188	26.7	76.932	8.771	2.65	4.775	21.425	25.51
00070	TURBIDITY, (JACKSON CANDLE UNITS)	12/18/91-04/01/92	3	1.9	1.867	2.4	0.303	0.551	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/06/94-07/21/97	5	4.4	5.42	9.9	13.322	3.65	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	12/18/91-11/05/92	5	10.	16.	32.	122.5	11.068	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12/18/91-07/21/97	16	126.5	140.375	248.	3142.383	56.057	82.8	93.25	201.75	223.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	01/28/92-08/28/96	13	10.5	11.146	16.5	6.988	2.643	8.04	9.1	12.9	15.86
00300	OXYGEN, DISSOLVED MG/L	12/18/91-04/01/92	2	13.4	13.4	14.1	0.98	0.99	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	12/18/91-07/21/97	16	1.	1.363	4.	0.793	0.891	0.5	1.	2.	2.67
00340	COD, .25N K2CR2O7 MG/L	12/18/91-07/21/97	16	7.	7.063	13.	10.063	3.172	1.7	6.	8.75	12.3
00400	PH (STANDARD UNITS)	12/18/91-07/21/97	16	8.1	8.156	9.5	0.509	0.714	7.18	7.575	8.6	9.22
00400	CONVERTED PH (STANDARD UNITS)	12/18/91-07/21/97	16	8.089	7.696	9.5	0.735	0.858	7.18	7.575	8.6	9.22
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/18/91-07/21/97	16	0.008	0.02	0.126	0.	0.001	0.032	0.001	0.003	0.028
00403	PH, LAB, STANDARD UNITS SU	12/18/91-07/21/97	16	7.35	7.3	8.	0.236	0.486	6.57	6.9	7.775	7.93
00403	CONVERTED PH, LAB, STANDARD UNITS	12/18/91-07/21/97	16	7.347	7.06	8.	0.297	0.545	6.57	6.9	7.775	7.93
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/18/91-07/21/97	16	0.045	0.087	0.316	0.009	0.094	0.012	0.017	0.126	0.271
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/18/91-07/21/97	16	40.	48.938	95.	741.396	27.229	21.7	24.	76.5	92.9
00500	RESIDUE, TOTAL (MG/L)	12/18/91-07/20/92	4	95.	92.25	119.	702.917	26.513	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/18/91-07/20/92	4	26.	25.	19.	18.667	4.32	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/18/91-07/20/92	4	69.	67.25	90.	500.25	22.366	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/18/91-07/21/97	15	4.	5.433	26.	38.888	6.236	1.5	1.5	6.	16.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/18/91-07/21/97	15 ##	1.5	1.6	4.	0.543	0.737	1.	1.	1.5	2.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/18/91-07/21/97	15	3.	4.367	22.	27.945	5.286	1.	1.5	5.	13.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12/18/91-07/21/97	16 ##	0.02	0.039	0.08	0.001	0.024	0.02	0.02	0.058	0.08
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/21/97	16	0.01	0.017	0.05	0.005	0.	0.014	0.005	0.028	0.043
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12/18/91-07/21/97	16	1.415	1.413	2.76	0.5	0.297	0.545	0.703	1.005	1.675
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12/18/91-07/21/97	16	0.2	0.306	1.1	0.1	0.066	0.257	0.1	0.125	0.375
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12/18/91-07/21/97	16 ##	0.05	0.066	0.1	0.005	0.001	0.024	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12/18/91-04/01/92	3	0.01	0.008	0.01	0.	0.003	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12/18/91-08/28/96	15	1.7	2.273	5.1	1.582	1.258	0.8	1.5	3.4	4.32
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12/18/91-07/21/97	16	50.5	60.188	108.	785.629	28.029	33.4	35.5	93.5	101.
00940	CHLORIDE, TOTAL IN WATER MG/L	12/18/91-07/21/97	16	4.	4.344	7.	2.757	1.661	2.35	3.	6.	7.
00945	SULFATE, TOTAL (MG/L AS SO4)	12/18/91-07/21/97	16	7.5	8.125	12.	2.917	1.708	6.	7.	9.75	10.6
00951	FLUORIDE, TOTAL (MG/L AS F)	12/18/91-04/15/93	7 ##	0.15	0.131	0.25	0.009	0.096	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0542

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00955	SILICA, DISSOLVED (MG/L AS SI02)	12/18/91-01/27/93	6	10.65	10.633	11.3	9.8	0.247	0.497	**	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/20/92-08/05/96	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/20/92-08/05/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/05/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/05/96	1	24.	24.	24.	24.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/20/92-08/05/96	1	39.	39.	39.	39.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/20/92-08/05/96	1	21.	21.	21.	21.	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/05/96-08/05/96	1	887.	887.	887.	887.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/20/92-08/05/96	1	18.	18.	18.	18.	0.	0.	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/20/92-08/05/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/20/92-08/05/96	1	100.	100.	100.	100.	0.	0.	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/05/96-08/05/96	1	28.	28.	28.	28.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/05/96-08/05/96	1	24200.	24200.	24200.	24200.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/20/92-08/05/96	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/05/96-08/05/96	1	41700.	41700.	41700.	41700.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/21/97	16	400.	815.625	2800.	50.	758239.583	870.77	50.	150.	1375.	2450.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	12/18/91-07/21/97	16	2.602	2.617	3.447	1.699	0.346	0.588	1.699	2.119	3.132	3.387
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			413.901								
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/20/92-08/05/96	1##	55.	55.	55.	55.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/20/92-08/05/96	1##	30.	30.	30.	30.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/05/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/20/92-08/05/96	1##	115.	115.	115.	115.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/20/92-08/05/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/20/92-08/05/96	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	07/20/92-07/21/97	13	0.02	0.025	0.08	0.005	0.	0.022	0.005	0.01	0.04	0.068
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/20/92-08/05/96	1##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/20/92-08/05/96	1##	10.	10.	10.	10.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/20/92-08/05/96	1##	55.	55.	55.	55.	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	07/20/92-06/06/94	8	4.35	6.2	16.	1.3	27.991	5.291	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0542

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	3	0	0.00				2	0	0.00	1	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	5	0	0.00	4	0	0.00	1	0	0.00						
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	13	0	0.00	5	0	0.00	6	0	0.00	2	0	0.00			
00300	OXYGEN, DISSOLVED	4.	2	0	0.00				1	0	0.00	1	0	0.00			
00400	PH	9.	16	3	0.19	6	0	0.00	7	2	0.29	3	1	0.33			
		6.5	16	0	0.00	6	0	0.00	7	0	0.00	3	0	0.00			
00403	PH, LAB	9.	16	0	0.00	6	0	0.00	7	0	0.00	3	0	0.00			
		6.5	16	1	0.06	6	0	0.00	7	1	0.14	3	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	16	0	0.00	6	0	0.00	7	0	0.00	3	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	16	0	0.00	6	0	0.00	7	0	0.00	3	0	0.00			
00940	CHLORIDE,TOTAL IN WATER	860.	16	0	0.00	6	0	0.00	7	0	0.00	3	0	0.00			
		250.	16	0	0.00	6	0	0.00	7	0	0.00	3	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	16	0	0.00	6	0	0.00	7	0	0.00	3	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	7	0	0.00	1	0	0.00	4	0	0.00	2	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	16	12	0.75	6	5	0.83	7	5	0.71	3	2	0.67			
82078	TURBIDITY, FIELD	50.	8	0	0.00	2	0	0.00	4	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0543

NPS Station ID: SHEN0543
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.628670/ -78.288588

Depth of Water: 0
 Elevation: 2000
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR30
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR30 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.37 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0543

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.79	6.79	6.79	6.79	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.79	6.79	6.79	6.79	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.162	0.162	0.162	0.162	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	101.9	101.9	101.9	101.9	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.17	1.17	1.17	1.17	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0543

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0544

NPS Station ID: SHEN0544
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.629753/ -78.272866

Depth of Water: 0
 Elevation: 1450
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR23
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR23 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.25 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0544

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.141	0.141	0.141	0.141	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	114.5	114.5	114.5	114.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.28	1.28	1.28	1.28	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0544

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00						1	0	0.00				
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00						1	1	1.00				
	Fresh Acute	860.	1	0	0.00						1	0	0.00				
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0545

NPS Station ID: SHEN0545
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.629781/ -78.358616

Depth of Water: 0
 Elevation: 1700
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF02 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.70 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0545

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	4	12.5	12.875	19.5	7.	27.729	5.266	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	4	27.5	27.75	31.	25.	6.25	2.5	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.43	6.432	6.6	6.27	0.018	0.136	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.43	6.417	6.6	6.27	0.019	0.137	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-10/31/94	4	0.372	0.383	0.537	0.251	0.014	0.118	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-10/31/94	4	26.5	27.	31.	24.	8.667	2.944	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-10/31/94	4	34.5	35.975	51.2	23.7	158.869	12.604	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	4	1.9	1.9	2.1	1.7	0.033	0.183	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	4	0.65	0.65	0.7	0.6	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	4	1.675	1.685	1.94	1.45	0.042	0.204	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	4	0.395	0.403	0.48	0.34	0.003	0.059	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	4	1.	1.	1.	0.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	4	4.8	4.85	5.4	4.4	0.17	0.412	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	4	9.8	9.85	11.8	8.	2.41	1.552	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	4	1.75	1.675	2.2	1.	0.289	0.538	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	4	0.375	0.385	0.54	0.25	0.014	0.12	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0545

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	4	3	0.75	2	1	0.50	1	1	1.00	1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0546

NPS Station ID: SHEN0546
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.630087/ -78.295115

Depth of Water: 0
 Elevation: 2200
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR32
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR32 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.66 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0546

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.68	6.68	6.68	6.68	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.68	6.68	6.68	6.68	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.209	0.209	0.209	0.209	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	121.2	121.2	121.2	121.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.24	1.24	1.24	1.24	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.21	0.21	0.21	0.21	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0546

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0547

NPS Station ID: SHEN0547
 Location: Hazel River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.630170/ -78.294782

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F090
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0547

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/22/94-07/02/96	2	17.	17.	17.	0.	0.	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/02/96-07/02/96	1	15.	15.	15.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/22/94-07/02/96	4	10.5	10.325	11.	9.3	0.689	0.83	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/02/96-07/02/96	1	6.55	6.55	6.55	6.55	0.	0.	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/02/96-07/02/96	1	6.55	6.55	6.55	6.55	0.	0.	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/02/96-07/02/96	1	0.282	0.282	0.282	0.282	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	07/02/96-07/02/96	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**
83509	STREAM, WIDTH METER	07/02/96-07/02/96	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	07/02/96-07/02/96	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0547

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4	0	0.00	4	0	0.00										
00406	PH, FIELD	Fresh Chronic	9.	1	0.00	1	0	0.00										
		Other-Lo Lim.	6.5	1	0.00	1	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0548

NPS Station ID: SHEN0548
 Location: Hazel River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.630170/ -78.295253

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_LTEM_2L302
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. the park's ongoing Long-Term Ecological Monitoring Program. Only the collected using a variety of probes; meters; and kits including: information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA STORET by the National Park Service Water Resources Division; 1201 Oak

Parameter Inventory for Station: SHEN0548

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/89-05/29/97	33	12.7	13.542	18.7	9.3	6.541	2.557	11.	11.9	16.	17.6
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/28/95-05/29/97	2	16.	16.	16.	16.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/26/89-05/29/97	28	10.	9.786	11.	8.1	0.632	0.795	8.4	9.225	10.	11.
00406 PH, FIELD, STANDARD UNITS SU	05/22/91-05/29/97	10	6.905	6.866	7.93	5.71	0.49	0.7	5.76	6.263	7.33	7.912
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/22/91-05/29/97	10	6.834	6.422	7.93	5.71	0.709	0.842	5.76	6.262	7.33	7.912
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/91-05/29/97	10	0.147	0.379	1.95	0.012	0.349	0.591	0.012	0.053	0.548	1.817
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/28/95-05/29/97	2	10.	10.	10.	10.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0548

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	28	0	0.00	14	0	0.00	14	0	0.00	14	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	10	0	0.00	6	0	0.00	4	0	0.00	4	0	0.00						
	Other-Lo Lim.	6.5	10	3	0.30	6	2	0.33	4	1	0.25									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0548

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/89-05/29/97	18	15.25	14.717	18.7	11.4	7.047	2.655	11.76	11.975	17.	18.07
00300 OXYGEN, DISSOLVED MG/L	06/26/89-05/29/97	14	9.25	9.593	11.	8.1	1.119	1.058	8.25	8.85	11.	11.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0548

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/89-05/29/97	15	12.5	12.133	16.	9.3	2.492	1.579	9.72	11.	12.7	14.5
00300 OXYGEN, DISSOLVED MG/L	06/26/89-05/29/97	14	10.	9.979	10.8	9.4	0.114	0.338	9.5	9.825	10.	10.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0549

NPS Station ID: SHEN0549
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.630559/ -78.273810

Depth of Water: 0
 Elevation: 1490
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR24
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR24 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0549

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	111.2	111.2	111.2	111.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.52	1.52	1.52	1.52	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.28	0.28	0.28	0.28	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	9.5	9.5	9.5	9.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0549

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0550

NPS Station ID: SHEN0550
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.630781/ -78.303588

Depth of Water: 0
 Elevation: 2300
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR31
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR31 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.92 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0550

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	120.	120.	120.	120.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.27	1.27	1.27	1.27	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0550

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0551

NPS Station ID: SHEN0551
 Location: Hazel River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.631143/ -78.272809

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F052
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0551

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/94-08/11/94	1	18.	18.	18.	18.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0552

NPS Station ID: SHEN0552
 Location: North Fork Dry Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.631531/ -78.359281

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_LTEM_2L308
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0552

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/07/89-05/14/97	37	14.7	14.505	21.7	8.1	9.711	3.116	10.12	12.5	16.	19.1
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/14/97	4	24.5	24.5	26.	23.	1.667	1.291	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/07/89-05/14/97	29	9.	9.262	12.	5.	2.389	1.546	8.	8.9	10.05	11.
00406 PH, FIELD, STANDARD UNITS SU	09/06/90-05/14/97	14	6.5	6.539	7.14	5.98	0.112	0.334	6.065	6.303	6.743	7.1
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/06/90-05/14/97	14	6.499	6.429	7.14	5.98	0.125	0.354	6.065	6.302	6.743	7.1
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/06/90-05/14/97	14	0.317	0.373	1.047	0.072	0.075	0.274	0.08	0.183	0.508	0.878
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/14/97	4	15.5	16.5	20.	15.	5.667	2.38	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0552

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	29	0	0.00	13	0	0.00	16	0	0.00	16	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	14	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	14	7	0.50	7	5	0.71	7	2	0.29						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0552

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/07/89-05/14/97	18	15.9	16.539	21.7	12.8	4.652	2.157	14.51	15.075	18.125	19.72
00300 OXYGEN, DISSOLVED MG/L	06/07/89-05/14/97	13	8.8	8.169	9.5	5.	2.164	1.471	5.	8.	9.	9.3

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0552

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/07/89-05/14/97	19	13.	12.579	19.8	8.1	6.975	2.641	9.2	10.5	14.2	15.
00300 OXYGEN, DISSOLVED MG/L	06/07/89-05/14/97	16	10.	10.15	12.	9.	0.852	0.923	9.	9.2	10.95	11.65

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0553

NPS Station ID: SHEN0553
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.631587/ -78.272670

Depth of Water: 0
 Elevation: 1500
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR25
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR25 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.55 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA, WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0553

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.141	0.141	0.141	0.141	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	112.	112.	112.	112.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.26	1.26	1.26	1.26	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.9	8.9	8.9	8.9	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.14	0.14	0.14	0.14	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0553

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0554

NPS Station ID: SHEN0554
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.632253/ -78.358948

Depth of Water: 0
 Elevation: 1620
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NF01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NF01 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.17 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0554

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/92-10/31/94	4	14.	13.5	19.	7.	25.	5.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/92-10/31/94	4	27.5	27.5	31.	24.	8.333	2.887	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.573	6.505	6.66	6.21	0.042	0.204	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/06/92-10/31/94	4	6.573	6.465	6.66	6.21	0.044	0.209	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/92-10/31/94	4	0.268	0.343	0.617	0.219	0.034	0.185	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	07/06/92-10/31/94	4	26.5	26.75	31.	23.	10.917	3.304	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	07/06/92-10/31/94	4	44.05	43.875	61.2	26.2	288.583	16.988	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	07/06/92-10/31/94	4	1.85	1.875	2.1	1.7	0.029	0.171	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	07/06/92-10/31/94	4	0.65	0.65	0.7	0.6	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	07/06/92-10/31/94	4	1.78	1.765	1.96	1.54	0.031	0.175	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	07/06/92-10/31/94	4	0.425	0.425	0.5	0.35	0.004	0.062	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	07/06/92-10/31/94	4	1.	0.975	1.	0.9	0.002	0.05	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	07/06/92-10/31/94	4	4.65	4.75	5.2	4.5	0.097	0.311	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	07/06/92-10/31/94	4	10.6	10.45	11.8	8.8	1.53	1.237	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	07/06/92-10/31/94	4	1.45	1.55	2.3	1.	0.337	0.58	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	07/06/92-10/31/94	4	0.265	0.343	0.62	0.22	0.035	0.187	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0554

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Other-Lo Lim.	6.5	4	1	0.25	2	1	0.50	1	0	0.00	1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS																	
	Other-Lo Lim.	200.	4	4	1.00	2	2	1.00	1	1	1.00	1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER																	
	Fresh Acute	860.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)																	
	Drinking Water	250.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)																	
	Drinking Water	44.	4	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0555

NPS Station ID: SHEN0555
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.632309/ -78.310254

Depth of Water: 0
 Elevation: 2440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR11 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.25 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0555

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	113.7	113.7	113.7	113.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.31	1.31	1.31	1.31	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.37	0.37	0.37	0.37	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0555

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0556

NPS Station ID: SHEN0556
 Location: North Fork Dry Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.632420/ -78.358671

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F131
 Within Park Boundary: Yes

Date Created: 10/13/99

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0556

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/01/94-06/18/98	6	15.7	15.733	19.	13.7	4.039	2.01	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/19/96-06/18/98	3	23.	23.	24.	22.	1.	1.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/01/94-06/18/98	6	9.1	9.267	10.	9.	0.155	0.393	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/01/94-06/18/98	5	6.32	7.38	9.22	6.22	2.353	1.534	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/01/94-06/18/98	5	6.32	6.483	9.22	6.22	3.359	1.833	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/01/94-06/18/98	5	0.479	0.329	0.603	0.001	0.092	0.303	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/18/98-06/18/98	1	14.	14.	14.	14.	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	06/19/96-06/18/98	3	5.6	5.827	7.55	4.33	2.631	1.622	**	**	**
83509	STREAM, WIDTH METER	06/19/96-06/18/98	3	3.	3.033	3.3	2.8	0.063	0.252	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	06/19/96-06/18/98	3	0.03	0.03	0.04	0.02	0.	0.01	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0556

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00			
00406	PH, FIELD	Fresh Chronic	9.	5	1	0.20	2	1	0.50	3	0	0.00						
		Other-Lo Lim.	6.5	5	3	0.60	2	0	0.00	3	3	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0557

NPS Station ID: SHEN0557
 Location: NF OF THE DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.633254/ -78.358503

Depth of Water: 0
 Elevation: 1600
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_NFDR
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION NFDR IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.31 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	484	10.	10.605	23.	0.5	27.768	5.27	4.	6.	15.5	18.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	513	27.	27.53	41.	18.	14.086	3.753	23.	25.	30.	33.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	513	6.46	6.498	7.22	5.92	0.046	0.214	6.274	6.37	6.565	6.84
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	513	6.46	6.452	7.22	5.92	0.048	0.219	6.274	6.37	6.565	6.84
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	513	0.347	0.353	1.202	0.06	0.023	0.153	0.145	0.272	0.427	0.532
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/87-07/28/97	513	26.	26.772	42.	18.	13.551	3.681	23.	24.	29.	32.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	513	59.5	68.452	246.1	-4.6	1473.826	38.39	34.94	41.9	84.4	119.38
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/28/97	10	0.95	1.16	2.	0.6	0.309	0.556	0.6	0.675	1.675	1.99
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	513	1.8	1.895	3.5	1.3	0.107	0.327	1.5	1.6	2.1	2.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	513	0.6	0.663	1.	0.5	0.012	0.11	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	513	1.75	1.772	2.76	1.28	0.039	0.196	1.55	1.63	1.89	2.04
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	513	0.4	0.416	0.75	0.26	0.007	0.084	0.32	0.36	0.46	0.53
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	513	1.	0.995	2.	0.7	0.014	0.119	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	513	4.7	4.76	6.9	2.1	0.279	0.528	4.2	4.4	5.1	5.5
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	513	10.1	10.385	20.6	6.9	1.971	1.404	8.84	9.5	11.1	12.16
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	04/30/96-07/28/97	8	6.968	7.145	11.003	4.361	4.594	2.143	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	513	1.6	1.656	8.9	0.	1.509	1.228	0.094	0.8	2.3	3.1
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	513	0.35	0.356	1.21	0.06	0.024	0.155	0.15	0.275	0.43	0.536

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0557

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	513	0	0.00	146	0	0.00	211	0	0.00	156	0	0.00			
	Other-Lo Lim.	6.5	513	327	0.64	146	104	0.71	211	136	0.64	156	87	0.56			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	513	508	0.99	146	146	1.00	211	211	1.00	156	151	0.97			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	513	0	0.00	146	0	0.00	211	0	0.00	156	0	0.00			
	Drinking Water	250.	513	0	0.00	146	0	0.00	211	0	0.00	156	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	513	0	0.00	146	0	0.00	211	0	0.00	156	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	513	0	0.00	146	0	0.00	211	0	0.00	156	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1987 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	41	11.	11.268	19.5	3.	27.951	5.287	5.	6.	16.25	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	41	25.	25.61	37.	20.	16.794	4.098	21.	23.	27.	33.
00400	PH (STANDARD UNITS)	41	6.36	6.343	6.5	6.13	0.009	0.093	6.21	6.27	6.425	6.45
00400	CONVERTED PH (STANDARD UNITS)	41	6.36	6.333	6.5	6.13	0.009	0.093	6.21	6.27	6.425	6.45
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	41	0.437	0.464	0.741	0.316	0.011	0.103	0.355	0.376	0.537	0.617
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	41	24.	24.829	36.	19.	16.195	4.024	20.2	22.	26.5	32.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	41	44.9	61.31	159.2	24.	1132.361	33.651	32.94	38.65	80.3	117.02
00915	CALCIUM, DISSOLVED (MG/L AS CA)	41	1.7	1.744	2.6	1.4	0.111	0.332	1.42	1.5	1.8	2.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	41	0.6	0.61	0.9	0.5	0.01	0.102	0.5	0.5	0.65	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	41	1.58	1.652	2.21	1.35	0.053	0.23	1.412	1.51	1.735	2.098
00935	POTASSIUM, DISSOLVED (MG/L AS K)	41	0.34	0.37	0.55	0.27	0.007	0.081	0.29	0.305	0.445	0.514
00941	CHLORIDE, DISSOLVED IN WATER MG/L	41	1.	0.954	1.	0.8	0.005	0.071	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	41	5.2	5.237	6.4	4.4	0.25	0.5	4.52	4.8	5.6	5.96
00955	SILICA, DISSOLVED (MG/L AS SI02)	41	9.3	10.032	20.6	7.	5.432	2.331	8.4	8.75	10.65	13.1
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	41	0.1	0.297	1.1	0.	0.148	0.385	0.	0.	0.55	0.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	41	0.44	0.469	0.75	0.32	0.011	0.104	0.36	0.38	0.54	0.62

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	44	8.5	9.195	21.	0.5	35.87	5.989	2.4	3.25	14.75	18.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	46	25.5	26.457	41.	20.	18.698	4.324	22.	23.	29.25	31.6
00400	PH (STANDARD UNITS)	46	6.425	6.415	6.6	6.2	0.007	0.081	6.307	6.365	6.47	6.512
00400	CONVERTED PH (STANDARD UNITS)	46	6.425	6.408	6.6	6.2	0.007	0.082	6.307	6.365	6.47	6.512
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	46	0.376	0.391	0.631	0.251	0.006	0.076	0.308	0.339	0.432	0.493
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	46	24.5	25.696	40.	19.	17.328	4.163	21.	22.	28.25	30.6
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	46	49.3	64.422	152.9	22.9	1091.915	33.044	31.52	38.7	89.	118.5
00915	CALCIUM, DISSOLVED (MG/L AS CA)	46	1.6	1.759	2.9	1.3	0.145	0.38	1.37	1.4	2.	2.33
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	46	0.6	0.622	1.	0.5	0.015	0.121	0.5	0.5	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	46	1.72	1.799	2.38	1.39	0.053	0.229	1.577	1.61	2.01	2.105
00935	POTASSIUM, DISSOLVED (MG/L AS K)	46	0.4	0.429	0.74	0.26	0.019	0.137	0.267	0.318	0.533	0.622
00941	CHLORIDE, DISSOLVED IN WATER MG/L	46	1.	1.009	2.	0.8	0.024	0.155	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	46	5.	5.072	5.9	4.4	0.157	0.396	4.57	4.8	5.3	5.73
00955	SILICA, DISSOLVED (MG/L AS SI02)	46	9.55	10.398	13.9	8.5	2.759	1.661	8.7	9.1	12.025	13.06
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	46	0.65	0.743	2.5	0.	0.499	0.706	0.	0.038	1.35	1.73
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	46	0.38	0.394	0.64	0.25	0.006	0.077	0.311	0.34	0.435	0.496

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	41	9.5	10.261	18.	2.	25.55	5.055	3.5	5.	14.75	17.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	50	25.	24.76	30.	18.	6.023	2.454	21.1	24.	26.	28.
00400	PH (STANDARD UNITS)	50	6.39	6.372	6.58	6.11	0.014	0.119	6.162	6.315	6.455	6.51
00400	CONVERTED PH (STANDARD UNITS)	50	6.39	6.355	6.58	6.11	0.014	0.12	6.162	6.315	6.455	6.51
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	50	0.407	0.441	0.776	0.263	0.017	0.132	0.309	0.351	0.484	0.689
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	50	24.	24.06	29.	18.	5.731	2.394	21.	23.	25.25	27.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	50	45.95	52.624	83.7	26.9	210.286	14.501	37.9	40.35	63.625	76.83
00915	CALCIUM, DISSOLVED (MG/L AS CA)	50	1.6	1.696	2.1	1.5	0.03	0.174	1.5	1.6	1.8	2.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	50	0.6	0.604	0.7	0.5	0.004	0.06	0.5	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	50	1.71	1.696	1.95	1.5	0.013	0.112	1.521	1.6	1.79	1.83
00935	POTASSIUM, DISSOLVED (MG/L AS K)	50	0.38	0.375	0.68	0.28	0.005	0.071	0.291	0.318	0.41	0.44

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	50	1.	1.016	2.	0.9	0.021	0.143	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	50	5.3	5.188	6.9	4.3	0.267	0.517	4.41	4.7	5.6
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	50	9.9	9.87	14.7	8.3	1.076	1.037	8.8	9.	10.425
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	50	0.7	1.056	3.7	0.	0.87	0.933	0.101	0.375	1.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	50	0.41	0.445	0.78	0.27	0.018	0.134	0.31	0.355	0.488

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	37	9.	9.77	17.5	3.	18.161	4.262	4.8	6.	12.75
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	49	30.	30.204	38.	23.	9.707	3.116	27.	28.5	31.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	49	6.39	6.396	6.8	5.97	0.023	0.15	6.21	6.32	6.46
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	49	6.39	6.371	6.8	5.97	0.023	0.152	6.21	6.32	6.46
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	49	0.407	0.425	1.072	0.158	0.023	0.151	0.263	0.347	0.479
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/87-07/28/97	49	29.	29.367	37.	22.	9.279	3.046	26.	28.	30.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	49	53.6	57.373	91.1	30.	210.209	14.499	44.3	46.8	67.85
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	49	2.	2.039	2.7	1.7	0.05	0.223	1.8	1.8	2.15
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	49	0.7	0.704	1.	0.6	0.009	0.093	0.6	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	49	1.76	1.761	2.01	1.54	0.009	0.094	1.63	1.715	1.825
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	49	0.39	0.4	0.56	0.33	0.002	0.046	0.35	0.37	0.425
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	49	1.	1.02	2.	1.	0.02	0.143	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	49	4.4	4.506	5.2	4.	0.091	0.302	4.2	4.25	4.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	49	9.9	10.039	11.9	8.7	0.403	0.635	9.4	9.6	10.6
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	49	3.1	3.565	8.9	1.6	2.138	1.462	2.1	2.4	4.25
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	49	0.41	0.429	1.08	0.16	0.023	0.152	0.27	0.35	0.48

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	48	10.25	11.071	20.5	3.	31.394	5.603	3.95	6.	16.875
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	49	31.	30.653	41.	25.	12.19	3.491	26.	27.	33.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	49	6.52	6.504	6.91	6.2	0.021	0.146	6.29	6.425	6.57
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	49	6.52	6.481	6.91	6.2	0.022	0.148	6.29	6.425	6.57
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	49	0.302	0.33	0.631	0.123	0.011	0.106	0.2	0.269	0.376
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/87-07/28/97	49	30.	30.	42.	25.	13.042	3.611	25.	26.	32.5
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	49	83.2	84.12	147.	25.4	1022.362	31.974	36.9	64.9	105.75
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	49	2.1	2.067	2.8	1.6	0.093	0.306	1.7	1.75	2.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	49	0.7	0.724	1.	0.6	0.01	0.101	0.6	0.6	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	49	1.99	1.949	2.28	1.63	0.041	0.203	1.67	1.745	2.13
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	49	0.46	0.464	0.65	0.33	0.006	0.079	0.35	0.39	0.515
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	49	1.	1.053	2.	0.9	0.06	0.246	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	49	4.5	4.622	5.6	4.3	0.095	0.308	4.4	4.4	4.65
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	49	11.2	11.261	13.9	8.9	1.976	1.406	9.7	9.9	12.45
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	49	2.4	2.443	7.8	0.9	1.212	1.101	1.3	1.9	2.6
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	49	0.3	0.333	0.64	0.12	0.012	0.108	0.2	0.275	0.38

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	48	9.25	10.083	23.	2.	29.355	5.418	3.9	6.	13.5	18.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	51	28.	28.51	34.	24.	10.215	3.196	25.	25.	31.	34.
00400	PH (STANDARD UNITS)	51	6.57	6.656	7.22	6.12	0.072	0.268	6.35	6.47	6.86	7.03
00400	CONVERTED PH (STANDARD UNITS)	51	6.57	6.58	7.22	6.12	0.078	0.278	6.35	6.47	6.86	7.03
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	51	0.269	0.263	0.759	0.06	0.023	0.152	0.093	0.138	0.339	0.447
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	51	28.	27.804	34.	24.	9.721	3.118	24.	25.	30.	32.8
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	51	53.7	71.878	187.8	28.7	1811.516	42.562	35.84	41.9	84.4	149.24
00915	CALCIUM, DISSOLVED (MG/L AS CA)	51	1.9	1.986	2.8	1.6	0.114	0.337	1.6	1.7	2.2	2.48
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	51	0.7	0.704	0.9	0.5	0.014	0.117	0.6	0.6	0.8	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	51	1.73	1.749	2.11	1.33	0.021	0.144	1.602	1.66	1.84	1.926
00935	POTASSIUM, DISSOLVED (MG/L AS K)	51	0.4	0.408	0.75	0.3	0.006	0.074	0.332	0.37	0.42	0.52
00941	CHLORIDE, DISSOLVED IN WATER MG/L	51	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	51	5.	4.986	6.3	3.7	0.271	0.521	4.12	4.8	5.2	5.58
00955	SILICA, DISSOLVED (MG/L AS SI02)	51	10.	10.008	11.8	8.1	0.578	0.76	9.	9.5	10.6	11.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	51	1.7	1.68	3.6	0.06	0.713	0.844	0.38	1.1	2.2	2.98
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	51	0.27	0.265	0.77	0.06	0.024	0.154	0.09	0.14	0.34	0.45

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	49	11.6	11.696	20.	2.	29.07	5.392	4.5	6.25	17.25	18.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	49	27.	27.776	39.	23.	9.303	3.05	24.	25.	30.	31.
00400	PH (STANDARD UNITS)	49	6.45	6.497	7.16	5.92	0.041	0.202	6.36	6.415	6.5	6.88
00400	CONVERTED PH (STANDARD UNITS)	49	6.45	6.456	7.16	5.92	0.042	0.206	6.36	6.415	6.5	6.88
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	49	0.355	0.35	1.202	0.069	0.026	0.16	0.132	0.316	0.385	0.437
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	49	26.	26.837	37.	23.	8.056	2.838	24.	24.5	29.	30.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	49	68.7	72.041	246.1	22.8	1650.259	40.623	35.3	52.65	78.7	99.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	49	1.9	1.878	2.8	1.5	0.061	0.248	1.6	1.7	2.	2.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	49	0.7	0.667	1.	0.5	0.007	0.085	0.6	0.6	0.7	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	49	1.76	1.78	2.76	1.4	0.057	0.238	1.49	1.61	1.9	2.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	49	0.42	0.424	0.58	0.31	0.005	0.072	0.33	0.37	0.49	0.52
00941	CHLORIDE, DISSOLVED IN WATER MG/L	49	1.	0.967	1.	0.8	0.003	0.055	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	49	4.6	4.586	5.7	2.1	0.271	0.52	4.4	4.4	4.8	5.
00955	SILICA, DISSOLVED (MG/L AS SI02)	49	10.3	10.488	17.2	7.9	2.338	1.529	8.8	9.4	11.3	12.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	49	2.2	2.331	4.	0.01	0.688	0.829	1.3	1.85	2.95	3.5
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	49	0.36	0.352	1.21	0.07	0.026	0.161	0.13	0.32	0.385	0.44

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	47	11.	11.426	19.	2.	25.076	5.008	4.8	7.5	16.	18.1
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	48	28.5	28.938	35.	24.	8.57	2.928	25.	27.	31.	33.1
00400	PH (STANDARD UNITS)	48	6.695	6.671	7.18	6.21	0.059	0.244	6.381	6.463	6.85	6.975
00400	CONVERTED PH (STANDARD UNITS)	48	6.694	6.606	7.18	6.21	0.064	0.252	6.381	6.462	6.85	6.975
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	48	0.202	0.248	0.617	0.066	0.019	0.136	0.106	0.141	0.345	0.417
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	48	28.	28.125	34.	23.	9.133	3.022	24.	26.	30.	32.1
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	48	88.7	99.404	235.4	31.9	2167.563	46.557	43.36	69.25	121.4	174.74
00915	CALCIUM, DISSOLVED (MG/L AS CA)	48	2.	2.071	2.9	1.6	0.108	0.328	1.69	1.9	2.275	2.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	48	0.7	0.729	1.	0.5	0.012	0.109	0.6	0.7	0.8	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	48	1.875	1.847	2.31	1.37	0.048	0.219	1.576	1.635	1.978	2.171
00935	POTASSIUM, DISSOLVED (MG/L AS K)	48	0.435	0.442	0.61	0.3	0.007	0.081	0.339	0.373	0.51	0.551

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	48	1.	0.942	1.	0.7	0.005	0.074	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	48	4.6	4.517	5.7	2.4	0.353	0.594	3.8	4.3	4.9	5.11
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	48	10.8	10.779	14.5	6.9	2.252	1.501	9.16	9.775	11.775	12.53
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	48	1.2	1.252	2.8	0.006	0.665	0.815	0.055	0.7	1.875	2.41
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	48	0.205	0.25	0.62	0.07	0.019	0.138	0.109	0.14	0.348	0.42

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	50	9.75	10.75	22.	0.5	27.574	5.251	4.55	7.	15.125	17.95
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	50	28.	27.62	33.	23.	6.363	2.522	24.	25.75	29.25	31.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	50	6.57	6.611	6.96	6.26	0.037	0.192	6.391	6.448	6.803	6.889
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	50	6.57	6.572	6.96	6.26	0.038	0.196	6.391	6.448	6.802	6.889
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	50	0.269	0.268	0.55	0.11	0.012	0.11	0.129	0.158	0.357	0.406
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/87-07/28/97	50	27.	26.94	32.	22.	5.813	2.411	24.	25.	29.	30.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	50	70.6	71.55	168.5	27.8	1061.251	32.577	36.27	40.9	89.55	123.45
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	50	2.	1.96	2.6	1.5	0.061	0.247	1.61	1.775	2.1	2.29
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	50	0.7	0.678	0.9	0.5	0.01	0.097	0.6	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	50	1.815	1.828	2.11	1.51	0.024	0.156	1.631	1.695	1.975	2.04
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	50	0.42	0.426	0.58	0.3	0.005	0.07	0.35	0.37	0.48	0.519
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	50	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	50	4.5	4.542	5.7	3.6	0.157	0.396	4.02	4.3	4.8	5.09
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	50	11.05	10.896	13.	9.	1.024	1.012	9.52	9.975	11.4	12.4
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	50	1.45	1.5	4.1	0.003	0.664	0.815	0.4	1.1	1.9	2.39
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	50	0.27	0.27	0.55	0.11	0.012	0.111	0.13	0.16	0.363	0.409

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	49	11.5	11.057	21.	2.	26.91	5.187	4.	6.75	15.75	18.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	50	25.	26.02	38.	22.	12.387	3.52	23.	23.	28.	30.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	50	6.425	6.496	7.05	6.02	0.065	0.254	6.212	6.33	6.762	6.876
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	50	6.425	6.431	7.05	6.02	0.069	0.262	6.212	6.33	6.762	6.876
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	50	0.376	0.371	0.955	0.089	0.036	0.19	0.133	0.173	0.468	0.614
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/87-07/28/97	50	24.	25.26	37.	22.	11.094	3.331	22.	23.	27.	29.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	50	51.1	72.04	236.	30.	2245.074	47.382	37.5	39.625	97.	147.12
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	50	1.7	1.834	3.5	1.4	0.167	0.409	1.5	1.5	1.95	2.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	50	0.6	0.618	1.	0.5	0.014	0.119	0.5	0.5	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	50	1.66	1.692	2.09	1.41	0.024	0.155	1.5	1.575	1.833	1.908
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	50	0.405	0.417	0.74	0.32	0.007	0.081	0.331	0.37	0.45	0.479
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	50	1.	0.994	1.	0.9	0.001	0.024	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	50	4.6	4.568	5.5	3.4	0.211	0.46	4.	4.3	4.8	5.09
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	50	10.	10.184	14.8	7.7	1.633	1.278	8.7	9.1	11.125	11.68
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	50	1.2	1.214	2.7	0.003	0.302	0.55	0.41	1.	1.5	1.89
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	50	0.38	0.373	0.96	0.09	0.037	0.191	0.132	0.178	0.47	0.617

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	30	9.75	9.3	19.	1.	24.734	4.973	3.55	4.75	11.875	17.45
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	30	24.	25.	30.	18.	7.034	2.652	23.	24.	27.	29.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	30	6.495	6.481	6.88	6.07	0.024	0.155	6.252	6.458	6.545	6.608
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	30	6.495	6.452	6.88	6.07	0.025	0.158	6.252	6.458	6.545	6.608
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	30	0.32	0.353	0.851	0.132	0.022	0.15	0.247	0.285	0.349	0.562
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/12/87-07/28/97	30	24.	24.3	29.	18.	5.872	2.423	22.	23.	26.	28.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	30	0.35	30.923	97.	-4.6	1138.884	33.747	0.39	2.8	62.15	82.87
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	30	1.65	1.71	2.1	1.5	0.032	0.179	1.5	1.6	1.8	2.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	30	0.6	0.59	0.7	0.5	0.004	0.066	0.5	0.5	0.6	0.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	30	1.665	1.703	1.98	1.28	0.018	0.135	1.59	1.645	1.783	1.89
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	30	0.4	0.417	0.59	0.33	0.005	0.068	0.351	0.36	0.443	0.538
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	30	1.	0.98	1.	0.7	0.004	0.066	0.91	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	30	4.5	4.523	5.5	3.8	0.095	0.308	4.2	4.3	4.7	4.88
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	30	10.05	10.173	12.2	7.4	1.041	1.02	9.21	9.6	10.675	11.87
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	30	2.	2.01	3.6	1.2	0.253	0.503	1.51	1.7	2.125	2.58
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	30	0.32	0.356	0.86	0.13	0.023	0.151	0.251	0.288	0.353	0.566

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	134	17.5	16.849	23.	10.	5.756	2.399	13.	15.5	18.5	19.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	146	30.	30.185	41.	23.	11.021	3.32	25.	28.	33.	34.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	146	6.42	6.48	7.22	5.97	0.061	0.246	6.237	6.35	6.52	6.96
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	146	6.42	6.425	7.22	5.97	0.064	0.252	6.237	6.35	6.52	6.96
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	146	0.38	0.375	1.072	0.06	0.026	0.161	0.11	0.302	0.447	0.579
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/87-07/28/97	146	29.	29.308	40.	22.	10.435	3.23	25.	27.	32.	33.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	146	44.8	56.632	186.2	-4.6	887.38	29.789	32.14	38.7	73.	96.68
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	146	2.1	2.147	3.5	1.6	0.105	0.324	1.7	1.9	2.325	2.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	146	0.7	0.732	1.	0.5	0.011	0.104	0.6	0.7	0.8	0.9
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	146	1.93	1.933	2.76	1.54	0.038	0.195	1.67	1.808	2.04	2.182
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	146	0.485	0.481	0.74	0.31	0.006	0.08	0.387	0.42	0.53	0.563
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	146	1.	0.998	2.	0.8	0.008	0.091	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	146	4.5	4.556	6.4	2.1	0.341	0.584	3.97	4.4	4.8	5.23
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	146	11.4	11.596	20.6	8.8	2.285	1.512	9.8	10.6	12.425	13.23
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	146	1.5	1.632	5.4	0.	1.278	1.13	0.1	0.7	2.4	3.13
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	146	0.38	0.378	1.08	0.06	0.026	0.163	0.11	0.3	0.45	0.583

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	204	6.	6.273	16.	0.5	8.634	2.938	3.	4.	8.	10.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	211	26.	26.654	41.	18.	12.123	3.482	23.	24.	29.	31.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	211	6.46	6.503	6.97	5.92	0.037	0.192	6.302	6.38	6.57	6.828
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	211	6.46	6.464	6.97	5.92	0.038	0.196	6.302	6.38	6.57	6.828
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	211	0.347	0.344	1.202	0.107	0.02	0.143	0.149	0.269	0.417	0.499
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/87-07/28/97	211	26.	25.976	42.	18.	12.385	3.519	22.	24.	28.	31.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	211	52.5	62.665	155.	21.1	761.158	27.589	35.3	41.2	81.2	101.4
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	211	1.8	1.797	2.8	1.3	0.08	0.283	1.5	1.6	2.	2.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	211	0.6	0.639	1.	0.5	0.011	0.106	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	211	1.69	1.721	2.21	1.35	0.024	0.155	1.552	1.62	1.79	1.918
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	211	0.37	0.385	0.72	0.26	0.006	0.077	0.3	0.33	0.42	0.488
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	211	1.	1.01	2.	0.8	0.02	0.141	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	211	4.8	4.888	6.	3.8	0.205	0.453	4.4	4.5	5.2	5.6
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	211	9.9	9.954	12.9	8.	0.819	0.905	8.8	9.3	10.6	11.1
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	211	1.7	1.783	8.9	0.	1.529	1.236	0.3	1.	2.4	3.2
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	211	0.35	0.346	1.21	0.11	0.021	0.144	0.15	0.27	0.42	0.506

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/12/87-07/28/97	146	11.	10.925	19.5	2.	12.592	3.548	6.35	8.5	13.5	16.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/12/87-07/28/97	156	26.	26.231	38.	18.	10.411	3.227	22.7	24.	29.	30.
00400	PH (STANDARD UNITS)	03/12/87-07/28/97	156	6.475	6.509	7.03	6.02	0.044	0.209	6.257	6.383	6.59	6.859
00400	CONVERTED PH (STANDARD UNITS)	03/12/87-07/28/97	156	6.475	6.463	7.03	6.02	0.046	0.214	6.257	6.382	6.59	6.859
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/12/87-07/28/97	156	0.335	0.345	0.955	0.093	0.025	0.158	0.138	0.257	0.414	0.553
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	03/12/87-07/28/97	156	25.	25.474	37.	18.	9.606	3.099	22.	24.	28.	29.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/12/87-07/28/97	156	79.05	87.342	246.1	0.3	2470.656	49.706	39.24	57.625	109.3	154.79
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/12/87-07/28/97	156	1.7	1.792	2.7	1.3	0.063	0.25	1.5	1.6	2.	2.13
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/12/87-07/28/97	156	0.6	0.629	1.	0.5	0.009	0.092	0.5	0.6	0.7	0.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/12/87-07/28/97	156	1.69	1.691	2.1	1.28	0.025	0.157	1.497	1.593	1.79	1.89
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/12/87-07/28/97	156	0.39	0.398	0.75	0.26	0.004	0.062	0.33	0.37	0.42	0.463

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0557

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/12/87-07/28/97	156	1.	0.972	2.	0.7	0.011	0.104	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/12/87-07/28/97	156	4.7	4.777	6.9	3.5	0.263	0.513	4.2	4.4	5.075	5.5
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/12/87-07/28/97	156	9.7	9.837	14.7	6.9	1.327	1.152	8.67	9.1	10.5	11.23
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/12/87-07/28/97	156	1.5	1.507	7.7	0.	1.672	1.293	0.007	0.4	2.1	3.03
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/12/87-07/28/97	156	0.335	0.348	0.96	0.09	0.025	0.159	0.137	0.26	0.418	0.556

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0558

NPS Station ID: SHEN0558
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005000133.29

LAT/LON: 38.633337/ -78.357781

Depth of Water: 0
 Elevation: 488
 RF1 Mile Point: 0.000
 RF3 Mile Point: 33.29

Agency: 12NSS
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 2B047918L /SI02B047918L
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.80
 Distance from RF3: 0.07

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS, AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS. EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988) WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN; (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0558

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/31/86-04/11/86	2	7.5	7.5	8.5	6.5	2.	1.414	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/31/86-04/11/86	2	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/31/86-04/11/86	2	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/31/86-04/11/86	2	20.	20.	20.	20.	0.	0.	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/31/86-04/11/86	2	10.7	10.7	10.8	10.6	0.02	0.141	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/31/86-04/11/86	2	6.65	6.65	6.7	6.6	0.005	0.071	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/31/86-04/11/86	2	6.647	6.647	6.7	6.6	0.005	0.071	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/31/86-04/11/86	2	0.225	0.225	0.251	0.2	0.001	0.037	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/31/86-04/11/86	2	51.3	51.3	52.7	49.9	3.92	1.98	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/31/86-04/11/86	2	3.	3.	3.	3.	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/31/86-04/11/86	2	0.003	0.003	0.006	0.	0.	0.004	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/31/86-04/11/86	2	0.55	0.55	0.6	0.5	0.005	0.071	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/31/86-04/11/86	2	0.85	0.85	0.9	0.8	0.005	0.071	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/31/86-04/11/86	2	1.35	1.35	1.4	1.3	0.005	0.071	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/31/86-04/11/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/31/86-04/11/86	2	1.67	1.67	1.68	1.66	0.	0.014	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/31/86-04/11/86	2	0.325	0.325	0.33	0.32	0.	0.007	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/31/86-04/11/86	2	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/31/86-04/11/86	2	4.85	4.85	5.	4.7	0.045	0.212	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0558

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/31/86-04/11/86	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/31/86-04/11/86	2	10.	10.	10.5	9.5	0.5	0.707	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/31/86-04/11/86	2	4.5	4.5	9.	0.	40.5	6.364	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/31/86-04/11/86	2	15.	15.	17.	13.	8.	2.828	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/31/86-04/11/86	2	0.65	0.65	0.7	0.6	0.005	0.071	**	**	**
71885	IRON (UG/L AS FE)	03/31/86-04/11/86	2	4.995	4.995	9.99	0.	49.9	7.064	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/31/86-04/11/86	2	1600.	1600.	1600.	1600.	0.	0.	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/31/86-04/11/86	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**
83509	STREAM, WIDTH METER	03/31/86-04/11/86	2	0.9	0.9	0.9	0.9	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0558

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00						2	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0559

NPS Station ID: SHEN0559
 Location: HAZEL RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.633365/ -78.284809

Depth of Water: 0
 Elevation: 1880
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR29
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR29 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.67 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0559

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	0.	0.	0.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.82	6.82	6.82	6.82	0.	0.	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.82	6.82	6.82	6.82	0.	0.	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.151	0.151	0.151	0.151	0.	0.	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	31.2	31.2	31.2	31.2	0.	0.	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.18	1.18	1.18	1.18	0.	0.	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0559

Parameter	Std. Type	Std. Value	Total			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00						1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00						1	0	0.00				
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00						1	1	1.00				
	Fresh Acute	860.	1	0	0.00						1	0	0.00				
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0560

NPS Station ID: SHEN0560
 Location: NORTH FORK DRY RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.633615/ -78.357504

Depth of Water: 0
 Elevation: 1580
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_VTSSS_PG10
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PG10 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT NORTH FORK DRY RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.35 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0560

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.44	6.44	6.44	6.44	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.44	6.44	6.44	6.44	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.363	0.363	0.363	0.363	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.45	1.45	1.45	1.45	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0560

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0561

NPS Station ID: SHEN0561
 Location: Hazel River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.634115/ -78.284921

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F053
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0561

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/16/94-07/02/96	8	16.65	15.063	17.6	11.6	8.357	2.891	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/24/95-07/02/96	4	16.	15.75	16.	15.	0.25	0.5	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/16/94-07/02/96	7	9.3	9.557	11.	8.8	0.663	0.814	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/16/94-07/02/96	7	6.69	6.743	7.22	6.45	0.078	0.279	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/16/94-07/02/96	7	6.69	6.677	7.22	6.45	0.083	0.287	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/16/94-07/02/96	7	0.204	0.21	0.355	0.06	0.012	0.108	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/24/95-08/24/95	3	10.	10.	10.	10.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/02/96-07/02/96	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	07/02/96-07/02/96	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/02/96-07/02/96	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0561

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	7	0	0.00	7	0	0.00										
00406 PH, FIELD	Fresh Chronic	9.	7	0	0.00	7	0	0.00										
	Other-Lo Lim.	6.5	7	1	0.14	7	1	0.14										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0562

NPS Station ID: SHEN0562
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.634115/ -78.291309

 Depth of Water: 0
 Elevation: 2090
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR33
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR33 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.03 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0562

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.66	6.66	6.66	6.66	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.66	6.66	6.66	6.66	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.219	0.219	0.219	0.219	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	22.8	22.8	22.8	22.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.23	1.23	1.23	1.23	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.37	0.37	0.37	0.37	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0562

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0563

NPS Station ID: SHEN0563
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.634253/ -78.284059

Depth of Water: 0
 Elevation: 1800
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR27
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR27 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.90 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0563

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.82	6.82	6.82	6.82	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.82	6.82	6.82	6.82	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.151	0.151	0.151	0.151	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	41.1	41.1	41.1	41.1	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.19	1.19	1.19	1.19	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0563

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0564

NPS Station ID: SHEN0564
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.634253/ -78.285309

Depth of Water: 0
 Elevation: 1830
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR28
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR28 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.15 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0564

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	29.5	29.5	29.5	29.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.22	1.22	1.22	1.22	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0564

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0565

NPS Station ID: SHEN0565
 Location: HAZEL RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.634892/ -78.277115

Depth of Water: 0
 Elevation: 1575
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_HR26
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION HR26 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE HAZEL RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.27 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0565

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/21/92-03/21/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/21/92-03/21/92	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/21/92-03/21/92	1	6.81	6.81	6.81	6.81	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/21/92-03/21/92	1	0.155	0.155	0.155	0.155	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/21/92-03/21/92	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/21/92-03/21/92	1	126.7	126.7	126.7	126.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/21/92-03/21/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/21/92-03/21/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/21/92-03/21/92	1	1.24	1.24	1.24	1.24	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/21/92-03/21/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/21/92-03/21/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/21/92-03/21/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/21/92-03/21/92	1	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/21/92-03/21/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/21/92-03/21/92	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0565

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0566

NPS Station ID: SHEN0566 LAT/LON: 38.641670/ -78.390004

Location: LAKE ARROWHEAD - STATION 100' FROM DAME PAGE CO.

Station Type: /TYPA/AMBNT/LAKE

RMI-Indexes:

RMI-Miles:

HUC: 02070005

Major Basin: 02-NORTH-ATLANTIC

Minor Basin: 1-POTOMAC-SHENANDOAH

RF1 Index: 02070005

RF3 Index: 02070005003200.00

Description:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: DRY RUN SECTION: 02B TOPO MAP #: 0035 TOPO MAP NAME: LURAY, VA

Agency: 21VASWCB

FIPS State/County: 51139 VIRGINIA/PAGE

STORET Station ID(s): 1BDRI005.55

Within Park Boundary: No

Date Created: 05/12/90

Depth of Water: 0

Elevation: 0

RF1 Mile Point: 0.000

RF3 Mile Point: 1.37

Aquifer:

Water Body ID:

ECO Region:

Distance from RF1: 2.90

Distance from RF3: 0.12

On/Off RF1:

On/Off RF3:

Parameter Inventory for Station: SHEN0566

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/07/80-07/31/90	3	27.1	22.433	28.2	12.	81.943	9.052	**	**	**
00078	TRANSPARENCY, SECCHI DISC (METERS)	04/07/80-10/14/80	3	2.5	2.19	2.97	1.1	0.946	0.973	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/07/80-07/24/80	7	54.	48.286	72.	5.	445.571	21.109	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/31/90-07/31/90	3	52.	52.	53.	51.	1.	1.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	04/07/80-07/31/90	3	8.3	9.3	13.2	6.4	12.31	3.509	**	**	**
00340	COD, .25N K2CR2O7 MG/L	07/31/90-07/31/90	3	9.	6.333	9.	1.	21.333	4.619	**	**	**
00400	PH (STANDARD UNITS)	04/07/80-07/31/90	5	6.7	7.222	8.3	6.7	0.554	0.745	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/07/80-07/31/90	5	6.7	6.904	8.3	6.7	0.68	0.825	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/80-07/31/90	5	0.2	0.125	0.2	0.005	0.011	0.103	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/07/80-07/31/90	9	6.6	6.611	7.7	6.	0.321	0.567	6.	6.05	6.95
00403	CONVERTED PH, LAB, STANDARD UNITS	04/07/80-07/31/90	9	6.6	6.369	7.7	6.	0.387	0.622	6.	6.05	6.95
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/80-07/31/90	9	0.251	0.427	1.	0.02	0.155	0.393	0.02	0.131	0.897
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/07/80-07/31/90	9	15.	18.778	49.	11.	147.444	12.143	11.	11.	21.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/07/80-07/31/90	10 ##	2.5	2.9	6.	2.	1.489	1.22	2.	2.375	2.875
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/07/80-07/31/90	9 ##	2.5	2.722	4.	2.	0.569	0.755	2.	2.25	3.25
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/07/80-07/31/90	10 ##	2.5	1.85	2.5	0.5	0.892	0.944	0.5	0.5	2.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/07/80-07/31/90	10 ##	0.05	0.111	0.6	0.02	0.032	0.18	0.02	0.02	0.088
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/80-07/31/90	6 ##	0.005	0.013	0.05	0.005	0.	0.018	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	07/31/90-07/31/90	3	0.06	0.127	0.26	0.06	0.013	0.115	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/07/80-07/31/90	10	0.25	0.29	0.9	0.1	0.057	0.238	0.1	0.1	0.325
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	04/07/80-07/24/80	7 ##	0.025	0.066	0.14	0.025	0.003	0.052	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/07/80-07/31/90	10	0.02	0.026	0.05	0.01	0.	0.017	0.01	0.01	0.05
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/07/80-07/31/90	10 ##	0.005	0.007	0.01	0.005	0.	0.003	0.005	0.005	0.01
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	07/31/90-07/31/90	3	3.3	2.967	3.4	2.2	0.443	0.666	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	07/31/90-07/31/90	3	16.	15.333	18.	12.	9.333	3.055	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	07/31/90-07/31/90	3	2.	1.667	2.	1.	0.333	0.577	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	07/31/90-07/31/90	3	5.	5.	5.	5.	0.	0.	**	**	**
00951	FLUORIDE, TOTAL (MG/L AS F)	07/31/90-07/31/90	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/31/90-07/31/90	1	5.	5.	5.	5.	0.	0.	**	**	**
01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/31/90-07/31/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/31/90-07/31/90	1	23.	23.	23.	23.	0.	0.	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/31/90-07/31/90	1	27.	27.	27.	27.	0.	0.	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/31/90-07/31/90	1	34.	34.	34.	34.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0566

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	07/31/90-07/31/90	1	17.	17.	17.	17.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/31/90-07/31/90	1	120.	120.	120.	120.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/24/80-07/24/80	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/24/80-07/24/80	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/90-07/31/90	1	50.	50.	50.	50.	0.	0.	**	**	**	**
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/31/90-07/31/90	1	2.16	2.16	2.16	2.16	0.	0.	**	**	**	**
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID, METH.	07/31/90-07/31/90	1	2.	2.	2.	2.	0.	0.	**	**	**	**
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID, METH.	07/31/90-07/31/90	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
32219	PHEOPHYTIN RATIO(OD 663)SPECTRO,BEFORE/AFTER ACID	07/31/90-07/31/90	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
34671	PCB - 1016 TOTWUG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/31/90-07/31/90	1	50.	50.	50.	50.	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE), WHOLE WATER, UG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS), SEDIMENTS, DRY WGT, UG/KG	07/31/90-07/31/90	1	1000.	1000.	1000.	1000.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/31/90-07/31/90	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	1	100.	100.	100.	100.	0.	0.	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/31/90-07/31/90	1	1000.	1000.	1000.	1000.	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/31/90-07/31/90	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	07/31/90-07/31/90	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39526	PCBS TOTAL, IN SEDIMENT, DRY (ISOMER ANALYSES) UG/KG	07/31/90-07/31/90	1	1000.	1000.	1000.	1000.	0.	0.	**	**	**	**
71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/31/90-07/31/90	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	07/31/90-07/31/90	1	100.	100.	100.	100.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	07/31/90-07/31/90	1	100.	100.	100.	100.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0566

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	2	0	0.00	1	0	0.00						
00400	PH	Fresh Chronic	9.	5	0	0.00	2	0	0.00	3	0	0.00						
		Other-Lo Lim.	6.5	5	0	0.00	2	0	0.00	3	0	0.00						
00403	PH, LAB	Fresh Chronic	9.	9	0	0.00	6	0	0.00	3	0	0.00						
		Other-Lo Lim.	6.5	9	4	0.44	6	1	0.17	3	3	1.00						
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	6	0	0.00	3	0	0.00	3	0	0.00						
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	3	0	0.00	3	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0566

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00630	NITRITE PLUS NITRATE, TOTAL I DET.																	
00940	CHLORIDE, TOTAL IN WATER	10.	7	0	0.00	4	0	0.00				3	0	0.00				
	Fresh Acute	860.	3	0	0.00	3	0	0.00										
	Drinking Water	250.	3	0	0.00	3	0	0.00										
00945	SULFATE, TOTAL (AS SO4)	250.	3	0	0.00	3	0	0.00										
00951	FLUORIDE, TOTAL AS F	4.	3	0	0.00	3	0	0.00										
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	1	0	0.00	1	0	0.00										
34356	ENDOSULFAN, BETA, TOTAL	0.22	1	0	0.00	1	0	0.00										
34361	ENDOSULFAN, ALPHA, TOTAL	0.22	1	0	0.00	1	0	0.00										
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	20.	1	0	0.00	1	0	0.00										
	Fresh Acute	1.	1	0	0.00	1	0	0.00										
	Drinking Water	1.1	1	0	0.00	1	0	0.00										
39300	P,P' DDT IN WHOLE WATER SAMPLE	0.6	1	0	0.00	1	0	0.00										
39310	P,P' DDD IN WHOLE WATER SAMPLE	1050.	1	0	0.00	1	0	0.00										
39320	P,P' DDE IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00										
39330	ALDRIN IN WHOLE WATER SAMPLE	2.	1	0	0.00	1	0	0.00										
39340	GAMMA-BHC(LINDANE), WHOLE WATER	0.2	1	0	0.00	1	0	0.00										
	Fresh Acute	2.5	1	0	0.00	1	0	0.00										
	Drinking Water	0.18	1	0	0.00	1	0	0.00										
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.	1	0	0.00	1	0	0.00										
39390	ENDRIN IN WHOLE WATER SAMPLE	0.73	1	0	0.00	1	0	0.00										
39400	TOXAPHENE IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00										
	Fresh Acute	0.52	1	0	0.00	1	0	0.00										
	Drinking Water	0.4	1	0	0.00	1	0	0.00										
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	0.52	1	0	0.00	1	0	0.00										
	Fresh Acute	0.2	1	0	0.00	1	0	0.00										
	Drinking Water	0.2	1	0	0.00	1	0	0.00										
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE																	
	Fresh Acute																	
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0567

NPS Station ID: SHEN0567
 Location: N F DRY RUN NEAR THORNTON GAP, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005019905.34
 Description:

LAT/LON: 38.644726/ -78.369171

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 5.99

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01630200
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.80

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0567

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/81-06/24/82	6	19.	14.917	24.	1.	84.442	9.189	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/10/81-06/24/82	6	0.9	1.883	7.	0.1	6.706	2.59	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/10/81-08/10/81	1	35.	35.	35.	35.	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	08/10/81-06/24/82	6	6.95	6.95	7.4	6.4	0.139	0.373	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/10/81-06/24/82	6	6.947	6.817	7.4	6.4	0.16	0.4	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/10/81-06/24/82	6	0.113	0.152	0.398	0.04	0.018	0.134	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/10/81-06/24/82	6	6.9	6.9	7.3	6.6	0.06	0.245	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/10/81-06/24/82	6	6.9	6.847	7.3	6.6	0.063	0.252	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/10/81-06/24/82	6	0.126	0.142	0.251	0.05	0.005	0.072	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/10/81-06/24/82	6##	0.008	0.009	0.02	0.005	0.	0.006	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/10/81-06/24/82	6	0.25	0.282	0.5	0.09	0.022	0.15	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/10/81-06/24/82	6	9.	8.833	10.	8.	0.567	0.753	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/10/81-06/24/82	6	2.15	2.167	2.4	2.	0.019	0.137	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/10/81-06/24/82	6	0.8	0.8	0.9	0.7	0.008	0.089	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/10/81-06/24/82	6	1.85	1.9	2.3	1.7	0.044	0.21	**	**	**
00931	SODIUM ADSORPTION RATIO	08/10/81-06/24/82	6	0.3	0.3	0.3	0.3	0.	0.	**	**	**
00932	SODIUM, PERCENT	08/10/81-06/24/82	6	31.	31.	33.	30.	1.2	1.095	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/10/81-06/24/82	6	0.4	0.4	0.5	0.3	0.004	0.063	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/10/81-06/24/82	6	1.	1.	1.	1.	0.	0.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/10/81-06/24/82	6	5.	4.833	5.	4.	0.167	0.408	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/10/81-06/24/82	6	10.05	9.9	11.	9.	0.56	0.748	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	08/10/81-05/20/82	3	0.01	0.017	0.03	0.01	0.	0.012	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0567

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.													
00403	PH, LAB	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.													
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Drinking Water													
00940	CHLORIDE, TOTAL IN WATER	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Drinking Water													

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0567

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0568

NPS Station ID: SHEN0568
 Location: ROUTE 620 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02070005
 RF3 Index: 02080103002100.71
 Description:

LAT/LON: 38.646392/ -78.206670

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 3.82

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-THO021.19
 Within Park Boundary: No

Date Created: 08/25/90

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.60
 Distance from RF3: 0.06

On/Off RF1:
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN
 RIVER: THORNTON RIVER SECTION: 04 TOPO MAP #: 0074 TOPO MAP NAME: WASHINGTON, VA

Parameter Inventory for Station: SHEN0568

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/17/74-09/29/98	73	14.	12.778	27.	0.2	60.676	7.789	1.64	5.15	19.	23.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/19/90-12/14/93	6	0.8	0.95	1.5	0.7	0.107	0.327	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	09/20/94-09/29/98	16	2.05	1.844	3.7	0.2	1.031	1.015	0.55	0.825	2.575	3.35
00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/01/93	8	8.	9.063	17.	0.5	30.46	5.519	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	02/25/91-09/29/98	26	61.5	70.115	144.	50.	484.746	22.017	52.4	55.	78.5	108.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/19/90-09/29/98	28	55.	60.643	132.	32.	335.72	18.323	46.9	52.	65.25	82.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/18/91-09/29/98	26	10.85	11.019	14.6	8.	2.63	1.622	9.1	9.7	12.3	13.13
00300	OXYGEN, DISSOLVED MG/L	09/17/74-06/13/91	47	10.4	10.396	14.2	7.	2.761	1.662	8.4	9.	11.5	13.2
00310	BOD, 5 DAY, 20 DEG C MG/L	11/19/90-09/29/98	29	1.	1.072	3.	0.5	0.328	0.573	0.5	0.5	1.2	2.
00340	COD, .25N K2CR2O7 MG/L	11/19/90-04/22/98	27	4.	4.37	12.	0.5	7.992	2.827	1.7	2.5	6.	8.6
00400	PH (STANDARD UNITS)	09/17/74-09/29/98	72	7.35	7.418	9.5	6.4	0.28	0.53	6.9	7.025	7.675	8.
00400	CONVERTED PH (STANDARD UNITS)	09/17/74-09/29/98	72	7.347	7.196	9.5	6.4	0.33	0.575	6.9	7.025	7.675	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/17/74-09/29/98	72	0.045	0.064	0.398	0.	0.004	0.067	0.01	0.021	0.095	0.126
00403	PH, LAB, STANDARD UNITS SU	11/19/90-09/29/98	29	6.7	6.8	7.4	6.1	0.105	0.324	6.4	6.5	7.1	7.2
00403	CONVERTED PH, LAB, STANDARD UNITS	11/19/90-09/29/98	29	6.7	6.688	7.4	6.1	0.118	0.344	6.4	6.5	7.1	7.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/90-09/29/98	29	0.2	0.205	0.794	0.04	0.025	0.158	0.063	0.079	0.316	0.398
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/19/90-09/29/98	29	15.	17.	37.	8.	41.286	6.425	11.	13.	18.	28.
00500	RESIDUE, TOTAL (MG/L)	11/19/90-09/29/98	28	50.5	50.786	83.	25.	221.952	14.898	31.7	39.	56.75	77.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/19/90-09/29/98	27	14.	15.537	30.	2.5	45.441	6.741	6.6	11.	20.	25.
00510	RESIDUE, TOTAL FIXED (MG/L)	11/19/90-09/29/98	27	33.	34.148	72.	15.	161.67	12.715	17.8	25.	42.	48.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/19/90-09/29/98	29 ##	1.5	1.948	5.	0.5	1.06	1.029	1.5	1.5	1.75	4.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/19/90-09/29/98	29 ##	1.5	1.414	1.5	0.5	0.073	0.27	1.	1.5	1.5	1.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/19/90-09/29/98	29 ##	1.5	1.638	3.	0.5	0.302	0.549	1.5	1.5	1.5	3.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/17/74-09/29/98	72 ##	0.05	0.042	0.2	0.02	0.001	0.027	0.02	0.02	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	73 ##	0.005	0.006	0.03	0.005	0.	0.004	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	43	0.33	0.352	0.7	0.1	0.024	0.154	0.156	0.22	0.48	0.572
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/17/74-09/29/98	71	0.1	0.163	1.1	0.05	0.022	0.15	0.05	0.1	0.2	0.3
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	10/13/76-06/06/79	30	0.21	0.279	0.6	0.025	0.03	0.174	0.08	0.11	0.43	0.588
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/90-09/29/98	29 ##	0.05	0.057	0.1	0.05	0.	0.018	0.05	0.05	0.05	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11/19/90-12/14/93	6	0.01	0.013	0.03	0.005	0.	0.009	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/19/90-06/17/96	21	1.5	1.881	5.2	0.5	1.651	1.285	0.6	1.	2.25	4.6
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	27	18.	18.222	29.	7.	27.026	5.199	12.	14.	22.	26.2
00927	MAGNESIUM, TOTAL (MG/L AS MG)	03/01/93-03/01/93	1	1540.	1540.	1540.	1540.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0568

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00940	CHLORIDE,TOTAL IN WATER MG/L	11/19/90-09/29/98	28	4.	4.018	10.	2.	3.064	1.751	2.45	2.5	5.	6.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/90-09/29/98	28	3.	3.268	5.	2.5	0.676	0.822	2.5	2.5	4.	5.
00951	FLUORIDE, TOTAL (MG/L AS F)	11/19/90-03/01/93	9 ##	0.05	0.094	0.25	0.05	0.005	0.073	0.05	0.05	0.15	0.25
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/19/90-12/03/92	8	14.3	14.213	16.8	12.3	2.193	1.481	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/11/77-09/20/94	7 ##	1.	2.143	5.	1.	3.81	1.952	**	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/11/77-09/20/94	7 ##	5.	4.5	5.	1.5	1.75	1.323	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/11/77-09/20/94	7 ##	5.	7.857	25.	5.	57.143	7.559	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	04/11/77-09/20/94	7 ##	5.	7.857	25.	5.	57.143	7.559	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	11/02/78-09/20/94	4	71.	98.	200.	50.	4746.	68.891	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	04/11/77-09/20/94	7	3.	3.	5.	1.5	1.417	1.19	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	11/02/78-09/20/94	4 ##	12.5	13.75	25.	5.	106.25	10.308	**	**	**	**
01059	THALLIUM, TOTAL (UG/L AS TL)	03/01/93-03/01/93	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/11/77-04/12/79	5 ##	50.	41.	50.	5.	405.	20.125	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	03/01/93-09/20/94	2 ##	15.	15.	25.	5.	200.	14.142	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/11/77-09/20/94	7 ##	5.	10.	25.	5.	75.	8.66	**	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	03/01/93-09/20/94	2 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/17/74-09/29/98	66	100.	418.182	4900.	50.	689538.182	830.384	50.	50.	425.	990.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/17/74-09/29/98	66	2.	2.204	3.69	1.699	0.293	0.541	1.699	1.699	2.626	2.992
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	09/17/74-09/29/98			160.074								
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
34671	PCB - 1016 TOTWUG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
38451	DICHLORPROP WATER,SUSPUG/L	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
38745	2,4-DB WATER, TOTUG/L	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	03/01/93-09/20/94	2	20.5	20.5	25.	16.	40.5	6.364	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/28/75-11/29/76	2	0.	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	09/17/74-06/06/79	43 ##	0.05	0.053	0.1	0.05	0.	0.013	0.05	0.05	0.05	0.05
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/17/74-09/29/98	67 ##	0.005	0.016	0.07	0.005	0.	0.016	0.005	0.005	0.02	0.05
71900	MERCURY, TOTAL (UG/L AS HG)	04/11/77-09/20/94	7 ##	0.15	0.193	0.25	0.15	0.003	0.053	**	**	**	**
77825	ALACHLOR WHOLE WATER,UG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82032	CALCIUM - TOTAL UG/L (AS CA)	03/01/93-03/01/93	1	3840.	3840.	3840.	3840.	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/18/92-06/16/94	7	1.8	1.957	4.9	0.4	2.44	1.562	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0568

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	6	0	0.00				5	0	0.00	1	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	16	0	0.00	6	0	0.00	5	0	0.00	5	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	26	0	0.00	8	0	0.00	10	0	0.00	8	0	0.00			
00300	OXYGEN, DISSOLVED	4.	47	0	0.00	13	0	0.00	18	0	0.00	16	0	0.00			
00400	PH	9.	72	2	0.03	21	1	0.05	28	0	0.00	23	1	0.04			
	Other-Lo Lim.	6.5	72	2	0.03	21	1	0.05	28	1	0.04	23	0	0.00			
00403	PH, LAB	9.	29	0	0.00	8	0	0.00	12	0	0.00	9	0	0.00			
	Other-Lo Lim.	6.5	29	9	0.31	8	0	0.00	12	6	0.50	9	3	0.33			
00615	NITRITE NITROGEN, TOTAL AS N	1.	73	0	0.00	21	0	0.00	28	0	0.00	24	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	43	0	0.00	13	0	0.00	15	0	0.00	15	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	10.	30	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	28	0	0.00	8	0	0.00	11	0	0.00	9	0	0.00			
	Drinking Water	250.	28	0	0.00	8	0	0.00	11	0	0.00	9	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	28	0	0.00	8	0	0.00	11	0	0.00	9	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	9	0	0.00	1	0	0.00	6	0	0.00	2	0	0.00			
01002	ARSENIC, TOTAL	360.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
	Drinking Water	50.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
01012	BERYLLIUM, TOTAL	130.	1	0	0.00				1	0	0.00						
	Drinking Water	4.	0 &	0	0.00												
01027	CADMIUM, TOTAL	3.9	1 &	0	0.00	1	0	0.00									
	Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	100.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
01042	COPPER, TOTAL	18.	6 &	0	0.00				3	0	0.00	3	0	0.00			
	Drinking Water	1300.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
01051	LEAD, TOTAL	82.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
	Drinking Water	15.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
01059	THALLIUM, TOTAL	1400.	1	0	0.00				1	0	0.00						
	Drinking Water	2.	0 &	0	0.00												
01065	NICKEL, DISSOLVED	1400.	5	0	0.00				2	0	0.00	3	0	0.00			
	Drinking Water	100.	5	0	0.00				2	0	0.00	3	0	0.00			
01067	NICKEL, TOTAL	1400.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	100.	2	0	0.00	1	0	0.00	1	0	0.00						
01092	ZINC, TOTAL	120.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
	Drinking Water	5000.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
01147	SELENIUM, TOTAL	20.	2	0	0.00	1	0	0.00	1	0	0.00						
	Drinking Water	50.	2	0	0.00	1	0	0.00	1	0	0.00						
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	66	28	0.42	20	12	0.60	23	6	0.26	23	10	0.43			
34356	ENDOSULFAN, BETA, TOTAL	0.22	1	0	0.00	1	0	0.00									
34361	ENDOSULFAN, ALPHA, TOTAL	0.22	1	0	0.00	1	0	0.00									
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	20.	1	0	0.00	1	0	0.00									
	Drinking Water	1.	1	0	0.00	1	0	0.00									
39033	ATRAZINE IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE	1.1	1	0	0.00	1	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	0.6	1	0	0.00	1	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	1050.	1	0	0.00	1	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39340	GAMMA-BHC(LINDANE), WHOLE WATER	2.	1	0	0.00	1	0	0.00									
	Drinking Water	0.2	1	0	0.00	1	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	2.4	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.5	1	0	0.00	1	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	0.18	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									
39400	TOXAPHENE IN WHOLE WATER SAMPLE	0.73	1	0	0.00	1	0	0.00									
	Drinking Water	3.	1	0	0.00	1	0	0.00									
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	0.52	1	0	0.00	1	0	0.00									
	Drinking Water	0.4	1	0	0.00	1	0	0.00									
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	0.52	1	0	0.00	1	0	0.00									
	Drinking Water	0.2	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0568

Parameter	Std. Type	Std. Value	Total			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
39730 2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00	1	0	0.00									
39760 SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00	1	0	0.00									
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	2	0	0.00				1	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
	Drinking Water	2.	7	0	0.00	1	0	0.00	3	0	0.00	3	0	0.00			
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0568

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/17/74-09/29/98	21	18.3	18.776	27.	2.3	32.654	5.714	12.9	15.6	23.7	26.6
00300	OXYGEN, DISSOLVED MG/L	09/17/74-06/13/91	13	8.9	9.069	10.6	7.	0.992	0.996	7.48	8.45	9.9	10.52
00400	PH (STANDARD UNITS)	09/17/74-09/29/98	21	7.7	7.643	9.	6.5	0.332	0.576	6.82	7.25	8.	8.42
00400	CONVERTED PH (STANDARD UNITS)	09/17/74-09/29/98	21	7.7	7.306	9.	6.5	0.451	0.671	6.82	7.25	8.	8.42
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/17/74-09/29/98	21	0.02	0.049	0.316	0.001	0.005	0.073	0.004	0.01	0.057	0.152
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/17/74-09/29/98	21 ##	0.05	0.043	0.1	0.02	0.001	0.024	0.02	0.02	0.05	0.09
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	21 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	13	0.32	0.356	0.7	0.14	0.035	0.188	0.14	0.2	0.465	0.696
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/17/74-09/29/98	21	0.1	0.155	0.4	0.05	0.009	0.093	0.05	0.1	0.2	0.3
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	20	200.	342.5	1600.	50.	169809.211	412.079	50.	62.5	550.	1140.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	20	2.301	2.285	3.204	1.699	0.227	0.476	1.699	1.774	2.734	3.049
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	21 ##	0.005	0.016	0.05	0.005	0.	0.017	0.005	0.005	0.02	0.05
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/17/74-09/29/98	21 ##	0.005	0.016	0.05	0.005	0.	0.017	0.005	0.005	0.02	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0568

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/17/74-09/29/98	28	4.55	5.007	14.	0.2	13.061	3.614	0.75	1.625	7.7	10.63
00300	OXYGEN, DISSOLVED MG/L	09/17/74-06/13/91	18	11.9	12.094	14.2	10.8	1.137	1.066	10.89	11.	13.2	13.48
00400	PH (STANDARD UNITS)	09/17/74-09/29/98	28	7.15	7.232	8.9	6.4	0.199	0.446	6.88	7.	7.4	7.71
00400	CONVERTED PH (STANDARD UNITS)	09/17/74-09/29/98	28	7.147	7.077	8.9	6.4	0.224	0.473	6.88	7.	7.4	7.71
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/17/74-09/29/98	28	0.071	0.084	0.398	0.001	0.006	0.075	0.02	0.04	0.1	0.133
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/17/74-09/29/98	28 ##	0.05	0.039	0.1	0.02	0.	0.019	0.02	0.02	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	28 ##	0.005	0.006	0.03	0.005	0.	0.005	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	15	0.47	0.429	0.6	0.1	0.015	0.123	0.202	0.4	0.48	0.558
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/17/74-09/29/98	28	0.1	0.145	1.1	0.05	0.043	0.208	0.05	0.05	0.1	0.23
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	23 ##	50.	568.696	4900.	50.	1522130.04	1233.746	50.	50.	230.	2820.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	23 ##	1.699	2.119	3.69	1.699	0.428	0.655	1.699	1.699	2.362	3.429
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	23 ##	0.005	0.016	0.07	0.005	0.	0.018	0.005	0.005	0.02	0.05
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/17/74-09/29/98	23 ##	0.005	0.016	0.07	0.005	0.	0.018	0.005	0.005	0.02	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0568

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/17/74-09/29/98	24	17.25	16.596	24.4	4.8	24.641	4.964	10.4	12.025	20.7	22.9
00300	OXYGEN, DISSOLVED MG/L	09/17/74-06/13/91	16	9.55	9.563	10.8	8.4	0.656	0.81	8.4	8.85	10.35	10.59
00400	PH (STANDARD UNITS)	09/17/74-09/29/98	23	7.4	7.439	9.5	6.7	0.267	0.517	7.	7.2	7.5	7.76
00400	CONVERTED PH (STANDARD UNITS)	09/17/74-09/29/98	23	7.4	7.281	9.5	6.7	0.293	0.541	7.	7.2	7.5	7.76
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/17/74-09/29/98	23	0.04	0.052	0.2	0.	0.002	0.042	0.017	0.032	0.063	0.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/17/74-09/29/98	23 ##	0.05	0.045	0.2	0.02	0.001	0.037	0.02	0.02	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	24 ##	0.005	0.006	0.02	0.005	0.	0.003	0.005	0.005	0.005	0.008
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/29/98	15	0.24	0.271	0.6	0.13	0.013	0.112	0.16	0.2	0.33	0.468
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/17/74-09/29/98	22	0.2	0.195	0.4	0.05	0.009	0.094	0.065	0.1	0.3	0.3
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	23	100.	333.478	2800.	50.	332096.443	576.278	50.	50.	500.	660.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	23	2.	2.22	3.447	1.699	0.227	0.476	1.699	1.699	2.699	2.818
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-09/29/98	23 ##	0.01	0.015	0.05	0.005	0.	0.014	0.005	0.005	0.02	0.046
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/17/74-09/29/98	23 ##	0.01	0.015	0.05	0.005	0.	0.014	0.005	0.005	0.02	0.046

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0569

NPS Station ID: SHEN0569
 Location: PASS RUN NEAR THORNTON GAP, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005010600.00
 Description:

LAT/LON: 38.651392/ -78.353892

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.00

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01630542
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.31

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0569

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/10/81-06/24/82	6	15.5	12.083	19.5	1.	53.342	7.304	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/10/81-06/24/82	6	0.9	2.1	7.	0.3	6.704	2.589	**	**	**
00400	PH (STANDARD UNITS)	08/10/81-06/24/82	6	7.3	7.15	7.4	6.5	0.123	0.351	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/10/81-06/24/82	6	7.3	7.003	7.4	6.5	0.149	0.386	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/10/81-06/24/82	6	0.05	0.099	0.316	0.04	0.012	0.109	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/10/81-06/24/82	6	7.25	7.2	7.4	6.9	0.044	0.21	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/10/81-06/24/82	6	7.247	7.156	7.4	6.9	0.046	0.215	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/10/81-06/24/82	6	0.057	0.07	0.126	0.04	0.001	0.035	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/10/81-06/24/82	6 ##	0.008	0.008	0.01	0.005	0.	0.003	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/10/81-06/24/82	6	0.1	0.17	0.4	0.04	0.021	0.145	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/10/81-06/24/82	6	25.	24.667	29.	19.	12.267	3.502	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/10/81-06/24/82	6	5.75	5.7	6.8	4.5	0.604	0.777	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/10/81-06/24/82	6	2.55	2.517	3.	1.9	0.158	0.397	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	08/10/81-06/24/82	6	5.	4.65	5.8	2.7	1.335	1.155	**	**	**
00931	SODIUM ADSORPTION RATIO	08/10/81-06/24/82	6	0.45	0.417	0.5	0.2	0.014	0.117	**	**	**
00932	SODIUM, PERCENT	08/10/81-06/24/82	6	29.	28.667	35.	18.	38.667	6.218	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/10/81-06/24/82	6	0.4	0.383	0.4	0.3	0.002	0.041	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/10/81-06/24/82	6	13.	13.333	15.	12.	1.067	1.033	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/10/81-06/24/82	6	3.	2.833	4.	2.	0.567	0.753	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/10/81-06/24/82	6	13.8	14.317	18.	10.	8.738	2.956	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/26/82-06/24/82	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0569

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	0	0.00	2	1	0.50	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0569

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0570

NPS Station ID: SHEN0570
 Location: Pass Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.651420/ -78.351921

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F096
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0570

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/16/95-05/16/95	1	13.1	13.1	13.1	13.1	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/16/95-05/16/95	1	72.	72.	72.	72.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/16/95-05/16/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/16/95-05/16/95	1	7.08	7.08	7.08	7.08	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/16/95-05/16/95	1	7.08	7.08	7.08	7.08	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/16/95-05/16/95	1	0.083	0.083	0.083	0.083	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/16/95-05/16/95	1	46.	46.	46.	46.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0570

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00							1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00							1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0	0.00							1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0571

NPS Station ID: SHEN0571
 Location: South Fork Thornton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.653642/ -78.273365

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F035
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0571

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/95-05/17/95	1	12.5	12.5	12.5	12.5	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/17/95	1	53.	53.	53.	53.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/17/95-05/17/95	1	10.1	10.1	10.1	10.1	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/17/95-05/17/95	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/17/95-05/17/95	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/95-05/17/95	1	0.158	0.158	0.158	0.158	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/17/95	1	34.	34.	34.	34.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0571

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00									1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00									1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00									1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0572

NPS Station ID: SHEN0572
 Location: Pass Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.653781/ -78.357753

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F095
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0572

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/12/96-06/18/98	3	15.9	15.967	18.4	13.6	5.763	2.401	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/12/96-06/18/98	3	77.	68.333	82.	46.	380.333	19.502	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/12/96-06/18/98	3	9.7	9.267	9.7	8.4	0.563	0.751	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/12/96-06/18/98	3	7.16	7.187	7.25	7.15	0.003	0.055	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/12/96-06/18/98	3	7.16	7.184	7.25	7.15	0.003	0.055	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/12/96-06/18/98	3	0.069	0.065	0.071	0.056	0.	0.008	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/18/98-06/18/98	1	49.	49.	49.	49.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/12/96-06/18/98	3	3.09	2.913	3.4	2.25	0.354	0.595	**	**	**	**
83509 STREAM, WIDTH METER	06/12/96-06/18/98	3	5.5	5.833	6.7	5.3	0.573	0.757	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/12/96-06/18/98	3	0.11	0.213	0.46	0.07	0.046	0.215	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0572

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00							3	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00							3	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00							3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0573

NPS Station ID: SHEN0573
 Location: RT. 600
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103
 RF3 Index: 02080103001300.00
 Description:

LAT/LON: 38.654170/ -78.245837

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.44

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-THO024.12 /VA3-04-X0078/VA3-3X0078
 Within Park Boundary: No

Date Created: 04/19/76

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN VIRGINIA
 RIVER: THORNTON RIVER SECTION: 04 TOPO MAP #: 0074 TOPO MAP NAME: WASHINGTON, VA

Parameter Inventory for Station: SHEN0573

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/18/76-05/15/79	17	15.	13.853	27.	0.8	83.261	9.125	0.96	4.5	22.	26.76
00300	OXYGEN, DISSOLVED MG/L	05/18/76-05/15/79	17	9.8	10.059	13.1	8.2	2.615	1.617	8.2	8.55	11.3	12.86
00400	PH (STANDARD UNITS)	05/18/76-05/15/79	17	7.4	7.359	7.8	6.9	0.09	0.3	6.98	7.	7.6	7.8
00400	CONVERTED PH (STANDARD UNITS)	05/18/76-05/15/79	17	7.4	7.264	7.8	6.9	0.1	0.316	6.98	7.	7.6	7.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/18/76-05/15/79	17	0.04	0.054	0.126	0.016	0.001	0.036	0.016	0.026	0.1	0.105
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/18/76-05/15/79	17 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/18/76-05/15/79	17 ##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/18/76-05/15/79	17	0.1	0.165	1.	0.05	0.051	0.227	0.05	0.05	0.2	0.44
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/18/76-05/15/79	17	0.11	0.13	0.35	0.025	0.008	0.09	0.025	0.055	0.19	0.278
01002	ARSENIC, TOTAL (UG/L AS AS)	05/25/77-11/02/78	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/25/77-11/02/78	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/25/77-11/02/78	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/25/77-11/02/78	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	11/02/78-11/02/78	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/25/77-11/02/78	2 ##	13.	13.	24.	2.	242.	15.556	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	11/02/78-11/02/78	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/25/77-11/02/78	2 ##	27.5	27.5	50.	5.	1012.5	31.82	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/25/77-11/02/78	2 ##	77.5	77.5	150.	5.	10512.5	102.53	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/18/76-05/15/79	16	100.	293.75	2100.	50.	287625.	536.307	50.	50.	275.	1330.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/18/76-05/15/79	16	2.	2.111	3.322	1.699	0.243	0.493	1.699	1.699	2.433	3.097
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				129.035								
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	11/29/76-11/29/76	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	05/18/76-05/15/79	17 ##	0.05	0.053	0.1	0.05	0.	0.012	0.05	0.05	0.05	0.06
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/18/76-05/15/79	17 ##	0.005	0.007	0.03	0.005	0.	0.006	0.005	0.005	0.005	0.014
71900	MERCURY, TOTAL (UG/L AS HG)	05/25/77-11/02/78	2 ##	0.2	0.2	0.25	0.15	0.005	0.071	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0573

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
00400 PH	Fresh Chronic	9.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
	Other-Lo Lim.	6.5	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	50.	2	0	0.00				1	0	0.00	1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	0 &	0	0.00												
	Drinking Water	5.	0 &	0	0.00												
01034 CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00				1	0	0.00	1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	1300.	2	0	0.00				1	0	0.00	1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	15.	2	1	0.50				1	1	1.00	1	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	100.	2	0	0.00				1	0	0.00	1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	2	1	0.50				1	1	1.00	1	0	0.00			
	Drinking Water	5000.	2	0	0.00				1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	16	5	0.31	6	2	0.33	7	2	0.29	3	1	0.33			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	1	0	0.00				1	0	0.00						
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	2.	2	0	0.00				1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0574

NPS Station ID: SHEN0574
 Location: HAWKSBILL CR. OFF US 340 S LURAY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005032
 RF3 Index: 02070005000200.00
 Description:

LAT/LON: 38.654170/ -78.463337

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 4.770
 RF3 Mile Point: 4.41

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 075 /075 /HAWK-S15
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0574

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/28/69-08/18/69	2	21.75	21.75	22.	21.5	0.125	0.354	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/28/69-08/18/69	2	3.25	3.25	4.	2.5	1.125	1.061	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/28/69-08/18/69	2	7.3	7.3	7.4	7.2	0.02	0.141	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/28/69-08/18/69	2	1.4	1.4	1.7	1.1	0.18	0.424	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/28/69-08/18/69	2	0.024	0.024	0.035	0.012	0.	0.016	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/28/69-08/18/69	2	0.474	0.474	0.571	0.376	0.019	0.138	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/28/69-08/18/69	2	0.375	0.375	0.54	0.21	0.054	0.233	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	10250.	10250.	17200.	3300.	96605000.	9828.784	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/28/69-08/18/69	2	3.877	3.877	4.236	3.519	0.257	0.507	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			7533.923								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	8150.	8150.	13000.	3300.	47045000.	6858.936	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/28/69-08/18/69	2	3.816	3.816	4.114	3.519	0.177	0.421	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			6549.809								
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/28/69-08/18/69	2	3.75	3.75	4.5	3.	1.125	1.061	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/28/69-08/18/69	2	0.145	0.145	0.21	0.08	0.008	0.092	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0574

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0575

NPS Station ID: SHEN0575
 Location: VARA501R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.656115/ -78.303198

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_NURE_08 /4091463
 Within Park Boundary: Yes

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE THORNTON GAP VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS INSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0575

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/08/77-04/08/77	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/08/77-04/08/77	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/08/77-04/08/77	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/08/77-04/08/77	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/77-04/08/77	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/08/77-04/08/77	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/08/77-04/08/77	1	3.04	3.04	3.04	3.04	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/77-04/08/77	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/08/77-04/08/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/08/77-04/08/77	1	37.	37.	37.	37.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/08/77-04/08/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/08/77-04/08/77	1	3200.	3200.	3200.	3200.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/08/77-04/08/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0575

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0576

NPS Station ID: SHEN0576
 Location: South Fork Thornton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.657281/ -78.282671

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_2F036
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0576

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/21/95-07/09/98	2	18.3	18.3	18.5	18.1	0.08	0.283	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/21/95-07/09/98	2	80.	80.	81.	79.	2.	1.414	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/21/95-07/09/98	2	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/21/95-07/09/98	2	7.075	7.075	7.18	6.97	0.022	0.148	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/21/95-07/09/98	2	7.062	7.062	7.18	6.97	0.022	0.15	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/21/95-07/09/98	2	0.087	0.087	0.107	0.066	0.001	0.029	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/21/95-07/09/98	2	51.	51.	52.	50.	2.	1.414	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/09/98-07/09/98	1	5.91	5.91	5.91	5.91	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	07/09/98-07/09/98	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/09/98-07/09/98	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0576

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	2	0	0.00	2	0	0.00									
	Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0577

NPS Station ID: SHEN0577
 Location: VARA510R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.661003/ -78.231393

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_NURE_14 /4091472
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE WASHINGTON VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0577

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/11/77-04/11/77	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/11/77-04/11/77	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/11/77-04/11/77	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/11/77-04/11/77	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/11/77-04/11/77	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/11/77-04/11/77	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/11/77-04/11/77	1	2.97	2.97	2.97	2.97	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/11/77-04/11/77	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/11/77-04/11/77	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/11/77-04/11/77	1	44.	44.	44.	44.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/11/77-04/11/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	1	42.	42.	42.	42.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/11/77-04/11/77	1	3200.	3200.	3200.	3200.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/11/77-04/11/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0577

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0578

NPS Station ID: SHEN0578
 Location: Pass Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.661560/ -78.372253

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_PARK_PASS1
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0578

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/95-05/17/95	1	13.2	13.2	13.2	13.2	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/17/95	1	62.	62.	62.	62.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/17/95-05/17/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/17/95-05/17/95	1	7.15	7.15	7.15	7.15	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/17/95-05/17/95	1	7.15	7.15	7.15	7.15	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/95-05/17/95	1	0.071	0.071	0.071	0.071	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/17/95	1	40.	40.	40.	40.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0578

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00							1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00							1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0	0.00							1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0579

NPS Station ID: SHEN0579
 Location: RT. 522 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103022
 RF3 Index: 02080103002300.00
 Description:

LAT/LON: 38.663892/ -78.217504

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 8.030
 RF3 Mile Point: 4.29

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANOCK
 STORET Station ID(s): 3-THR000.50 /VA3-04-X0059/VA3-3X0059
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.12

On/Off RF1: OFF
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN VIRGINIA
 RIVER: N FORK THORNTON RIVER SECTION: 04 TOPO MAP #: 0074 TOPO MAP NAME: WASHINGTON, VA

Parameter Inventory for Station: SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	83	14.5	13.863	27.	0.6	51.13	7.151	3.54	7.8	20.	22.86
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	83	10.	10.387	15.4	6.8	3.147	1.774	8.28	9.	11.6	13.
00310	BOD, 5 DAY, 20 DEG C MG/L	10/08/68-02/10/71	8	1.5	1.35	2.	0.5	0.28	0.529	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	84	7.	7.19	9.5	6.3	0.22	0.469	6.7	6.825	7.5	7.7
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	84	7.	7.014	9.5	6.3	0.252	0.502	6.7	6.825	7.5	7.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	84	0.1	0.097	0.501	0.	0.007	0.083	0.02	0.032	0.15	0.2
00403	PH, LAB, STANDARD UNITS SU	10/08/68-07/21/78	7	6.8	6.971	7.9	6.2	0.376	0.613	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/08/68-07/21/78	7	6.8	6.68	7.9	6.2	0.475	0.689	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/08/68-07/21/78	7	0.158	0.209	0.631	0.013	0.051	0.227	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	10/08/68-07/21/78	7	14.	15.143	28.	9.	45.476	6.744	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	10/08/68-11/26/70	7	64.	71.143	134.	44.	909.476	30.158	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/08/68-11/26/70	7	26.	33.286	97.	4.	947.238	30.777	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	10/08/68-11/26/70	7	39.	37.857	42.	30.	14.476	3.805	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/27/69-11/26/70	6	5.5	6.167	12.	1.	15.767	3.971	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	02/27/69-11/26/70	6	4.	4.5	11.	1.	12.7	3.564	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/27/69-11/26/70	6	1.5	1.667	4.	0.	1.867	1.366	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/13/70-05/15/79	47 ##	0.05	0.051	0.12	0.005	0.	0.02	0.03	0.05	0.05	0.06
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/13/70-05/15/79	47 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/13/70-09/24/76	33	0.18	0.295	3.699	0.025	0.385	0.621	0.05	0.11	0.3	0.38
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/13/70-05/15/79	46	0.1	0.182	1.1	0.05	0.043	0.207	0.05	0.05	0.2	0.3
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	11/29/76-05/15/79	14	0.095	0.117	0.32	0.015	0.008	0.088	0.02	0.044	0.168	0.275
01002	ARSENIC, TOTAL (UG/L AS AS)	04/25/71-11/02/78	7 ##	2.5	1.786	2.5	0.5	0.821	0.906	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	11/26/70-11/02/78	10 ##	5.	4.55	5.	0.5	2.025	1.423	0.95	5.	5.	5.
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/13/70-11/02/78	17 ##	5.	6.765	20.	5.	15.441	3.93	5.	5.	7.5	12.
01042	COPPER, TOTAL (UG/L AS CU)	04/13/70-11/02/78	17 ##	5.	8.529	30.	5.	36.765	6.063	5.	5.	10.	14.
01045	IRON, TOTAL (UG/L AS FE)	11/26/70-11/02/78	4	100.	87.5	100.	50.	625.	25.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/26/70-11/02/78	13 ##	5.	5.423	10.	1.5	4.244	2.06	2.9	5.	5.	9.6
01055	MANGANESE, TOTAL (UG/L AS MN)	04/13/70-11/02/78	3	50.	50.	70.	30.	400.	20.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-11/02/78	4 ##	27.5	27.5	50.	5.	675.	25.981	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/13/70-11/02/78	17 ##	5.	25.588	180.	5.	1899.632	43.585	5.	5.	30.	92.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/04/68-11/13/73	14	4300.	5325.714	15000.	230.	19439426.374	4409.016	580.	1950.	9300.	13000.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	02/04/68-11/13/73	14	3.633	3.537	4.176	2.362	0.239	0.489	2.665	3.286	3.968	4.109
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			3443.987								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	68	100.	830.882	12800.	0.	33223	15.628	1822.722	50.	2430.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	68	2.	2.311	4.107	0.	0.749	1.699	1.699	3.	3.385
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		204.694								
39630	ATRAZINE (AATREX) IN WHOLE WATER SAMPLE (UG/L)	11/02/78-11/02/78	1	0.1	0.1	0.1	0.1	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/28/75-11/29/76	2	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/13/70-05/15/79	46 ##	0.05	0.051	0.1	0.025	0.	0.012	0.05	0.05	0.05
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/13/70-05/15/79	46 ##	0.025	0.028	0.05	0.005	0.	0.022	0.005	0.005	0.05
71900	MERCURY, TOTAL (UG/L AS HG)	11/26/70-11/02/78	15 ##	0.25	0.243	0.25	0.15	0.001	0.026	0.21	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0579

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	4.	83	0	0.00	28	0	0.00	32	0	0.00	23	0	0.00			
00400	PH	9.	84	1	0.01	29	1	0.03	32	0	0.00	23	0	0.00			
	Other-Lo Lim.	6.5	84	4	0.05	29	2	0.07	32	2	0.06	23	0	0.00			
00403	PH, LAB	9.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	7	2	0.29	3	1	0.33	1	0	0.00	3	1	0.33			
00615	NITRITE NITROGEN, TOTAL AS N	1.	47	0	0.00	13	0	0.00	20	0	0.00	14	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	33	0	0.00	9	0	0.00	13	0	0.00	11	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	10.	14	0	0.00	4	0	0.00	7	0	0.00	3	0	0.00			
01002	ARSENIC, TOTAL	360.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	50.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
01027	CADMIUM, TOTAL	3.9	1 &	0	0.00	1	0	0.00									
	Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	100.	17	0	0.00	4	0	0.00	6	0	0.00	7	0	0.00			
01042	COPPER, TOTAL	18.	17	1	0.06	4	0	0.00	6	0	0.00	7	1	0.14			
	Drinking Water	1300.	17	0	0.00	4	0	0.00	6	0	0.00	7	0	0.00			
01051	LEAD, TOTAL	82.	13	0	0.00	4	0	0.00	5	0	0.00	4	0	0.00			
	Drinking Water	15.	13	0	0.00	4	0	0.00	5	0	0.00	4	0	0.00			
01065	NICKEL, DISSOLVED	1400.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
	Drinking Water	100.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
01092	ZINC, TOTAL	120.	17	1	0.06	4	0	0.00	6	1	0.17	7	0	0.00			
	Drinking Water	5000.	17	0	0.00	4	0	0.00	6	0	0.00	7	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	1000.	14	12	0.86	8	8	1.00	3	2	0.67	3	2	0.67			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	68	31	0.46	20	10	0.50	30	12	0.40	18	9	0.50			
39630	ATRAZINE (AATREX) IN WHOLE WATER SAMPLE	3.	1	0	0.00				1	0	0.00						
50060	CHLORINE, TOTAL RESIDUAL	0.019	2	0	0.00				1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL	2.4	15	0	0.00	4	0	0.00	6	0	0.00	5	0	0.00			
	Drinking Water	2.	15	0	0.00	4	0	0.00	6	0	0.00	5	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	4	20.3	20.575	26.1	15.6	18.536	4.305	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	4	8.5	8.75	10.	8.	0.917	0.957	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	4	7.6	7.55	8.	7.	0.177	0.42	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	4	7.589	7.394	8.	7.	0.209	0.457	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	4	0.026	0.04	0.1	0.01	0.002	0.041	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	3	18.9	15.167	23.3	3.3	110.453	10.51	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	3	8.6	9.933	13.	8.2	7.093	2.663	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	3	6.8	6.767	7.	6.5	0.063	0.252	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	3	6.8	6.718	7.	6.5	0.067	0.259	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	3	0.158	0.192	0.316	0.1	0.013	0.112	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	8	14.45	14.163	22.2	3.9	59.586	7.719	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	8	9.7	10.225	13.2	8.6	3.136	1.771	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	8	7.	7.05	7.7	6.5	0.163	0.404	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	8	7.	6.908	7.7	6.5	0.186	0.431	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	8	0.1	0.124	0.316	0.02	0.01	0.099	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	2	400.	400.	800.	0.	320000.	565.685	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	2	1.452	1.452	2.903	0.	4.214	2.053	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			28.284								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	13	14.4	12.962	24.4	0.6	53.963	7.346	2.6	6.7	20.	22.88
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	13	10.8	11.192	15.3	8.	3.751	1.937	8.64	9.9	12.7	14.38
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	13	7.	7.108	8.2	6.5	0.259	0.509	6.58	6.8	7.3	8.12
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	13	7.	6.929	8.2	6.5	0.294	0.542	6.58	6.8	7.3	8.12
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	13	0.1	0.118	0.316	0.006	0.007	0.084	0.008	0.063	0.158	0.27
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	12	350.	2029.167	12800.	50.	13250662.879	3640.146	50.	62.5	3075.	10040.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	12	2.54	2.651	4.107	1.699	0.728	0.853	1.699	1.774	3.484	3.942
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			448.187								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	11	13.3	12.336	20.	1.7	36.065	6.005	2.48	6.1	17.8	19.66
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	12	10.2	10.842	15.4	8.5	4.639	2.154	8.59	9.2	11.95	14.92
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	12	7.	7.15	9.5	6.7	0.572	0.756	6.7	6.8	7.075	8.81
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	12	7.	6.946	9.5	6.7	0.617	0.786	6.7	6.8	7.075	8.81
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	12	0.1	0.113	0.2	0.	0.003	0.057	0.019	0.085	0.158	0.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	12	1000.	1025.	2700.	50.	645227.273	803.26	50.	200.	1575.	2400.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	12	3.	2.761	3.431	1.699	0.377	0.614	1.699	2.175	3.197	3.371
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			576.563								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	10	11.65	13.23	26.7	5.	44.749	6.689	5.28	7.8	17.675	26.09
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	10	11.	10.84	12.8	9.	1.269	1.127	9.06	10.05	11.55	12.72
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	10	7.05	7.15	7.8	6.8	0.132	0.363	6.8	6.8	7.5	7.77
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	10	7.025	7.036	7.8	6.8	0.146	0.382	6.8	6.8	7.5	7.77
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	10	0.094	0.092	0.158	0.016	0.003	0.059	0.017	0.032	0.158	0.158
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	9	400.	1061.111	6000.	50.	3636736.111	1907.023	50.	50.	1150.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	9	2.602	2.485	3.778	1.699	0.565	0.752	1.699	1.699	3.057	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			305.822								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	10	14.45	14.6	24.4	3.3	40.413	6.357	3.86	10.175	20.1	24.18
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	10	9.6	9.85	12.	6.9	2.758	1.661	7.03	8.8	11.65	11.98
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	10	7.2	7.2	8.	6.3	0.224	0.474	6.35	6.95	7.475	7.97
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	10	7.2	6.96	8.	6.3	0.288	0.537	6.35	6.95	7.475	7.97
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	10	0.063	0.11	0.501	0.01	0.021	0.145	0.011	0.035	0.115	0.467
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	10 ##	50.	350.	1400.	50.	272222.222	521.749	50.	50.	675.	1380.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	10 ##	1.699	2.112	3.146	1.699	0.376	0.613	1.699	1.699	2.794	3.139
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			129.363								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	5	15.	15.1	22.2	6.1	45.855	6.772	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	5	9.6	9.48	11.	6.8	2.832	1.683	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	5	7.1	7.18	7.5	6.8	0.097	0.311	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	5	7.1	7.096	7.5	6.8	0.106	0.325	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	5	0.079	0.08	0.158	0.032	0.003	0.053	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	5 ##	50.	90.	200.	50.	4250.	65.192	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	5 ##	1.699	1.88	2.301	1.699	0.072	0.269	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			75.786								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	5	15.	14.78	25.6	5.	58.042	7.619	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	5	9.2	9.88	13.2	8.4	3.667	1.915	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	5	7.1	7.26	8.	6.7	0.253	0.503	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	5	7.1	7.075	8.	6.7	0.296	0.544	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	5	0.079	0.084	0.2	0.01	0.005	0.074	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	5 ##	50.	120.	400.	50.	24500.	156.525	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	5 ##	1.699	1.88	2.602	1.699	0.163	0.404	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			75.786								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	5	8.	10.52	21.	0.9	94.387	9.715	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	5	10.	9.92	11.6	8.2	2.052	1.432	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	5	7.5	7.4	7.6	7.	0.055	0.235	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	5	7.5	7.341	7.6	7.	0.059	0.244	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	5	0.032	0.046	0.1	0.025	0.001	0.031	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	5	200.	270.	700.	50.	67000.	258.844	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	5	2.301	2.264	2.845	1.699	0.193	0.44	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			183.842								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	6	14.5	15.833	27.	1.	88.067	9.384	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	5	10.2	10.42	12.9	8.6	2.402	1.55	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	6	7.5	7.433	7.6	7.	0.051	0.225	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	6	7.5	7.375	7.6	7.	0.055	0.234	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	6	0.032	0.042	0.1	0.025	0.001	0.029	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	5 ##	50.	690.	3200.	50.	1969250.	1403.3	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	5 ##	1.699	2.12	3.505	1.699	0.616	0.785	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			131.951								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	3	8.5	10.	18.5	3.	61.75	7.858	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	3	11.6	11.5	13.1	9.8	2.73	1.652	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	3	7.2	7.2	7.4	7.	0.04	0.2	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	3	7.2	7.17	7.4	7.	0.041	0.203	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	3	0.063	0.068	0.1	0.04	0.001	0.03	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	3 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	3 ##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			50.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	28	20.6	20.329	27.	2.2	24.712	4.971	15.54	17.35	24.125	26.16
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	28	8.95	8.936	11.	6.8	0.944	0.972	7.89	8.2	9.675	10.2
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	29	7.5	7.386	9.5	6.5	0.332	0.576	6.8	7.	7.65	8.
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	29	7.5	7.131	9.5	6.5	0.399	0.632	6.8	7.	7.65	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	29	0.032	0.074	0.316	0.	0.007	0.081	0.01	0.023	0.1	0.158
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/13/70-05/15/79	13 ##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.08
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/13/70-05/15/79	13 ##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/13/70-09/24/76	9	0.11	0.148	0.4	0.025	0.016	0.128	0.025	0.045	0.245	0.4
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/13/70-05/15/79	13	0.2	0.154	0.4	0.05	0.01	0.101	0.05	0.05	0.2	0.32
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	20	150.	1185.	6000.	50.	2882394.737	1697.762	50.	50.	2425.	3570.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	20	2.151	2.469	3.778	1.699	0.652	0.808	1.699	1.699	3.375	3.553
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			294.602								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/13/70-05/15/79	13 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/13/70-05/15/79	12 ##	0.028	0.028	0.05	0.005	0.001	0.024	0.005	0.005	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	32	6.7	7.003	15.	0.6	14.32	3.784	1.21	4.175	10.	12.76
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	32	11.9	12.091	15.4	9.6	1.799	1.341	10.32	11.05	13.	13.62
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	32	7.	6.984	8.	6.3	0.095	0.308	6.7	6.8	7.075	7.4
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	32	7.	6.892	8.	6.3	0.104	0.322	6.7	6.8	7.075	7.4
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	32	0.1	0.128	0.501	0.01	0.008	0.091	0.04	0.085	0.158	0.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/13/70-05/15/79	20 ##	0.05	0.046	0.1	0.005	0.	0.021	0.007	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/13/70-05/15/79	20 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/13/70-09/24/76	13	0.26	0.501	3.699	0.05	0.932	0.965	0.082	0.17	0.33	2.359
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/13/70-05/15/79	20	0.1	0.22	1.1	0.05	0.089	0.298	0.05	0.05	0.275	0.93
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	30	100.	891.667	12800.	0.	5450014.368	2334.527	50.	50.	1000.	1670.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	30	2.	2.251	4.107	0.	0.682	0.826	1.699	1.699	3.	3.222
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			178.155								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/13/70-05/15/79	20 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/13/70-05/15/79	20 ##	0.01	0.027	0.05	0.005	0.	0.022	0.005	0.005	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0579

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-05/15/79	23	15.6	15.535	22.2	7.8	15.495	3.936	9.42	13.3	18.5	21.52
00300	OXYGEN, DISSOLVED MG/L	07/01/68-05/15/79	23	9.8	9.783	12.	8.4	0.752	0.867	8.68	9.2	10.2	10.92
00400	PH (STANDARD UNITS)	07/01/68-05/15/79	23	7.2	7.23	8.2	6.7	0.161	0.402	6.7	7.	7.5	7.84
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-05/15/79	23	7.2	7.084	8.2	6.7	0.184	0.429	6.7	7.	7.5	7.84
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-05/15/79	23	0.063	0.082	0.2	0.006	0.004	0.062	0.016	0.032	0.1	0.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/13/70-05/15/79	14 ##	0.05	0.057	0.12	0.03	0.001	0.023	0.04	0.05	0.05	0.11
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/13/70-05/15/79	14 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/13/70-09/24/76	11	0.14	0.171	0.41	0.06	0.01	0.102	0.066	0.11	0.2	0.388
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/13/70-05/15/79	13	0.1	0.15	0.3	0.05	0.005	0.071	0.07	0.1	0.2	0.26
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	18	150.	336.111	1400.	50.	162001.634	402.494	50.	50.	425.	1220.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-05/15/79	18	2.151	2.236	3.146	1.699	0.278	0.527	1.699	1.699	2.626	3.086
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			172.154								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/13/70-05/15/79	13 ##	0.05	0.054	0.1	0.025	0.001	0.022	0.025	0.05	0.05	0.1
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/13/70-05/15/79	14 ##	0.045	0.031	0.05	0.005	0.	0.022	0.005	0.005	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0580

NPS Station ID: SHEN0580
 Location: Pass Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.665309/ -78.375948

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_2F094
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Luray VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0580

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/27/94-07/27/94	4	16.4	17.05	19.	16.4	1.69	1.3	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/27/94-07/27/94	3	10.	10.333	11.	10.	0.333	0.577	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/27/94-07/27/94	3	8.36	8.34	8.4	8.26	0.005	0.072	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/27/94-07/27/94	3	8.36	8.336	8.4	8.26	0.005	0.072	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/27/94-07/27/94	3	0.004	0.005	0.005	0.004	0.	0.001	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0580

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00					
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0581

NPS Station ID: SHEN0581
 Location: VA. OAK TANNERY LURAY UPSTREAM
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005032
 RF3 Index: 02080204030000.00
 Description:

LAT/LON: 38.667504/ -78.459727

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 3.720
 RF3 Mile Point: 0.00

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 045 /045 /VA OAK 02
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.05

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0581

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0582

NPS Station ID: SHEN0582
 Location: HAWKSBILL CK RT 675UPSTREAM STP
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005032
 RF3 Index: 02070005003100.00
 Description:

LAT/LON: 38.668059/ -78.459727

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 3.720
 RF3 Mile Point: 0.00

Agency: 1112A9WQ
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): UP-POT-084 /SHEN-084 /084 /HAWKBI 084
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0582

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	4	11.75	10.875	18.	2.	47.063	6.86	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	4	10.55	10.7	13.2	8.5	3.993	1.998	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	4	1.95	1.8	2.3	1.	0.313	0.56	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/13/73	2	7.	7.	7.1	6.9	0.02	0.141	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/13/73	2	6.989	6.989	7.1	6.9	0.02	0.142	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/13/73	2	0.103	0.103	0.126	0.079	0.001	0.033	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	26.	26.	26.	26.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	7.	7.	7.	7.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	0.087	0.083	0.11	0.045	0.001	0.028	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	0.35	0.326	0.413	0.19	0.011	0.106	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	0.655	0.685	0.81	0.62	0.008	0.087	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	3	0.06	0.053	0.06	0.04	0.	0.012	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	3	2.	2.067	2.5	1.7	0.163	0.404	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	3	11.8	15.033	26.	7.3	95.263	9.76	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-04/16/73	2 ##	10.	10.	10.	10.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-04/16/73	3	50.	45.533	86.	0.6	1838.253	42.875	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	9200.	9200.	16000.	2400.	92480000.	9616.652	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/16/73	2	3.792	3.792	4.204	3.38	0.339	0.583	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)				6196.773							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	150.	150.	170.	130.	800.	28.284	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/16/73	2	2.172	2.172	2.23	2.114	0.007	0.082	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				148.661							
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	3	1.	1.	1.	1.	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	0.125	0.16	0.35	0.04	0.018	0.133	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-02/13/73	2 ##	0.4	0.4	0.8	0.	0.32	0.566	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0582

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00							2	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	1	0	0.00	1	0	0.00						
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	2	1.00				1	1	1.00	1	1	1.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	0	0.00				1	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	2.	2	0	0.00				1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0583

NPS Station ID: SHEN0583
 Location: ROUTE 675 BRIDGE IN LURAY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005032
 RF3 Index: 02070005003202.61

LAT/LON: 38.668116/ -78.459088

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BHK006.23 /VA1B02-X0020/VA1B6X0020
 Within Park Boundary: No

Date Created: / /

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.06

On/Off RF1: OFF
 On/Off RF3:

RF1 Mile Point: 3.720
 RF3 Mile Point: 4.09

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH
 RIVER: HAWKSBILL CREEK SECTION: 02 TOPO MAP #: 0035 TOPO MAP NAME: LURAY, VA

REGION: 6 VALLEY

Parameter Inventory for Station: SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	98	13.4	13.276	26.7	0.6	48.744	6.982	3.3	6.925	18.9	22.71
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/14/71-09/24/73	5	2.	5.86	18.	0.5	52.198	7.225	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	99	11.1	11.014	15.6	7.9	3.334	1.826	8.8	9.3	12.4	13.4
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-06/22/78	14	1.35	1.493	2.8	0.5	0.518	0.719	0.6	1.	2.05	2.75
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	96	8.	8.044	9.5	6.7	0.528	0.727	7.	7.5	8.7	9.
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	96	8.	7.563	9.5	6.7	0.761	0.873	7.	7.5	8.7	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	96	0.01	0.027	0.2	0.	0.002	0.039	0.001	0.002	0.032	0.1
00403	PH, LAB, STANDARD UNITS SU	12/05/68-09/24/73	9	7.8	7.822	8.9	6.9	0.352	0.593	6.9	7.4	8.15	8.9
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-09/24/73	9	7.8	7.497	8.9	6.9	0.471	0.686	6.9	7.4	8.15	8.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-09/24/73	9	0.016	0.032	0.126	0.001	0.002	0.042	0.001	0.007	0.05	0.126
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-06/28/70	8	56.	60.75	106.	6.	1277.643	35.744	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	92	128.	159.152	1114.	15.	18119.933	134.61	85.3	102.5	167.	220.3
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	92	41.	56.185	1034.	7.	11333.009	106.457	19.	27.	55.75	81.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	92	84.5	104.641	555.	1.	5234.694	72.351	51.6	67.	119.75	176.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	91	6.	13.802	240.	0.5	977.066	31.258	0.5	2.	14.	25.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	91	2.	4.258	33.	0.	34.719	5.892	0.	1.	6.	11.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	88	3.	11.136	207.	0.	868.728	29.474	0.	0.5	8.75	19.2
00545	RESIDUE, SETTLEABLE (ML/L)	04/14/71-04/14/71	1	77.	77.	77.	77.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-02/06/79	61 ##	0.05	0.11	3.799	0.005	0.231	0.48	0.032	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-02/06/79	62 ##	0.005	0.008	0.09	0.005	0.	0.011	0.005	0.005	0.01	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-05/31/78	56	0.6	0.797	6.	0.09	0.657	0.81	0.32	0.433	0.87	1.199
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-02/06/79	63	0.1	0.271	6.	0.05	0.551	0.742	0.05	0.1	0.3	0.4
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	06/22/78-02/06/79	6	0.7	0.822	1.5	0.43	0.149	0.386	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-02/06/79	27	4.	4.815	26.	0.5	21.984	4.689	0.9	2.	6.	7.
01002	ARSENIC, TOTAL (UG/L AS AS)	04/14/71-08/09/78	11 ##	1.5	3.727	25.	0.5	50.368	7.097	0.6	1.	2.5	20.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/14/71-08/09/78	15 ##	5.	4.633	5.	0.5	1.374	1.172	2.6	5.	5.	5.
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-08/09/78	26 ##	5.	6.75	20.	0.5	13.625	3.691	5.	5.	10.	10.
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-08/09/78	26 ##	5.	10.962	70.	5.	204.038	14.284	5.	5.	10.	26.
01045	IRON, TOTAL (UG/L AS FE)	06/28/70-12/05/71	4	150.	127.5	200.	10.	8358.333	91.424	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-08/09/78	24 ##	5.	7.417	40.	1.	56.341	7.506	1.	5.	10.	10.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-12/05/71	3	40.	33.333	50.	10.	433.333	20.817	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-08/09/78	10 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	05/15/69-08/09/78	25	10.	11.4	50.	5.	105.25	10.259	5.	5.	10.	24.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/16/68-10/14/70	14	4600.	22595.714	240000.	210.3931743903297	62703.62	320.	2300.	11000.	125500.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/16/68-10/14/70	14	3.663	3.699	5.38	2.322	0.511	0.715	2.478	3.362	4.711
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =		5000.231								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/70-12/14/78	82	200.	1282.927	39000.	50.20456927.13	4522.933	50.	50.	725.	2220.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/70-12/14/78	82	2.301	2.402	4.591	1.699	0.476	0.69	1.699	1.699	2.86
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		252.585								
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	05/04/71-05/04/71	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	06/06/71-06/06/71	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	63 ##	0.05	0.112	1.7	0.025	0.062	0.249	0.05	0.05	0.05
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	62 ##	0.02	0.055	1.699	0.005	0.046	0.214	0.005	0.005	0.05
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-08/09/78	23 ##	0.25	0.337	1.2	0.15	0.058	0.242	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0583

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	5	0	0.00	2	0	0.00			3	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	99	0	0.00	29	0	0.00	41	0	0.00	29	0	0.00		
00400	PH	Fresh Chronic	9.	96	16	0.17	29	6	0.21	39	4	0.10	28	6	0.21		
		Other-Lo Lim.	6.5	96	0	0.00	29	0	0.00	39	0	0.00	28	0	0.00		
00403	PH, LAB	Fresh Chronic	9.	9	0	0.00	2	0	0.00	3	0	0.00	4	0	0.00		
		Other-Lo Lim.	6.5	9	0	0.00	2	0	0.00	3	0	0.00	4	0	0.00		
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	62	0	0.00	15	0	0.00	26	0	0.00	21	0	0.00		
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	56	0	0.00	13	0	0.00	23	0	0.00	20	0	0.00		
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00		
01002	ARSENIC, TOTAL	Fresh Acute	360.	11	0	0.00	5	0	0.00	2	0	0.00	4	0	0.00		
		Drinking Water	50.	11	0	0.00	5	0	0.00	2	0	0.00	4	0	0.00		
01027	CADMIUM, TOTAL	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00								
		Drinking Water	5.	2 &	0	0.00	1	0	0.00			1	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	26	0	0.00	8	0	0.00	8	0	0.00	10	0	0.00		
01042	COPPER, TOTAL	Fresh Acute	18.	26	4	0.15	8	2	0.25	8	0	0.00	10	2	0.20		
		Drinking Water	1300.	26	0	0.00	8	0	0.00	8	0	0.00	10	0	0.00		
01051	LEAD, TOTAL	Fresh Acute	82.	24	0	0.00	8	0	0.00	8	0	0.00	8	0	0.00		
		Drinking Water	15.	24	1	0.04	8	0	0.00	8	1	0.13	8	0	0.00		
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	10	0	0.00	3	0	0.00	3	0	0.00	4	0	0.00		
		Drinking Water	100.	10	0	0.00	3	0	0.00	3	0	0.00	4	0	0.00		
01092	ZINC, TOTAL	Fresh Acute	120.	25	0	0.00	7	0	0.00	8	0	0.00	10	0	0.00		
		Drinking Water	5000.	25	0	0.00	7	0	0.00	8	0	0.00	10	0	0.00		
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	14	12	0.86	8	7	0.88	2	1	0.50	4	4	1.00		
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	82	45	0.55	21	17	0.81	36	15	0.42	25	13	0.52		
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1	0	0.00						1	0	0.00			
		Drinking Water	2.	1	0	0.00						1	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	23	0	0.00	8	0	0.00	8	0	0.00	7	0	0.00		
		Drinking Water	2.	23	0	0.00	8	0	0.00	8	0	0.00	7	0	0.00		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	4	22.2	19.575	26.7	7.2	75.789	8.706	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	4	9.85	9.825	11.5	8.1	3.143	1.773	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	4	8.35	8.35	8.7	8.	0.097	0.311	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	4	8.325	8.27	8.7	8.	0.105	0.324	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	4	0.005	0.005	0.01	0.002	0.	0.004	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	1	136.	136.	136.	136.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	1	57.	57.	57.	57.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	1	79.	79.	79.	79.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	1	8.	8.	8.	8.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	3	18.3	14.433	21.1	3.9	85.173	9.229	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	3	11.2	11.4	13.9	9.1	5.79	2.406	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	3	8.4	8.467	9.	8.	0.253	0.503	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	3	8.4	8.302	9.	8.	0.294	0.542	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	3	0.004	0.005	0.01	0.001	0.	0.005	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	3	126.	108.	183.	15.	7299.	85.434	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	3	56.	56.	63.	49.	49.	7.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	3	89.	95.333	120.	77.	492.333	22.189	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	3	8.	8.667	12.	6.	9.333	3.055	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	3	3.	3.	3.	3.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	3	5.	5.667	9.	3.	9.333	3.055	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	10	14.45	14.56	21.7	6.7	39.752	6.305	6.81	8.175	21.25	21.7
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	10	11.	10.76	12.4	8.2	2.585	1.608	8.28	9.15	12.4	12.4
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	10	8.55	8.29	9.4	7.	0.852	0.923	7.02	7.35	9.125	9.38
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	10	8.525	7.614	9.4	7.	1.36	1.166	7.02	7.35	9.125	9.38
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	10	0.003	0.024	0.1	0.	0.001	0.034	0.	0.001	0.046	0.096
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	10	145.	203.5	724.	76.	37590.944	193.884	77.	100.25	207.	681.3
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	10	45.5	59.1	169.	31.	1737.211	41.68	31.2	33.75	73.25	159.5
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	10	98.	144.4	555.	42.	23468.711	153.195	42.9	60.75	148.	521.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	12.5	19.7	85.	4.	568.456	23.842	4.	7.75	20.	79.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	5.5	8.2	33.	3.	80.622	8.979	3.	3.75	7.75	30.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	6.5	11.5	52.	1.	234.278	15.306	1.	2.5	14.5	48.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	2	4150.	4150.	8000.	300.	29645000.	5444.722	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	2	3.19	3.19	3.903	2.477	1.017	1.008	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			1549.193								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	12	13.05	12.833	22.8	3.3	45.233	6.726	3.63	5.875	18.625	22.47
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	12	10.8	10.667	13.2	8.	3.639	1.908	8.	9.1	12.6	13.14
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	12	8.	7.808	9.	6.7	0.488	0.699	6.73	7.2	8.3	8.79
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	12	8.	7.342	9.	6.7	0.726	0.852	6.73	7.2	8.3	8.79
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	12	0.01	0.046	0.2	0.001	0.004	0.067	0.002	0.005	0.063	0.187
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	12	135.	131.667	207.	29.	2648.788	51.466	45.5	97.	170.75	201.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	12	34.	37.583	77.	7.	394.083	19.852	10.	22.25	53.5	70.4
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	12	84.5	95.75	200.	1.	2844.75	53.336	15.7	67.	136.75	187.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	12	7.	15.167	59.	1.	357.606	18.91	1.3	2.75	26.5	54.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	12	2.	3.167	11.	0.	11.242	3.353	0.	0.25	5.5	9.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	11	3.	13.	52.	1.	326.	18.055	1.2	2.	21.	50.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	11	1000.	4213.636	39000.	50.	133646545.455	11560.56	50.	50.	1300.	31680.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	11	3.	2.7	4.591	1.699	0.805	0.897	1.699	1.699	3.114	4.349
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			501.255								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	12	14.2	12.733	23.3	0.6	57.199	7.563	1.41	6.	18.175	22.97
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	12	9.8	10.217	13.8	8.	2.578	1.606	8.24	9.05	11.55	13.14
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	12	7.5	7.533	8.5	7.	0.25	0.5	7.	7.	7.9	8.41
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	12	7.5	7.327	8.5	7.	0.296	0.544	7.	7.	7.9	8.41
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	12	0.032	0.047	0.1	0.003	0.002	0.04	0.004	0.014	0.1	0.1
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	10	125.	181.6	428.	80.	16730.933	129.348	80.6	95.75	261.25	425.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	10	39.	46.	103.	12.	782.667	27.976	13.	25.75	70.	100.3
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	10	91.	135.6	352.	38.	11569.6	107.562	40.3	65.5	207.75	346.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	9.	31.2	240.	1.	5403.956	73.512	1.2	3.75	13.5	217.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	3.	5.8	33.	1.	93.956	9.693	1.	1.	4.5	30.3
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	7.5	36.	207.	0.	4799.333	69.277	0.1	1.	36.	197.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	12	700.	1629.167	6000.	50.	4456571.97	2111.059	125.	350.	1775.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	12	2.827	2.896	3.778	1.699	0.337	0.581	1.932	2.533	3.249	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			786.199								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	10	13.3	12.76	24.4	2.2	62.772	7.923	2.26	5.725	18.725	24.29
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	11	12.1	11.591	15.6	8.8	5.133	2.266	8.84	9.	13.2	15.16
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	9	7.5	7.633	8.7	6.8	0.365	0.604	6.8	7.2	8.15	8.7
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	9	7.5	7.349	8.7	6.8	0.456	0.675	6.8	7.2	8.15	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	9	0.032	0.045	0.158	0.002	0.002	0.049	0.002	0.008	0.063	0.158
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	11	154.	234.455	1114.	85.	87529.073	295.853	89.4	107.	196.	943.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	11	37.	126.636	1034.	13.	90926.655	301.54	14.	19.	50.	843.4
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	11	94.	107.818	221.	62.	2514.564	50.145	63.	73.	133.	212.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	10.5	25.5	156.	1.	2213.167	47.044	1.2	3.75	20.75	144.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	10	6.5	7.	18.	0.	37.556	6.128	0.1	1.	12.	17.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	9	3.	20.556	138.	0.	2006.528	44.794	0.	0.5	18.	138.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	11	300.	981.818	5900.	50.	2956636.364	1719.487	50.	50.	1300.	5000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	11	2.477	2.453	3.771	1.699	0.555	0.745	1.699	1.699	3.114	3.646
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			283.921								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	13.9	12.129	18.9	4.4	35.122	5.926	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	7	12.	11.114	13.	7.9	3.388	1.841	**	**	**	**
00400	PH (STANDARD UNITS)	8	7.65	7.813	8.9	7.	0.396	0.629	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	8	7.647	7.521	8.9	7.	0.493	0.702	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	8	0.023	0.03	0.1	0.001	0.001	0.032	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	8	127.	144.375	256.	79.	3299.125	57.438	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	8	51.	52.875	87.	16.	744.411	27.284	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	8	77.	91.5	175.	45.	1944.286	44.094	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	8	4.5	10.5	36.	1.	155.714	12.479	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	8	1.	3.	18.	0.	36.857	6.071	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	8	3.5	7.5	19.	0.	70.	8.367	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	100.	181.25	700.	50.	47812.5	218.661	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	2.	2.068	2.845	1.699	0.161	0.402	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	14.2	13.392	22.2	5.6	35.854	5.988	5.93	7.1	18.475	21.87
00300	OXYGEN, DISSOLVED MG/L	12	11.25	11.633	14.5	8.8	2.992	1.73	8.95	10.725	13.35	14.17
00400	PH (STANDARD UNITS)	12	8.7	8.333	9.5	7.	0.65	0.806	7.15	7.5	9.	9.35
00400	CONVERTED PH (STANDARD UNITS)	12	8.7	7.743	9.5	7.	1.03	1.015	7.15	7.5	9.	9.35
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.002	0.018	0.1	0.	0.001	0.029	0.001	0.001	0.032	0.079
00500	RESIDUE, TOTAL (MG/L)	11	128.	131.091	223.	71.	1696.291	41.186	74.2	105.	151.	211.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	11	41.	51.364	112.	12.	969.055	31.13	15.6	31.	62.	110.2
00510	RESIDUE, TOTAL FIXED (MG/L)	11	73.	79.727	139.	25.	1310.218	36.197	27.6	53.	111.	133.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	4.	8.273	22.	1.	57.218	7.564	1.2	2.	16.	20.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11	2.	4.364	12.	0.	19.655	4.433	0.2	1.	8.	12.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10	3.	4.3	16.	0.	27.122	5.208	0.	0.	7.	15.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12 ##	125.	725.	6000.	50.	2826136.364	1681.112	50.	50.	575.	4440.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12 ##	2.	2.261	3.778	1.699	0.465	0.682	1.699	1.699	2.758	3.516
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10	13.35	14.22	22.8	2.8	40.415	6.357	3.46	9.85	20.7	22.8
00300	OXYGEN, DISSOLVED MG/L	10	10.1	10.64	13.2	8.8	2.336	1.528	8.83	9.25	12.225	13.11
00400	PH (STANDARD UNITS)	10	7.9	8.15	9.2	7.	0.552	0.743	7.05	7.65	8.85	9.18
00400	CONVERTED PH (STANDARD UNITS)	10	7.889	7.694	9.2	7.	0.782	0.885	7.05	7.65	8.85	9.18
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.013	0.02	0.1	0.001	0.001	0.03	0.001	0.001	0.023	0.093
00500	RESIDUE, TOTAL (MG/L)	9	133.	134.111	185.	96.	979.611	31.299	96.	103.5	161.	185.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	9	46.	45.889	92.	26.	412.611	20.313	26.	29.5	53.	92.
00510	RESIDUE, TOTAL FIXED (MG/L)	9	81.	88.222	132.	50.	918.444	30.306	50.	59.5	119.5	132.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	9	2.	3.722	16.	0.5	24.507	4.95	0.5	0.5	5.	16.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	9	0.5	1.278	4.	0.	2.757	1.66	0.	0.	3.	4.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	9	0.5	2.611	16.	0.	25.924	5.092	0.	0.25	2.	16.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	100.	165.	400.	50.	16138.889	127.039	50.	50.	300.	390.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	2.	2.095	2.602	1.699	0.121	0.348	1.699	1.699	2.477	2.59
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	8	11.25	11.513	22.7	0.6	79.841	8.935	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	8	12.25	12.425	15.2	8.8	3.991	1.998	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	8	8.45	8.413	9.	7.5	0.358	0.599	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	8	8.25	8.083	9.	7.5	0.483	0.695	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	8	0.006	0.008	0.032	0.001	0.	0.01	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	8	164.5	163.625	348.	67.	7108.839	84.314	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	8	32.	43.	119.	13.	1140.571	33.772	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	8	132.5	120.625	229.	54.	3201.411	56.581	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	8 ##	2.25	5.75	18.	0.5	55.786	7.469	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	8 ##	2.25	3.875	12.	0.5	19.696	4.438	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	8 ##	0.5	2.125	8.	0.	9.411	3.068	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	8 ##	175.	912.5	6000.	50.	4251250.	2061.856	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	8 ##	2.088	2.282	3.778	1.699	0.549	0.741	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			191.386								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	9	13.5	12.722	24.	3.	56.382	7.509	3.	5.	19.25	24.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	9	10.8	10.556	12.8	8.5	1.653	1.286	8.5	9.65	11.35	12.8
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	8	8.55	8.3	9.	7.5	0.469	0.685	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	8	8.547	7.886	9.	7.5	0.665	0.815	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	8	0.003	0.013	0.032	0.001	0.	0.015	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	8	106.5	120.125	165.	90.	952.411	30.861	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	8	29.	34.625	63.	20.	229.696	15.156	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	8	79.	86.	119.	65.	451.429	21.247	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	8	1.	1.75	6.	0.5	3.286	1.813	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	8	0.75	1.063	3.	0.	0.96	0.98	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	8 ##	0.5	1.	3.	0.	1.	1.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	8	100.	137.5	400.	50.	13392.857	115.728	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	8	2.	2.038	2.602	1.699	0.089	0.298	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			109.051								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	1	98.	98.	98.	98.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	1	27.	27.	27.	27.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	1	71.	71.	71.	71.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	29	20.	19.348	26.7	2.3	20.753	4.556	15.	16.95	22.45	24.4
00300	OXYGEN, DISSOLVED MG/L	29	9.4	9.938	13.4	8.	2.125	1.458	8.2	8.9	10.8	12.4
00400	PH (STANDARD UNITS)	29	8.3	8.331	9.2	7.	0.392	0.626	7.5	7.9	8.9	9.
00400	CONVERTED PH (STANDARD UNITS)	29	8.3	7.885	9.2	7.	0.598	0.773	7.5	7.9	8.9	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	29	0.005	0.013	0.1	0.001	0.	0.022	0.001	0.001	0.013	0.032
00500	RESIDUE, TOTAL (MG/L)	25	167.	198.84	724.	15.	17113.473	130.818	113.4	149.	201.5	349.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	25	50.	55.2	169.	7.	1251.833	35.381	16.2	30.5	75.	100.
00510	RESIDUE, TOTAL FIXED (MG/L)	25	123.	148.84	555.	55.	10953.223	104.658	68.8	93.	167.5	274.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	25	7.	21.46	240.	0.5	2397.373	48.963	1.	3.	13.5	59.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	25	3.	6.1	33.	0.	77.917	8.827	0.	1.	7.5	20.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	24	3.5	16.042	207.	0.	1826.976	42.743	0.25	1.	8.25	47.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	15###	0.05	0.057	0.1	0.05	0.	0.018	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	15###	0.005	0.012	0.09	0.005	0.	0.022	0.005	0.005	0.01	0.042
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	13	0.53	0.633	1.899	0.31	0.189	0.434	0.314	0.33	0.745	1.539
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	15	0.1	0.18	0.4	0.05	0.017	0.129	0.05	0.05	0.3	0.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	21	300.	1266.667	6000.	50.	4122083.333	2030.291	60.	200.	1200.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	21	2.477	2.664	3.778	1.699	0.387	0.622	1.759	2.301	3.073	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			461.562								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	15###	0.05	0.157	0.9	0.05	0.08	0.282	0.05	0.05	0.05	0.84
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	15###	0.01	0.026	0.1	0.005	0.001	0.028	0.005	0.005	0.05	0.07

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	40	6.7	7.01	15.	0.6	15.23	3.903	2.8	3.925	9.4	13.25
00300	OXYGEN, DISSOLVED MG/L	41	12.2	12.127	15.6	8.5	2.457	1.567	9.44	11.2	13.2	13.88
00400	PH (STANDARD UNITS)	39	7.7	7.813	9.5	6.8	0.535	0.732	7.	7.2	8.4	9.
00400	CONVERTED PH (STANDARD UNITS)	39	7.7	7.402	9.5	6.8	0.709	0.842	7.	7.2	8.4	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	39	0.02	0.04	0.158	0.	0.002	0.044	0.001	0.004	0.063	0.1
00500	RESIDUE, TOTAL (MG/L)	39	117.	154.41	1114.	71.	26593.511	163.075	93.	105.	154.	196.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	39	41.	70.103	1034.	17.	25449.568	159.529	22.	30.	55.	81.
00510	RESIDUE, TOTAL FIXED (MG/L)	39	73.	84.41	221.	25.	1412.933	37.589	45.	64.	105.	134.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	38	6.	13.776	156.	0.5	705.036	26.553	0.5	1.75	15.	36.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	38	2.	3.908	18.	0.	21.485	4.635	0.45	1.	5.25	12.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	37	3.	10.216	138.	0.	565.244	23.775	0.	0.5	9.5	19.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	26###	0.05	0.045	0.1	0.005	0.	0.019	0.009	0.048	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	26###	0.005	0.007	0.02	0.005	0.	0.003	0.005	0.005	0.006	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	23	0.8	0.887	1.899	0.09	0.176	0.419	0.43	0.6	1.099	1.619
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	27	0.1	0.159	0.4	0.05	0.01	0.099	0.05	0.1	0.2	0.3
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	36	100.	573.611	8000.	50.	1918212.302	1384.995	50.	50.	475.	1420.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	36	2.	2.214	3.903	1.699	0.39	0.625	1.699	1.699	2.675	3.149
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			163.66								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	27###	0.05	0.074	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	27###	0.01	0.026	0.1	0.005	0.001	0.025	0.005	0.005	0.05	0.05

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	29	17.2	15.845	24.	6.7	25.784	5.078	8.	12.5	20.	22.8
00300	OXYGEN, DISSOLVED MG/L	29	10.2	10.517	14.5	7.9	2.766	1.663	8.	9.25	11.5	13.
00400	PH (STANDARD UNITS)	28	7.85	8.068	9.4	6.7	0.532	0.729	7.27	7.5	8.7	9.02

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0583

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	28	7.825	7.602	9.4	6.7	0.757	0.87	7.27	7.5	8.7	9.02
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	28	0.015	0.025	0.2	0.	0.002	0.04	0.001	0.002	0.032	0.055
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	28	105.5	130.321	403.	29.	6078.078	77.962	77.8	86.25	157.	192.3
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	28	31.	37.679	119.	12.	629.93	25.098	13.	20.75	48.	66.1
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	28	79.	93.357	300.	1.	3386.016	58.189	49.7	63.25	108.25	152.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	28	3.	7.	26.	0.5	57.444	7.579	0.5	1.25	11.75	20.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	28	2.	3.089	12.	0.	12.297	3.507	0.	0.5	4.	9.3
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	27	2.	8.037	114.	0.	474.691	21.787	0.	0.5	6.	19.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-02/06/79	20 ##	0.05	0.235	3.799	0.01	0.704	0.839	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-02/06/79	21 ##	0.005	0.008	0.03	0.005	0.	0.006	0.005	0.005	0.01	0.018
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-05/31/78	20	0.505	0.799	6.	0.1	1.55	1.245	0.232	0.405	0.67	1.159
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-02/06/79	21	0.2	0.481	6.	0.05	1.614	1.271	0.06	0.1	0.3	0.48
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	25	200.	2318.	39000.	50.	60938725.	7806.326	50.	50.	700.	5940.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/14/78	25	2.301	2.454	4.591	1.699	0.599	0.774	1.699	1.699	2.827	3.774
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			284.356								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	21 ##	0.05	0.129	1.7	0.025	0.13	0.36	0.03	0.05	0.05	0.09
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	20 ##	0.03	0.114	1.699	0.005	0.14	0.374	0.005	0.005	0.05	0.095

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0584

NPS Station ID: SHEN0584
 Location: South Fork Thornton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.669420/ -78.291560

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_SFTR1
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0584

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/17/95-05/17/95	1	11.7	11.7	11.7	11.7	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/17/95	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/17/95-05/17/95	1	10.2	10.2	10.2	10.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/17/95-05/17/95	1	6.78	6.78	6.78	6.78	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/17/95-05/17/95	1	6.78	6.78	6.78	6.78	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/17/95-05/17/95	1	0.166	0.166	0.166	0.166	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/17/95	1	17.	17.	17.	17.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0584

Parameter	Std. Type	Std. Value	Total			Prop.			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.		
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0		0.00						1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0		0.00						1	0	0.00						
	Other-Lo Lim.	6.5	1	0		0.00						1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0585

NPS Station ID: SHEN0585
 Location: IMMEDIATELY BELOW TOWN OF LURAY STP
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005032
 RF3 Index: 02070005003202.61

LAT/LON: 38.670698/ -78.457726
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 3.330
 RF3 Mile Point: 4.03
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH
 RIVER: HAWKSBILL CREEK SECTION: 02 TOPO MAP #: 0035 TOPO MAP NAME: LURAY, VA

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BHKS006.04 /VA1B02-X0019/VA1B6X0019
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	62	14.2	13.882	24.4	0.6	46.402	6.812	3.98	8.	20.	23.15
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	63	10.	9.876	15.	0.	7.265	2.695	7.16	8.4	11.8	12.72
00310	BOD, 5 DAY, 20 DEG C MG/L	07/31/72-06/22/78	4	14.	14.45	24.	5.8	56.143	7.493	**	**	**	**
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	61	8.	8.087	9.2	6.9	0.375	0.613	7.42	7.5	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	61	8.	7.726	9.2	6.9	0.508	0.712	7.42	7.5	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	61	0.01	0.019	0.126	0.001	0.001	0.025	0.001	0.003	0.032	0.038
00403	PH, LAB, STANDARD UNITS SU	09/24/73-09/24/73	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/24/73-09/24/73	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/24/73-09/24/73	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	07/31/72-02/06/79	60	285.	366.867	1892.	24.	94811.88	307.915	153.6	212.	430.5	527.1
00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/31/72-02/06/79	60	70.5	99.2	550.	8.	9268.942	96.275	33.	47.25	120.75	161.9
00510	RESIDUE, TOTAL FIXED (MG/L)	07/31/72-02/06/79	60	221.	300.3	1930.	66.	98011.637	313.068	119.7	159.25	318.	440.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/31/72-02/06/79	59	23.	44.814	516.	0.	7586.775	87.102	4.	10.	40.	66.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/31/72-02/06/79	58	13.	23.707	380.	0.	2521.579	50.215	2.	6.	25.25	48.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/31/72-02/06/79	59	6.	20.822	468.	0.	4097.593	64.012	0.5	2.	13.	39.
00545	RESIDUE, SETTLEABLE (ML/L)	06/24/75-02/06/79	24##	0.05	0.217	3.	0.05	0.366	0.605	0.05	0.05	0.088	0.45
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	59	1.599	2.361	21.	0.3	7.983	2.825	0.7	1.	3.	4.299
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	59	0.01	0.019	0.08	0.005	0.	0.017	0.005	0.01	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	52	0.64	0.774	2.199	0.12	0.199	0.446	0.343	0.463	1.	1.296
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	59	3.699	4.701	28.	0.9	16.45	4.056	1.699	2.399	5.899	8.
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	6	0.625	0.677	1.5	0.12	0.269	0.519	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/22/78-02/06/79	2	18.	18.	21.	15.	18.	4.243	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/07/73-08/09/78	5##	1.	1.	1.5	0.5	0.125	0.354	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/31/72-08/09/78	10##	5.	5.15	10.	0.5	5.114	2.261	0.95	5.	5.25	9.6
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/31/72-08/09/78	15	50.	482.6	4500.	5.	1339529.257	1157.38	5.	40.	460.	2519.4
01042	COPPER, TOTAL (UG/L AS CU)	07/31/72-08/09/78	15##	5.	8.667	40.	5.	90.952	9.537	5.	5.	5.	28.
01051	LEAD, TOTAL (UG/L AS PB)	07/31/72-08/09/78	14##	5.	8.357	40.	1.	97.478	9.873	1.5	3.75	10.75	27.
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-08/09/78	11##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	07/31/72-08/09/78	14##	7.5	16.071	50.	5.	281.456	16.777	5.	5.	30.	50.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	62	6000.	5445.161	8000.	50.	4148336.859	2036.747	890.	6000.	6000.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	62	3.778	3.63	3.903	1.699	0.209	0.457	2.945	3.778	3.778	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			4261.72								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	58	1.5	2.458	22.	0.15	10.408	3.226	0.5	1.	2.8	5.02

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	59	1.099	1.665	12.	0.15	4.051	2.013	0.3	0.52	2.	4.
71900 MERCURY, TOTAL (UG/L AS HG)	07/31/72-08/09/78	15 ##	0.25	0.243	0.25	0.15	0.001	0.026	0.21	0.25	0.25	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0585

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	63	2	0.03	18	2	0.11	26	0	0.00	19	0	0.00			
00400 PH	Fresh Chronic	9.	61	9	0.15	18	4	0.22	25	3	0.12	18	2	0.11			
	Other-Lo Lim.	6.5	61	0	0.00	18	0	0.00	25	0	0.00	18	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00									
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	59	0	0.00	15	0	0.00	25	0	0.00	19	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	52	0	0.00	13	0	0.00	22	0	0.00	17	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	5	0	0.00	4	0	0.00	1	0	0.00						
	Drinking Water	50.	5	0	0.00	4	0	0.00	1	0	0.00						
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2 &	1	0.50	2	1	0.50									
	Drinking Water	5.	2 &	1	0.50	2	1	0.50									
01034 CHROMIUM, TOTAL	Drinking Water	100.	15	5	0.33	6	1	0.17	5	3	0.60	4	1	0.25			
01042 COPPER, TOTAL	Fresh Acute	18.	15	2	0.13	6	0	0.00	5	1	0.20	4	1	0.25			
	Drinking Water	1300.	15	0	0.00	6	0	0.00	5	0	0.00	4	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	14	0	0.00	6	0	0.00	5	0	0.00	3	0	0.00			
	Drinking Water	15.	14	1	0.07	6	1	0.17	5	0	0.00	3	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	11	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00			
	Drinking Water	100.	11	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	14	0	0.00	5	0	0.00	5	0	0.00	4	0	0.00			
	Drinking Water	5000.	14	0	0.00	5	0	0.00	5	0	0.00	4	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	62	60	0.97	18	18	1.00	25	24	0.96	19	18	0.95			
71900 MERCURY, TOTAL	Fresh Acute	2.4	15	0	0.00	6	0	0.00	5	0	0.00	4	0	0.00			
	Drinking Water	2.	15	0	0.00	6	0	0.00	5	0	0.00	4	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1972 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	5	16.7	14.24	21.1	5.6	44.498	6.671	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	5	7.	8.04	11.8	5.8	5.588	2.364	**	**	**	**
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	5	8.	8.1	9.2	7.	0.67	0.819	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	5	8.	7.586	9.2	7.	1.	1.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	5	0.01	0.026	0.1	0.001	0.002	0.042	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	2	2.	2.	2.5	1.5	0.5	0.707	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	2	1.14	1.14	1.289	0.99	0.045	0.211	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	2	3.999	3.999	4.699	3.299	0.98	0.99	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	5	6000.	5760.	6000.	4800.	288000.	536.656	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	5	3.778	3.759	3.778	3.681	0.002	0.043	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			5738.115								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	2	1.85	1.85	2.4	1.3	0.605	0.778	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	2	0.7	0.7	1.149	0.25	0.404	0.636	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	10	13.3	13.1	24.4	2.8	63.64	7.977	2.85	5.4	19.7	24.35
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	11	10.	9.464	14.2	0.6	13.845	3.721	1.72	8.	12.	13.78
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	9	7.6	7.633	8.5	6.9	0.248	0.497	6.9	7.3	8.	8.5
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	9	7.6	7.428	8.5	6.9	0.295	0.543	6.9	7.3	8.	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	9	0.025	0.037	0.126	0.003	0.001	0.037	0.003	0.012	0.05	0.126
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	11	2.	4.012	21.	0.47	33.904	5.823	0.57	1.099	5.	17.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	11	0.01	0.01	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.018
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	11	0.68	0.653	1.099	0.12	0.11	0.332	0.16	0.34	0.99	1.097
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	11	4.799	6.427	28.	0.9	56.54	7.519	1.08	2.299	7.5	24.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	11	6000.	5463.636	6000.	400.	2828545.455	1681.828	1460.	6000.	6000.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	11	3.778	3.669	3.778	2.602	0.125	0.354	2.833	3.778	3.778	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			4668.837								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	11	2.2	4.927	22.	0.2	42.902	6.55	0.3	1.	8.5	19.6
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	11	1.099	3.077	12.	0.15	15.365	3.92	0.198	0.41	6.	11.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	9	14.4	13.322	20.	4.4	31.459	5.609	4.4	8.05	17.8	20.
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	9	11.	10.433	12.6	8.1	2.405	1.551	8.1	8.8	11.6	12.6
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	10	8.45	8.21	9.	7.	0.468	0.684	7.05	7.5	8.775	9.
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	10	8.447	7.727	9.	7.	0.727	0.853	7.05	7.5	8.775	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	10	0.004	0.019	0.1	0.001	0.001	0.031	0.001	0.002	0.032	0.093
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	10	1.549	2.04	4.	0.5	1.967	1.403	0.52	0.775	3.474	4.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	10##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	10	0.53	0.844	2.199	0.42	0.353	0.595	0.424	0.475	1.324	2.119
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	10	3.199	3.84	8.	1.5	3.896	1.974	1.55	2.449	5.174	7.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	10	3750.	3440.	6000.	400.	6364888.889	2522.873	420.	750.	6000.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	10	3.565	3.357	3.778	2.602	0.225	0.474	2.62	2.872	3.778	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			2273.858								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	10	1.9	2.56	4.1	1.5	1.336	1.156	1.5	1.575	4.	4.09
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	10	1.35	1.62	3.199	0.4	1.032	1.016	0.42	0.675	2.55	3.149

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	11	16.7	14.7	23.3	6.1	36.508	6.042	6.32	8.9	20.	22.76
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	11	10.4	10.364	13.5	7.4	3.333	1.826	7.56	8.7	11.8	13.24
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	11	8.5	8.309	9.	7.5	0.431	0.656	7.5	7.6	9.	9.
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	11	8.5	7.934	9.	7.5	0.585	0.765	7.5	7.6	9.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	11	0.003	0.012	0.032	0.001	0.	0.013	0.001	0.001	0.025	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	10	1.099	1.15	1.799	0.3	0.222	0.472	0.34	0.85	1.575	1.799
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	10	0.025	0.023	0.05	0.005	0.	0.014	0.005	0.009	0.03	0.048
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	10	0.665	0.71	1.199	0.43	0.069	0.263	0.431	0.463	0.978	1.179
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	10	2.55	2.589	4.599	0.9	1.223	1.106	0.94	1.674	3.399	4.509
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	11	6000.	5050.	6000.	50.	3740500.	1934.037	600.	4700.	6000.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	11	3.778	3.549	3.778	1.699	0.387	0.622	2.049	3.672	3.778	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			3543.262								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	10	1.35	1.53	4.	0.4	1.	1.	0.43	1.	1.75	3.82
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	10	1.1	1.2	4.	0.2	1.116	1.056	0.22	0.625	1.299	3.73

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	10	13.35	14.22	22.8	1.7	47.375	6.883	2.53	10.	22.35	22.8
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	10	9.3	9.68	12.1	7.8	1.957	1.399	7.83	8.625	11.075	12.02
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	10	8.45	8.25	9.	7.5	0.452	0.672	7.5	7.5	8.85	9.
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	10	8.447	7.858	9.	7.5	0.623	0.789	7.5	7.5	8.85	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	10	0.004	0.014	0.032	0.001	0.	0.015	0.001	0.001	0.032	0.032
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	10	1.35	1.36	2.899	0.3	0.58	0.761	0.33	0.75	1.724	2.819
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	10	0.02	0.028	0.08	0.005	0.001	0.023	0.006	0.01	0.043	0.077
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	10	0.565	0.762	1.989	0.22	0.297	0.545	0.23	0.358	1.122	1.909
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	10	4.649	4.189	7.199	1.399	4.959	2.227	1.429	1.849	6.049	7.129
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	10	6000.	5870.	6000.	4700.	169000.	411.096	4830.	6000.	6000.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	10	3.778	3.768	3.778	3.672	0.001	0.034	3.683	3.778	3.778	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			5855.256								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	9	1.1	1.489	3.5	0.2	1.219	1.104	0.2	0.55	2.35	3.5
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	10	0.95	1.201	3.	0.16	0.902	0.95	0.174	0.323	1.924	2.93

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	8	17.	14.463	24.	0.6	86.34	9.292	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	8	10.6	9.913	14.6	0.	22.318	4.724	**	**	**	**
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	8	8.	8.075	8.7	7.4	0.222	0.471	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	8	8.	7.863	8.7	7.4	0.274	0.523	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	8	0.01	0.014	0.04	0.002	0.	0.014	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	7	3.099	2.913	4.299	1.399	1.531	1.238	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	7	0.03	0.031	0.05	0.01	0.	0.012	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	6	0.585	0.683	1.099	0.35	0.089	0.298	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	7	4.699	5.628	14.	1.899	15.509	3.938	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	7	6000.	5150.	6000.	50.	5057500.	2248.889	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	7	3.778	3.481	3.778	1.699	0.618	0.786	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			3027.787								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	7	1.2	1.621	5.2	0.15	2.737	1.654	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	7	1.	1.528	4.5	0.6	1.882	1.372	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	8	14.5	14.313	24.	3.5	45.996	6.782	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	8	9.7	10.213	15.	8.4	4.63	2.152	**	**	**	**
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	8	8.	7.938	8.5	7.5	0.103	0.32	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	8	8.	7.837	8.5	7.5	0.114	0.338	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	8	0.01	0.015	0.032	0.003	0.	0.011	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	8	2.6	2.95	6.5	0.8	3.998	1.999	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	8	0.02	0.028	0.08	0.005	0.	0.022	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-05/31/78	3	0.78	1.187	2.	0.78	0.496	0.704	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	8	5.3	6.125	13.	2.	13.28	3.644	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	8	8000.	8000.	8000.	8000.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	8	3.903	3.903	3.903	3.903	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				8000.								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	8	1.65	2.25	5.8	0.5	3.437	1.854	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	8	1.1	1.466	4.2	0.25	1.699	1.304	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	1	12.2	12.2	12.2	12.2	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	1	1.	1.	1.	1.	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	18	20.2	19.933	24.4	12.8	11.836	3.44	15.23	16.7	23.3	24.04
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	18	8.2	7.628	13.5	0.	10.261	3.203	0.54	6.65	9.375	10.71
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	18	8.25	8.139	9.2	6.9	0.552	0.743	6.99	7.5	8.85	9.02
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	18	8.182	7.632	9.2	6.9	0.824	0.908	6.99	7.5	8.85	9.02
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	18	0.007	0.023	0.126	0.001	0.001	0.035	0.001	0.001	0.032	0.103
00500	RESIDUE, TOTAL (MG/L)	07/31/72-02/06/79	17	408.	468.471	1653.	115.	138270.39	371.847	124.6	250.5	511.	1157.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/31/72-02/06/79	17	95.	140.353	550.	8.	21637.118	147.096	28.	54.5	149.	462.
00510	RESIDUE, TOTAL FIXED (MG/L)	07/31/72-02/06/79	17	297.	328.118	1213.	73.	64847.235	254.651	85.8	194.5	381.	629.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/31/72-02/06/79	17	23.	64.294	516.	4.	16330.971	127.793	4.	18.	33.	290.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/31/72-02/06/79	17	15.	19.294	62.	2.	254.596	15.956	2.	9.5	23.	50.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/31/72-02/06/79	17	10.	45.029	468.	0.	13496.202	116.173	0.4	2.	15.5	231.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	15	2.099	2.353	5.	0.3	2.037	1.427	0.54	1.2	3.299	4.64
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	15	0.02	0.024	0.08	0.005	0.	0.019	0.008	0.01	0.03	0.062
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	15	4.899	5.093	9.4	0.9	6.327	2.515	1.439	2.599	7.199	8.56
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	18	6000.	6083.333	8000.	4700.	647352.941	804.582	4790.	6000.	6000.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	18	3.778	3.781	3.903	3.672	0.003	0.055	3.68	3.778	3.778	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				6036.116								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	14	2.95	3.443	10.	0.4	8.48	2.912	0.45	1.175	4.45	9.25
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	15	2.1	2.606	8.	0.2	4.721	2.173	0.26	1.099	4.	6.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	25	7.2	7.236	14.4	0.6	14.87	3.856	2.36	4.1	10.	13.58
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	26	11.5	11.404	15.	8.2	2.98	1.726	8.54	10.4	12.2	14.26
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	25	8.	8.06	9.	7.	0.328	0.573	7.42	7.55	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	25	8.	7.752	9.	7.	0.427	0.653	7.42	7.55	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	25	0.01	0.018	0.1	0.001	0.	0.022	0.001	0.003	0.028	0.039
00500	RESIDUE, TOTAL (MG/L)	07/31/72-02/06/79	25	268.	355.56	1892.	24.	121061.257	347.939	136.	190.5	406.5	553.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/31/72-02/06/79	25	70.	91.12	397.	25.	5442.86	73.776	36.	49.	119.	147.2
00510	RESIDUE, TOTAL FIXED (MG/L)	07/31/72-02/06/79	25	192.	342.76	1930.	66.	185152.857	430.294	105.2	155.	327.5	887.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/31/72-02/06/79	25	27.	44.36	420.	0.	6714.657	81.943	2.	6.	56.5	70.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/31/72-02/06/79	25	8.	32.36	380.	0.	5630.907	75.039	1.6	4.	32.	63.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/31/72-02/06/79	25	6.	12.	56.	0.	217.833	14.759	0.	2.	15.5	39.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	25	1.599	2.905	21.	0.3	16.655	4.081	0.488	1.05	3.85	5.6
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	25	0.01	0.016	0.05	0.005	0.	0.014	0.005	0.005	0.02	0.044
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	25	3.599	4.943	28.	0.9	29.979	5.475	1.359	2.15	5.95	10.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	25	6000.	5222.	8000.	50.	5252516.667	2291.837	400.	5200.	6000.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	25	3.778	3.571	3.903	1.699	0.286	0.534	2.602	3.714	3.778	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				3721.827								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	25	1.3	2.558	22.	0.15	17.907	4.232	0.44	1.	2.3	4.46
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	25	0.9	1.505	12.	0.15	5.484	2.342	0.298	0.405	1.45	3.019

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/31/72-02/06/79	19	17.8	16.895	24.	8.	18.699	4.324	10.	13.9	20.	22.8
00300	OXYGEN, DISSOLVED MG/L	07/31/72-02/06/79	19	9.4	9.916	14.6	8.	2.767	1.663	8.	8.8	11.	11.8
00400	PH (STANDARD UNITS)	07/31/72-12/14/78	18	8.	8.072	9.	7.3	0.304	0.552	7.39	7.5	8.525	9.
00400	CONVERTED PH (STANDARD UNITS)	07/31/72-12/14/78	18	8.	7.802	9.	7.3	0.382	0.618	7.39	7.5	8.525	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/31/72-12/14/78	18	0.01	0.016	0.05	0.001	0.	0.016	0.001	0.003	0.032	0.041

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0585

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00500	RESIDUE, TOTAL (MG/L)	07/31/72-02/06/79	18	272.	286.611	528.	159.	10674.958	103.32	177.9	221.	339.75	504.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/31/72-02/06/79	18	64.5	71.556	143.	22.	1521.556	39.007	28.3	39.	105.	141.2
00510	RESIDUE, TOTAL FIXED (MG/L)	07/31/72-02/06/79	18	199.	215.056	401.	104.	6613.938	81.326	123.8	158.5	244.75	388.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/31/72-02/06/79	17	22.	26.	72.	9.	319.5	17.875	9.8	12.	37.	60.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/31/72-02/06/79	16	12.	14.875	32.	6.	70.917	8.421	6.7	8.	20.	29.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/31/72-02/06/79	17	5.	9.588	50.	1.	152.507	12.349	1.8	2.5	11.5	28.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-02/06/79	19	1.5	1.652	4.299	0.6	0.989	0.994	0.7	0.9	1.899	3.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-02/06/79	19	0.02	0.021	0.08	0.005	0.	0.018	0.005	0.005	0.03	0.03
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-02/06/79	19	3.299	4.073	14.	1.699	7.486	2.736	1.899	2.599	4.799	6.399
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	19	6000.	5134.211	8000.	50.	5865014.62	2421.779	600.	3000.	6000.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/31/72-12/14/78	19	3.778	3.564	3.903	1.699	0.291	0.54	2.778	3.477	3.778	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				3662.479								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-02/06/79	19	1.5	1.6	5.2	0.2	1.411	1.188	0.5	0.8	2.	3.5
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-02/06/79	19	0.7	1.134	4.5	0.16	0.996	0.998	0.25	0.6	1.5	2.299

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0586

NPS Station ID: SHEN0586
 Location: RT. 612
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103022
 RF3 Index: 02080103002206.01

LAT/LON: 38.672226/ -78.224448

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 8.630
 RF3 Mile Point: 6.10

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANOCK
 STORET Station ID(s): 3-THR001.20 /VA3-04-X0060/VA3-3X0060
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN VIRGINIA
 RIVER: N FORK THORNTON RIVER SECTION: 04 TOPO MAP #: 0074 TOPO MAP NAME: WASHINGTON, VA

Parameter Inventory for Station: SHEN0586

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-08/24/74	57	14.4	13.758	27.8	1.7	48.135	6.938	4.78	7.8	20.	23.3
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/04/71-07/15/71	3	4.	4.333	6.	3.	2.333	1.528	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/01/68-08/24/74	58	10.6	10.736	15.6	6.9	3.834	1.958	8.56	9.275	12.05	13.6
00310	BOD, 5 DAY, 20 DEG C MG/L	10/08/68-02/10/71	7	1.5	1.343	1.8	0.5	0.236	0.486	**	**	**	**
00400	PH (STANDARD UNITS)	07/01/68-08/24/74	58	7.	7.155	8.5	6.7	0.205	0.452	6.7	6.8	7.4	7.82
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-08/24/74	58	7.	7.002	8.5	6.7	0.228	0.478	6.7	6.8	7.4	7.82
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-08/24/74	58	0.1	0.1	0.2	0.003	0.004	0.062	0.015	0.04	0.158	0.2
00403	PH, LAB, STANDARD UNITS SU	10/08/68-05/07/70	6	6.95	6.933	7.9	6.2	0.375	0.612	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	10/08/68-05/07/70	6	6.925	6.65	7.9	6.2	0.471	0.686	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/08/68-05/07/70	6	0.119	0.224	0.631	0.013	0.058	0.242	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	10/08/68-05/07/70	6	13.5	14.333	21.	10.	19.067	4.367	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	10/08/68-11/26/70	7	69.	66.429	94.	51.	206.952	14.386	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	10/08/68-11/26/70	7	28.	30.143	70.	13.	359.143	18.951	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	10/08/68-11/26/70	7	38.	37.714	50.	24.	90.905	9.534	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	02/27/69-11/26/70	6	4.5	4.833	9.	2.	6.167	2.483	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/22/69-11/26/70	5	2.	2.4	5.	0.	4.3	2.074	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	02/27/69-11/26/70	6	2.5	2.833	5.	1.	2.167	1.472	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/13/70-08/24/74	22 ##	0.05	0.05	0.1	0.005	0.001	0.024	0.01	0.05	0.05	0.097
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/13/70-08/24/74	22 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/13/70-08/24/74	22	0.115	0.151	0.43	0.01	0.015	0.121	0.02	0.05	0.213	0.373
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/13/70-08/24/74	22	0.1	0.227	1.799	0.05	0.137	0.37	0.05	0.05	0.3	0.4
01002	ARSENIC, TOTAL (UG/L AS AS)	03/18/71-08/24/73	7 ##	2.5	2.214	2.5	0.5	0.571	0.756	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	11/26/70-08/24/73	8 ##	5.	6.375	20.	1.	32.268	5.68	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/13/70-05/21/74	15 ##	5.	6.333	20.	5.	15.952	3.994	5.	5.	5.	14.
01042	COPPER, TOTAL (UG/L AS CU)	04/13/70-05/21/74	15 ##	5.	8.333	40.	5.	80.952	8.997	5.	5.	10.	22.
01045	IRON, TOTAL (UG/L AS FE)	11/26/70-12/14/71	3	100.	83.333	100.	50.	833.333	28.868	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/26/70-05/21/74	14 ##	5.	6.071	10.	5.	4.533	2.129	5.	5.	6.25	10.
01055	MANGANESE, TOTAL (UG/L AS MN)	04/13/70-04/25/71	2	30.	30.	50.	10.	800.	28.284	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/23/73-08/24/73	3 ##	50.	35.	50.	5.	675.	25.981	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/13/70-05/21/74	15	10.	20.333	70.	5.	408.81	20.219	5.	5.	30.	64.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/01/68-11/13/73	14	930.	19154.286	240000.	150.	4046556118.681	63612.547	190.	755.	4375.	124650.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	07/01/68-11/13/73	14	2.968	3.223	5.38	2.176	0.655	0.809	2.269	2.817	3.641	4.674
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			1672.966								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0586

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-08/24/74	42 ##	50.	623.81	8000.	0.	2904419.28	1704.236	50.	50.	200.	1760.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/26/70-08/24/74	42 ##	1.699	2.036	3.903	0.	0.482	0.694	1.699	1.699	2.301	3.234
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		108.699									
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	05/21/74-05/21/74	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	04/13/70-08/24/74	22 ##	0.05	0.048	0.05	0.025	0.	0.007	0.033	0.05	0.05	0.05
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	04/13/70-08/24/74	22 ##	0.05	0.04	0.05	0.01	0.	0.017	0.01	0.033	0.05	0.05
71900	MERCURY, TOTAL (UG/L AS HG)	11/26/70-05/21/74	15 ##	0.25	0.4	2.5	0.25	0.338	0.581	0.25	0.25	0.25	1.15

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0586

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	3	0	0.00	1	0	0.00				2	0	0.00			
00300	OXYGEN, DISSOLVED	4.	58	0	0.00	20	0	0.00	23	0	0.00	15	0	0.00			
00400	PH	9.	58	0	0.00	20	0	0.00	23	0	0.00	15	0	0.00			
	Other-Lo Lim.	6.5	58	0	0.00	20	0	0.00	23	0	0.00	15	0	0.00			
00403	PH, LAB	9.	6	0	0.00	2	0	0.00	1	0	0.00	3	0	0.00			
	Fresh Chronic	6.5	6	2	0.33	2	1	0.50	1	0	0.00	3	1	0.33			
	Other-Lo Lim.	1.	22	0	0.00	4	0	0.00	11	0	0.00	7	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	10.	22	0	0.00	4	0	0.00	11	0	0.00	7	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	360.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
01002	ARSENIC, TOTAL	50.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	3.9	2 &	1	0.50	1	0	0.00	1	1	1.00						
	Fresh Acute	5.	2 &	1	0.50	1	0	0.00	1	1	1.00						
	Drinking Water	100.	15	0	0.00	4	0	0.00	5	0	0.00	6	0	0.00			
01034	CHROMIUM, TOTAL	18.	15	1	0.07	4	0	0.00	5	0	0.00	6	1	0.17			
01042	COPPER, TOTAL	1300.	15	0	0.00	4	0	0.00	5	0	0.00	6	0	0.00			
	Drinking Water	82.	14	0	0.00	4	0	0.00	6	0	0.00	4	0	0.00			
01051	LEAD, TOTAL	15.	14	0	0.00	4	0	0.00	6	0	0.00	4	0	0.00			
	Fresh Acute	1400.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	120.	15	0	0.00	4	0	0.00	5	0	0.00	6	0	0.00			
01092	ZINC, TOTAL	5000.	15	0	0.00	4	0	0.00	5	0	0.00	6	0	0.00			
	Drinking Water	1000.	14	6	0.43	8	4	0.50	2	0	0.00	4	2	0.50			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	200.	42	11	0.26	11	5	0.45	21	2	0.10	10	4	0.40			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	0.019	1	0	0.00							1	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	2.4	14 &	0	0.00	3	0	0.00	6	0	0.00	5	0	0.00			
71900	MERCURY, TOTAL	2.	14 &	0	0.00	3	0	0.00	6	0	0.00	5	0	0.00			
	Drinking Water																

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0586

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-08/24/74	19	20.6	20.705	27.8	14.4	12.754	3.571	15.6	19.4	23.3	25.6
00300	OXYGEN, DISSOLVED MG/L	07/01/68-08/24/74	20	9.2	9.28	11.5	6.9	1.276	1.13	7.82	8.625	9.95	11.14
00400	PH (STANDARD UNITS)	07/01/68-08/24/74	20	7.3	7.34	8.5	6.7	0.224	0.473	6.71	7.	7.6	7.98
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-08/24/74	20	7.289	7.144	8.5	6.7	0.264	0.514	6.71	7.	7.6	7.98
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-08/24/74	20	0.051	0.072	0.2	0.003	0.004	0.063	0.011	0.025	0.1	0.195

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0586

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-08/24/74	23	5.6	7.087	15.6	1.7	13.572	3.684	1.9	5.	10.	12.66
00300	OXYGEN, DISSOLVED MG/L	07/01/68-08/24/74	23	12.4	12.483	15.6	9.4	2.302	1.517	10.76	11.4	13.6	14.98
00400	PH (STANDARD UNITS)	07/01/68-08/24/74	23	7.	6.983	8.3	6.7	0.109	0.33	6.7	6.8	7.	7.28
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-08/24/74	23	7.	6.913	8.3	6.7	0.114	0.337	6.7	6.8	7.	7.28
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-08/24/74	23	0.1	0.122	0.2	0.005	0.003	0.051	0.056	0.1	0.158	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0586

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/01/68-08/24/74	15	16.1	15.187	20.	7.8	14.016	3.744	8.1	12.8	17.8	20.
00300	OXYGEN, DISSOLVED MG/L	07/01/68-08/24/74	15	10.	10.	12.2	7.	1.64	1.281	7.96	9.6	10.6	11.84
00400	PH (STANDARD UNITS)	07/01/68-08/24/74	15	7.	7.173	8.3	6.7	0.261	0.511	6.76	6.8	7.5	8.18
00400	CONVERTED PH (STANDARD UNITS)	07/01/68-08/24/74	15	7.	6.992	8.3	6.7	0.296	0.544	6.76	6.8	7.5	8.18
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/01/68-08/24/74	15	0.1	0.102	0.2	0.005	0.004	0.067	0.007	0.032	0.158	0.175

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0587

NPS Station ID: SHEN0587
 Location: STP LURY OFF RT 340 AND
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005032
 RF3 Index: 02070005000226.76
 Description:

LAT/LON: 38.672226/ -78.456948

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 3.080
 RF3 Mile Point: 27.07

Agency: 1112A9WQ
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): UP-POT-126 /SHEN-STP 126/126 /STP-126
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0587

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/17/73	5	16.	15.9	22.5	10.	22.8	4.775	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	04/16/73-04/17/73	2	4.5	4.5	8.	1.	24.5	4.95	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/17/73	5	91.4	105.9	270.	27.1	9518.15	97.561	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-04/17/73	3	7.3	7.267	7.7	6.8	0.203	0.451	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-04/17/73	3	7.3	7.118	7.7	6.8	0.236	0.486	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-04/17/73	3	0.05	0.076	0.158	0.02	0.005	0.073	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	240.	240.	240.	240.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	61.	61.	61.	61.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/17/73	5	16.	20.68	46.	2.	267.512	16.356	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/17/73	5	24.563	24.131	33.47	13.96	48.963	6.997	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/17/73	5	0.04	0.424	1.37	0.001	0.364	0.603	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/17/73	5	10.77	15.242	33.	5.88	117.221	10.827	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-09/19/72	2	59.8	59.8	75.	44.6	462.08	21.496	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-09/19/72	2	112.9	112.9	141.2	84.6	1601.78	40.022	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	1	64.	64.	64.	64.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	1	1.	1.	1.	1.	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/17/73	5	18.84	19.418	36.14	5.8	118.343	10.879	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	1	1.	1.	1.	1.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0587

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	5	0	0.00	1	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	3.9	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0587

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0588

NPS Station ID: SHEN0588
 Location: TOWN OF LURAY STP
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005032
 RF3 Index: 02070005003300.00

LAT/LON: 38.672281/ -78.457809

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 3.330
 RF3 Mile Point: 0.00

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BHK5005.85 /VA1B02-X0018/VA1B6X0018
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

DESCRIPTION: VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: HAWKSBILL CREEK SECTION: 02 TOPO MAP #: 0035 TOPO MAP NAME: LURAY, VA

Parameter Inventory for Station: SHEN0588

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/06/72-04/12/74	16	18.05	17.35	26.7	8.9	28.555	5.344	9.25	12.375	21.65	24.74
00300	OXYGEN, DISSOLVED MG/L	07/06/72-04/12/74	17	4.4	4.747	10.4	0.6	6.051	2.46	0.92	3.3	6.15	8.64
00310	BOD, 5 DAY, 20 DEG C MG/L	07/31/72-12/07/72	4	60.5	76.625	148.	37.5	2635.229	51.334	**	**	**	**
00400	PH (STANDARD UNITS)	07/06/72-04/12/74	15	7.	7.247	8.5	6.7	0.3	0.548	6.7	6.8	7.5	8.32
00400	CONVERTED PH (STANDARD UNITS)	07/06/72-04/12/74	15	7.	7.037	8.5	6.7	0.347	0.589	6.7	6.8	7.5	8.32
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/06/72-04/12/74	15	0.1	0.092	0.2	0.003	0.005	0.07	0.005	0.032	0.158	0.2
00403	PH, LAB, STANDARD UNITS SU	09/24/73-09/24/73	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/24/73-09/24/73	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/24/73-09/24/73	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	07/06/72-04/12/74	17	518.	480.588	662.	108.	20233.632	142.245	233.6	452.5	568.5	615.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	07/06/72-04/12/74	17	125.	142.706	289.	20.	5195.221	72.078	64.	79.	197.5	249.8
00510	RESIDUE, TOTAL FIXED (MG/L)	07/06/72-04/12/74	17	373.	337.882	448.	88.	10111.11	100.554	168.	288.	404.	440.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	07/06/72-04/12/74	17	65.	62.706	121.	5.	1088.846	32.998	17.	33.	87.	118.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	07/06/72-04/12/74	17	47.	41.529	66.	4.	418.015	20.445	4.	26.5	56.	65.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	07/06/72-04/12/74	17	16.	21.176	58.	0.	265.154	16.284	0.8	13.	28.5	55.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-04/12/74	13	10.	11.146	30.	4.	57.749	7.599	4.04	4.399	15.5	25.8
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-04/12/74	13	0.04	0.046	0.14	0.005	0.001	0.038	0.007	0.015	0.07	0.12
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-04/12/74	13	0.51	0.624	2.169	0.01	0.407	0.638	0.018	0.07	1.01	1.777
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-04/12/74	13	21.	19.615	30.	9.	54.881	7.408	9.8	12.75	27.5	29.2
01002	ARSENIC, TOTAL (UG/L AS AS)	08/07/73-08/07/73	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/31/72-04/12/74	3 ##	5.	3.667	5.	1.	5.333	2.309	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/31/72-04/12/74	6 ##	5.	5.833	10.	5.	4.167	2.041	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/31/72-04/12/74	6 ##	22.5	29.167	60.	5.	754.167	27.462	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/31/72-04/12/74	5	10.	15.	30.	5.	100.	10.	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-04/12/74	4 ##	50.	75.	150.	50.	2500.	50.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/31/72-04/12/74	6	125.	104.167	190.	5.	5744.167	75.79	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/06/72-04/12/74	16	6000.	8634.375	60000.	50.	191678239.583	13844.791	85.	6000.	6000.	22200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/06/72-04/12/74	16	3.778	3.6	4.778	1.699	0.532	0.729	1.91	3.778	3.778	4.078
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	07/06/72-04/12/74	16	3977.113	3977.113	3977.113	3977.113	3977.113	3977.113	3977.113	3977.113	3977.113	3977.113
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-04/12/74	13	9.	9.192	15.5	2.8	19.037	4.363	3.48	5.1	13.	14.9
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-04/12/74	13	4.699	4.749	11.	1.699	6.076	2.465	1.939	2.85	6.	9.32
71900	MERCURY, TOTAL (UG/L AS HG)	07/31/72-04/12/74	6 ##	0.25	0.292	0.5	0.25	0.01	0.102	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0588

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	17	6	0.35	7	4	0.57	7	2	0.29	3	0	0.00			
00400 PH	Fresh Chronic	9.	15	0	0.00	6	0	0.00	7	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	15	0	0.00	6	0	0.00	7	0	0.00	2	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00									
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00									
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	13	0	0.00	3	0	0.00	7	0	0.00	3	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	13	0	0.00	3	0	0.00	7	0	0.00	3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	1	0	0.00	1	0	0.00									
	Drinking Water	50.	1	0	0.00	1	0	0.00									
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00									
	Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034 CHROMIUM, TOTAL	Drinking Water	100.	6	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	6	3	0.50	3	0	0.00	1	1	1.00	2	2	1.00			
	Drinking Water	1300.	6	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	5	0	0.00	3	0	0.00	1	0	0.00	1	0	0.00			
	Drinking Water	15.	5	2	0.40	3	2	0.67	1	0	0.00	1	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Drinking Water	100.	4	1	0.25	1	0	0.00	1	0	0.00	2	1	0.50			
01092 ZINC, TOTAL	Fresh Acute	120.	6	3	0.50	3	1	0.33	1	1	1.00	2	1	0.50			
	Drinking Water	5000.	6	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	16	14	0.88	7	6	0.86	7	7	1.00	2	1	0.50			
71900 MERCURY, TOTAL	Fresh Acute	2.4	6	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00			
	Drinking Water	2.	6	0	0.00	3	0	0.00	1	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0589

NPS Station ID: SHEN0589
 Location: RT. 211 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.672503/ -78.458059

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BHKS005.79
 Within Park Boundary: No

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 05/08/99

 On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: HAWKSBILL CREEK SECTION: 02 TOPO MAP #: 198B TOPO MAP NAME: LURAY, VA

Parameter Inventory for Station: SHEN0589

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0590

NPS Station ID: SHEN0590
 Location: VAPA501R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.680005/ -78.458393

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_NURE_27 /4091105
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE LURAY VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0590

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/12/77-04/12/77	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/12/77-04/12/77	1	162.	162.	162.	162.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/12/77-04/12/77	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/12/77-04/12/77	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/12/77-04/12/77	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/12/77-04/12/77	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/12/77-04/12/77	1	1.88	1.88	1.88	1.88	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/12/77-04/12/77	1	37.	37.	37.	37.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/12/77-04/12/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/12/77-04/12/77	1	35.	35.	35.	35.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/12/77-04/12/77	1	0.011	0.011	0.011	0.011	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/12/77-04/12/77	1	5300.	5300.	5300.	5300.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/12/77-04/12/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0590

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0591

NPS Station ID: SHEN0591
 Location: ROCKY BRANCH NEAR THORNTON GAP, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005003301.19
 Description:

LAT/LON: 38.685004/ -78.352782

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.58

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01630543
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 30.40
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0591

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/11/81-06/24/82	6	17.	13.5	22.	1.	68.5	8.276	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/11/81-06/24/82	6	0.8	2.483	10.	0.1	14.682	3.832	**	**	**	**
00400	PH (STANDARD UNITS)	08/11/81-06/24/82	6	7.25	7.217	7.5	6.7	0.09	0.299	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/11/81-06/24/82	6	7.247	7.12	7.5	6.7	0.101	0.318	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/81-06/24/82	6	0.057	0.076	0.2	0.032	0.004	0.063	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/11/81-06/24/82	6	7.3	7.225	7.4	7.	0.027	0.164	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/11/81-06/24/82	6	7.3	7.223	7.4	7.	0.028	0.167	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/11/81-06/24/82	6	0.05	0.06	0.1	0.04	0.001	0.024	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/11/81-06/24/82	6 ##	0.008	0.009	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/11/81-06/24/82	6	0.15	0.183	0.4	0.005	0.022	0.147	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/11/81-06/24/82	6	16.	18.167	26.	13.	26.167	5.115	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/11/81-06/24/82	6	3.6	4.067	6.1	2.9	1.447	1.203	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/11/81-06/24/82	6	1.65	1.933	2.7	1.5	0.275	0.524	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/11/81-06/24/82	6	2.05	2.25	3.1	1.8	0.227	0.476	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/11/81-06/24/82	6	0.2	0.217	0.3	0.2	0.002	0.041	**	**	**	**
00932	SODIUM, PERCENT	08/11/81-06/24/82	6	21.5	21.	22.	19.	1.6	1.265	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/11/81-06/24/82	6	0.5	0.483	0.6	0.4	0.006	0.075	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/11/81-06/24/82	6	1.5	1.45	2.	0.7	0.375	0.612	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/11/81-06/24/82	6	3.	3.333	5.	2.	1.867	1.366	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/11/81-06/24/82	6	13.65	13.783	16.9	10.2	6.502	2.55	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/26/82-06/24/82	3	0.01	0.017	0.03	0.01	0.	0.012	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0591

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0591

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0		2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0592

NPS Station ID: SHEN0592
 Location: HAWKSBILL CK OFF RT 340 N OF STP
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005032
 RF3 Index: 02070005003202.61
 Description:

LAT/LON: 38.686670/ -78.455559

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 2.130
 RF3 Mile Point: 4.14

Agency: 1112A9WQ
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): UP-POT-085 /SHEN-085 /085 /HAWK61 085
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0592

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	4	12.25	11.25	18.5	2.	48.75	6.982	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	4	9.2	8.45	12.1	3.3	14.463	3.803	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-04/16/73	3	3.3	4.833	8.3	2.9	9.053	3.009	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/13/73	2	6.8	6.9	6.9	6.7	0.02	0.141	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/13/73	2	6.789	6.789	6.9	6.7	0.02	0.142	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/13/73	2	0.163	0.163	0.2	0.126	0.003	0.052	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	48.	48.	48.	48.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	1	10.	10.	10.	10.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	0.952	1.786	4.95	0.29	4.765	2.183	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	1.727	2.301	5.106	0.645	4.265	2.065	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	0.715	0.713	0.87	0.55	0.017	0.131	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	0.355	0.485	1.08	0.15	0.173	0.416	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	3	11.7	10.333	14.2	5.1	22.103	4.701	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	3	19.1	26.333	43.5	16.4	222.843	14.928	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-04/16/73	2 ##	22.	22.	34.	10.	288.	16.971	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	09/19/72-02/13/73	2	17.	17.	29.	5.	288.	16.971	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-04/16/73	3	50.	86.233	208.	0.7	11727.963	108.296	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/16/73-04/16/73	1	16000.	16000.	16000.	16000.	0.	0.	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/16/73-04/16/73	1	4.204	4.204	4.204	4.204	0.	0.	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)				16000.							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/16/73-04/16/73	1	790.	790.	790.	790.	0.	0.	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	04/16/73-04/16/73	1	2.898	2.898	2.898	2.898	0.	0.	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				790.							
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	09/19/72-04/16/73	3	1.	1.	1.	1.	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	0.925	1.033	1.96	0.32	0.48	0.693	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-02/13/73	2 ##	0.001	0.001	0.001	0.	0.	0.001	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0592

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	1	0.25	1	1	1.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00							2	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00	1	0	0.00	1	0	0.00						
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	1	1	1.00							1	1	1.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	1	1.00							1	1	1.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00					1	0	0.00	1	0	0.00		
	Drinking Water	2.	2	0	0.00					1	0	0.00	1	0	0.00		

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0593

NPS Station ID: SHEN0593
 Location: HAWKSBILL CR. OFF US 340 N LURAY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005032
 RF3 Index: 02070005003204.62
 Description:

LAT/LON: 38.686670/ -78.455559

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 2.130
 RF3 Mile Point: 4.81

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 076 /076 /HAWK-S16
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0593

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/69-08/18/69	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	08/18/69-08/18/69	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/18/69-08/18/69	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	08/18/69-08/18/69	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/18/69-08/18/69	1	0.029	0.029	0.029	0.029	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/18/69-08/18/69	1	0.711	0.711	0.711	0.711	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/18/69-08/18/69	1	0.78	0.78	0.78	0.78	0.	0.	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/18/69-08/18/69	1	2400.	2400.	2400.	2400.	0.	0.	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	08/18/69-08/18/69	1	3.38	3.38	3.38	3.38	0.	0.	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =		2400.									
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	08/18/69-08/18/69	1	3.75	3.75	3.75	3.75	0.	0.	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	08/18/69-08/18/69	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0593

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	1	0	0.00	1	0	0.00								
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00								
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00								
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	1	1	1.00	1	1	1.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0594

NPS Station ID: SHEN0594
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.690115/ -78.297920

Depth of Water: 0
 Elevation: 1450
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH10
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH10 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.16 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0594

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.84	6.84	6.84	6.84	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.84	6.84	6.84	6.84	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.145	0.145	0.145	0.145	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.41	1.41	1.41	1.41	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0594

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0595

NPS Station ID: SHEN0595
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.692976/ -78.275253

Depth of Water: 0
 Elevation: 1100
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_VT61
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION VT61 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 19.08 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0595

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-07/30/97	29	11.5	11.71	20.	2.	36.6	6.05	2.1	7.15	17.75	19.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/29/87-07/30/97	40	43.	43.475	56.	25.	37.333	6.11	37.1	40.	48.75	51.9
00400	PH (STANDARD UNITS)	10/29/87-07/30/97	40	7.02	7.023	7.64	6.49	0.084	0.289	6.661	6.778	7.268	7.379
00400	CONVERTED PH (STANDARD UNITS)	10/29/87-07/30/97	40	7.02	6.934	7.64	6.49	0.092	0.303	6.661	6.777	7.267	7.379
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/29/87-07/30/97	40	0.096	0.116	0.324	0.023	0.005	0.073	0.042	0.054	0.167	0.218
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	10/29/87-07/30/97	40	42.	42.45	56.	24.	36.408	6.034	36.1	39.	46.75	50.9
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10/29/87-07/30/97	40	190.45	206.653	452.9	62.7	13079.581	114.366	77.27	92.35	295.425	387.22
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10/29/87-07/30/97	40	3.2	3.293	4.2	2.5	0.199	0.446	2.71	2.9	3.7	3.9
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10/29/87-07/30/97	40	1.8	1.797	2.2	1.5	0.042	0.206	1.5	1.625	1.975	2.1
00930	SODIUM, DISSOLVED (MG/L AS NA)	10/29/87-07/30/97	40	2.29	2.36	3.26	1.89	0.138	0.371	1.932	2.055	2.625	2.949
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/29/87-07/30/97	40	0.425	0.432	0.79	0.28	0.01	0.102	0.311	0.353	0.498	0.529
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10/29/87-07/30/97	40	1.	0.993	1.	0.9	0.001	0.027	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10/29/87-07/30/97	40	3.85	3.838	5.6	2.5	0.596	0.772	2.9	3.15	4.475	4.69
00955	SILICA, DISSOLVED (MG/L AS SI02)	10/29/87-07/30/97	40	14.85	15.465	19.6	12.6	3.881	1.97	13.32	14.025	17.275	18.89
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	6	7.581	7.1	9.125	3.577	3.47	1.863	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-07/30/97	15	9.446	9.933	17.071	5.512	8.234	2.87	5.954	8.43	11.337	14.841
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/29/87-07/30/97	40	0.3	0.989	4.4	0.	1.609	0.	4.4	0.004	2.375	2.89
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/29/87-07/30/97	40	0.095	0.118	0.33	0.02	0.006	0.074	0.04	0.053	0.168	0.22

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0595

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	40	0	0.00	10	0	0.00	20	0	0.00	10	0	0.00			
	Other-Lo Lim.	6.5	40	1	0.03	10	0	0.00	20	1	0.05	10	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	40	22	0.55	10	4	0.40	20	13	0.65	10	5	0.50			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	40	0	0.00	10	0	0.00	20	0	0.00	10	0	0.00			
	Drinking Water	250.	40	0	0.00	10	0	0.00	20	0	0.00	10	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	40	0	0.00	10	0	0.00	20	0	0.00	10	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	40	0	0.00	10	0	0.00	20	0	0.00	10	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0595

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	49.	47.7	54.	39.	26.233	5.122	39.1	43.	51.5	53.9
00400	PH (STANDARD UNITS)	10	6.915	7.025	7.39	6.71	0.066	0.256	6.719	6.815	7.273	7.388
00400	CONVERTED PH (STANDARD UNITS)	10	6.915	6.963	7.39	6.71	0.07	0.264	6.719	6.815	7.273	7.388
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.122	0.109	0.195	0.041	0.003	0.055	0.041	0.054	0.153	0.191
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10	47.5	46.7	52.	38.	23.122	4.809	38.1	44.25	51.	51.9
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10	306.65	251.89	414.2	77.2	21989.679	148.289	78.16	87.925	390.2	412.1
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10	3.85	3.75	4.	3.1	0.067	0.259	3.15	3.675	3.9	3.99
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10	2.	1.96	2.2	1.5	0.036	0.19	1.54	1.9	2.1	2.19
00930	SODIUM, DISSOLVED (MG/L AS NA)	10	2.655	2.679	3.08	2.04	0.101	0.317	2.077	2.47	2.953	3.071
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10	0.495	0.462	0.52	0.32	0.005	0.069	0.325	0.415	0.513	0.52
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10	1.	0.97	1.	0.9	0.002	0.048	0.9	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10	2.95	2.96	3.4	2.5	0.105	0.324	2.5	2.65	3.3	3.39
00955	SILICA, DISSOLVED (MG/L AS SI02)	10	17.85	17.81	19.6	15.5	1.965	1.402	15.51	16.8	18.95	19.55
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10	0.015	0.144	0.6	0.	0.044	0.209	0.	0.	0.25	0.58
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10	0.12	0.109	0.2	0.04	0.003	0.056	0.04	0.055	0.153	0.196

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0595

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	20	41.	42.4	56.	25.	44.253	6.652	36.1	40.	46.75	51.8
00400	PH (STANDARD UNITS)	20	7.02	6.961	7.36	6.49	0.079	0.281	6.601	6.688	7.228	7.333
00400	CONVERTED PH (STANDARD UNITS)	20	7.02	6.877	7.36	6.49	0.086	0.294	6.601	6.687	7.228	7.333
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	20	0.096	0.133	0.324	0.044	0.007	0.084	0.047	0.059	0.206	0.251
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	20	40.	41.45	56.	24.	43.418	6.589	35.1	39.	45.75	49.8
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	20	163.75	202.34	452.9	77.9	11027.879	105.014	89.05	132.95	291.1	368.71
00915	CALCIUM, DISSOLVED (MG/L AS CA)	20	3.15	3.17	4.2	2.5	0.214	0.462	2.61	2.8	3.475	3.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	20	1.75	1.77	2.2	1.5	0.043	0.208	1.5	1.6	1.9	2.09
00930	SODIUM, DISSOLVED (MG/L AS NA)	20	2.105	2.247	3.26	1.89	0.152	0.39	1.91	2.02	2.3	2.949
00935	POTASSIUM, DISSOLVED (MG/L AS K)	20	0.38	0.427	0.79	0.28	0.018	0.134	0.31	0.32	0.5	0.644
00941	CHLORIDE, DISSOLVED IN WATER MG/L	20	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	20	4.3	4.14	5.6	2.9	0.56	0.749	3.01	3.6	4.6	5.42
00955	SILICA, DISSOLVED (MG/L AS SI02)	20	14.5	14.74	19.	12.6	3.096	1.76	12.73	13.5	15.775	17.48
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	20	0.7	1.332	4.4	0.	2.095	1.447	0.	0.005	2.75	3.17
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	20	0.095	0.135	0.33	0.04	0.007	0.085	0.05	0.063	0.21	0.25

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0595

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	42.	41.4	46.	32.	14.933	3.864	32.7	40.5	43.5	45.9
00400	PH (STANDARD UNITS)	10	7.185	7.144	7.64	6.71	0.105	0.324	6.712	6.82	7.4	7.622
00400	CONVERTED PH (STANDARD UNITS)	10	7.172	7.04	7.64	6.71	0.117	0.342	6.712	6.82	7.4	7.622
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.067	0.091	0.195	0.023	0.004	0.064	0.024	0.04	0.152	0.194
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10	41.	40.2	44.	31.	15.067	3.882	31.7	38.75	43.25	44.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10	207.	170.04	263.5	62.7	7602.869	87.194	62.72	72.875	251.65	263.26
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10	3.05	3.08	3.4	2.9	0.028	0.169	2.9	2.9	3.2	3.38
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10	1.7	1.69	1.9	1.5	0.012	0.11	1.51	1.6	1.725	1.89
00930	SODIUM, DISSOLVED (MG/L AS NA)	10	2.33	2.266	2.4	1.95	0.024	0.154	1.962	2.168	2.393	2.4
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10	0.415	0.414	0.46	0.37	0.001	0.03	0.371	0.388	0.435	0.459
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10	4.1	4.11	4.8	3.5	0.152	0.39	3.52	3.85	4.425	4.77
00955	SILICA, DISSOLVED (MG/L AS SI02)	10	14.6	14.57	15.1	14.	0.147	0.383	14.01	14.1	14.9	15.08

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0595

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/29/87-07/30/97	10	0.6	1.151	3.1	0.	1.422	1.192	0.	0.004	2.35	3.04
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	10/29/87-07/30/97	10	0.065	0.092	0.2	0.02	0.004	0.065	0.022	0.04	0.153	0.199

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0596

NPS Station ID: SHEN0596
 Location: North Fork Thornton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.692976/ -78.275253

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_VTS61
 Within Park Boundary: No

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle just outside Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0596

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-10/29/97	6	12.3	11.717	18.8	3.3	30.518	5.524	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-10/29/97	6	41.5	41.5	49.	31.	35.9	5.992	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/26/95-10/29/97	6	10.35	10.283	11.9	8.6	1.238	1.113	**	**	**	**
00301 OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/31/96-10/31/96	1	96.5	96.5	96.5	96.5	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/26/95-10/29/97	6	7.12	7.217	7.63	6.87	0.102	0.32	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/26/95-10/29/97	6	7.12	7.132	7.63	6.87	0.111	0.333	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/95-10/29/97	6	0.076	0.074	0.135	0.023	0.002	0.044	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-10/29/97	6	26.5	26.5	31.	20.	13.9	3.728	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0596

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0597

NPS Station ID: SHEN0597
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.692976/ -78.275282

Depth of Water: 0
 Elevation: 1120
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH01
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH01 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 19.08 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0597

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	2	3.5	3.5	4.	3.	0.5	0.707	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	2	42.	42.	42.	42.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	2	7.25	7.25	7.27	7.23	0.001	0.028	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	2	7.25	7.25	7.27	7.23	0.001	0.028	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	2	0.056	0.056	0.059	0.054	0.	0.004	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	2	40.	40.	40.	40.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	2	166.5	166.5	166.9	166.1	0.32	0.566	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	2	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	2	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	2	2.	2.	2.02	1.98	0.001	0.028	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	2	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	2	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	2	13.05	13.05	13.1	13.	0.005	0.071	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	2	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	2	0.055	0.055	0.06	0.05	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0597

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	2	0	0.00				2	0	0.00							
	Other-Lo Lim.	6.5	2	0	0.00				2	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00				2	2	1.00							
	Fresh Acute	860.	2	0	0.00				2	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	2	0	0.00				2	0	0.00							
	Drinking Water	250.	2	0	0.00				2	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00				2	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00				2	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0598

NPS Station ID: SHEN0598
 Location: NORTH FORK THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.693115/ -78.275003

 Depth of Water: 0
 Elevation: 1100
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_VTSSS_RA04
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

 On/Off RF1:
 On/Off RF3:

Description:
 STATION RA04 IS LOCATED ON THE THORTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NORTH FORK THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 19.09 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0598

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.33	7.33	7.33	7.33	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.33	7.33	7.33	7.33	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.047	0.047	0.047	0.047	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.84	1.84	1.84	1.84	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0598

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0599

NPS Station ID: SHEN0599
 Location: N F THORNTON RIVER NEAR SPERRYVILLE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103002504.98
 Description:

LAT/LON: 38.693337/ -78.275837
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 10.88

Agency: 112WRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 01662350
 Within Park Boundary: Yes

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 3.70
 Distance from RF3: 0.36

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0599

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/22/82	6	14.5	12.	16.5	1.	37.	6.083	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/22/82	6	3.	9.317	38.	0.3	212.93	14.592	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/22/82	5	7.3	7.26	7.5	6.9	0.048	0.219	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/22/82	5	7.3	7.211	7.5	6.9	0.051	0.226	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/22/82	5	0.05	0.062	0.126	0.032	0.001	0.037	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/22/82	6	7.3	7.267	7.4	7.1	0.019	0.137	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/22/82	6	7.3	7.248	7.4	7.1	0.019	0.138	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/22/82	6	0.05	0.056	0.079	0.04	0.	0.018	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/22/82	6##	0.005	0.008	0.02	0.005	0.	0.006	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/22/82	6	0.135	0.168	0.4	0.01	0.025	0.159	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/22/82	6	14.5	14.667	16.	13.	1.467	1.211	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/22/82	6	3.05	3.017	3.3	2.7	0.042	0.204	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/22/82	6	1.7	1.717	2.	1.4	0.046	0.214	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/22/82	6	2.25	2.333	2.8	2.	0.119	0.344	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/22/82	6	0.3	0.267	0.3	0.2	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/22/82	6	25.	25.	27.	23.	2.	1.414	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/22/82	6	0.4	0.367	0.4	0.3	0.003	0.052	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/22/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/22/82	6	4.	4.333	6.	4.	0.667	0.816	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/22/82	6	15.05	15.017	17.9	12.	5.166	2.273	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0599

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0599

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0600

NPS Station ID: SHEN0600
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.693726/ -78.277337

Depth of Water: 0
 Elevation: 1140
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH02
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH02 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 18.72 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0600

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.28	7.28	7.28	7.28	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.28	7.28	7.28	7.28	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.052	0.052	0.052	0.052	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	154.2	154.2	154.2	154.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	13.	13.	13.	13.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0600

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Fresh Acute	860.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	44.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	44.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0601

NPS Station ID: SHEN0601
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.694227/ -78.296309

Depth of Water: 0
 Elevation: 1410
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH09
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH09 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.84 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0601

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	16.2	16.2	16.2	16.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.43	1.43	1.43	1.43	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0601

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0602

NPS Station ID: SHEN0602	LAT/LON: 38.694448/ -78.276392	Agency: 21VASWCB	Date Created: 02/06/82
Location: FCWA, OCCOQUAN RESERVOIR		FIPS State/County: 51059 VIRGINIA/FAIRFAX	
Station Type: /RESERV/TYPA/MUN/INTAKE/AMBNT/SUPPLY		STORET Station ID(s): OCCOQUAN @WR11	
RMI-Indexes: 0214001 002190		Within Park Boundary: Yes	
RMI-Miles: 0087.39 0007.87			
HUC: 02080103	Depth of Water: 0	Aquifer:	
Major Basin: NORTH ATLANTIC	Elevation: 0	Water Body Id:	
Minor Basin: POTOMAC		ECO Region:	
RF1 Index: 02080103	RF1 Mile Point: 0.000	Distance from RF1: 24.20	On/Off RF1:
RF3 Index: 02070008023700.00	RF3 Mile Point: 4.32	Distance from RF3: 0.14	On/Off RF3:
Description:			
SYMBOL SUPPLY TREATMENT STORAGE PLANNING DATA *****			
DRAIN STORAGE PROCESS EXISTING/ UTILITY POP SAFE DEMAND AREA (MG) DESIGN SERVED YIELD (MGD)			
(SQM) CAP(MGD) (MGD) *****			
@WR11 570 11.1 C 111.6 FCWA 443K* 67.5 44* TOPO NAME: OCCOQUAN			
TOPO NUMBER: 194D HPU: #8/11-13-81			
*FAIRFAX COUNTY ONLY			

Parameter Inventory for Station: SHEN0602

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0603

NPS Station ID: SHEN0603
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.694587/ -78.279392

Depth of Water: 0
 Elevation: 1150
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH03
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH03 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 18.57 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0603

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.056	0.056	0.056	0.056	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	80.4	80.4	80.4	80.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.03	2.03	2.03	2.03	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	13.	13.	13.	13.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0603

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0604

NPS Station ID: SHEN0604
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.695060/ -78.297281

Depth of Water: 0
 Elevation: 1350
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH07
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH07 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.34 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0604

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.19	7.19	7.19	7.19	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.19	7.19	7.19	7.19	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.065	0.065	0.065	0.065	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	186.1	186.1	186.1	186.1	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.78	1.78	1.78	1.78	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.31	0.31	0.31	0.31	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	12.2	12.2	12.2	12.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0604

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0605

NPS Station ID: SHEN0605
 Location: North Fork Thornton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.695170/ -78.280142

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1F030
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0605

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/08/95-07/14/98	4	18.45	18.325	20.1	16.3	2.563	1.601	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/08/95-07/14/98	4	47.5	47.5	50.	45.	5.667	2.38	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/08/95-07/14/98	4	8.7	8.725	9.2	8.3	0.196	0.443	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/08/95-07/14/98	4	7.09	7.125	7.37	6.95	0.031	0.177	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/08/95-07/14/98	4	7.09	7.1	7.37	6.95	0.032	0.179	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/08/95-07/14/98	4	0.081	0.079	0.112	0.043	0.001	0.029	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	06/08/95-07/14/98	2	29.5	29.5	30.	29.	0.5	0.707	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/18/96-07/14/98	3	3.2	3.233	4.3	2.2	1.103	1.05	**	**	**	**
83509 STREAM, WIDTH METER	07/18/96-07/14/98	3	7.	6.933	7.6	6.2	0.493	0.702	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/18/96-07/14/98	3	0.06	0.06	0.09	0.03	0.001	0.03	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0605

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00				1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	4	0	0.00	3	0	0.00				1	0	0.00			
	Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00				1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0606

NPS Station ID: SHEN0606
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.695392/ -78.294865

Depth of Water: 0
 Elevation: 1370
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH06 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0606

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.16	7.16	7.16	7.16	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.16	7.16	7.16	7.16	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.069	0.069	0.069	0.069	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	165.5	165.5	165.5	165.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.67	1.67	1.67	1.67	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.29	0.29	0.29	0.29	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	11.7	11.7	11.7	11.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0606

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0607

NPS Station ID: SHEN0607
 Location: PINEY RIVER NEAR SPERRYVILLE, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103007100.00
 Description:

LAT/LON: 38.696115/ -78.258337

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 3.28

Agency: 112WRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 01662370
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 7.70
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0607

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/22/82	6	15.25	12.333	17.	2.	36.567	6.047	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/22/82	6	2.5	7.033	28.	0.4	112.999	10.63	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/22/82	6	7.1	7.067	7.3	6.8	0.055	0.234	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/22/82	6	7.089	7.014	7.3	6.8	0.058	0.241	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/22/82	6	0.082	0.097	0.158	0.05	0.003	0.051	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/22/82	6	7.2	7.15	7.3	6.9	0.027	0.164	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/22/82	6	7.2	7.123	7.3	6.9	0.028	0.167	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/22/82	6	0.063	0.075	0.126	0.05	0.001	0.031	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/22/82	6##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/22/82	6	0.1	0.178	0.5	0.02	0.034	0.186	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/22/82	6	12.	11.833	13.	10.	1.367	1.169	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/22/82	6	2.65	2.583	2.8	2.3	0.038	0.194	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/22/82	6	1.3	1.317	1.5	1.1	0.026	0.16	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/22/82	6	1.85	1.85	2.2	1.5	0.075	0.274	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/22/82	6	0.2	0.233	0.3	0.2	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/22/82	6	24.5	24.833	26.	24.	0.967	0.983	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/22/82	6	0.2	0.233	0.3	0.2	0.003	0.052	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/22/82	6	1.	0.983	1.	0.9	0.002	0.041	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/22/82	6	3.	3.333	5.	3.	0.667	0.816	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/22/82	6	13.25	13.2	15.7	11.	3.844	1.961	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0607

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0607

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0608

NPS Station ID: SHEN0608
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.696726/ -78.283587

Depth of Water: 0
 Elevation: 1180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TH04 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 17.89 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0608

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.22	7.22	7.22	7.22	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.22	7.22	7.22	7.22	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	158.5	158.5	158.5	158.5	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.95	1.95	1.95	1.95	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	12.9	12.9	12.9	12.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0608

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0609

NPS Station ID: SHEN0609
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.696865/ -78.284949

Depth of Water: 0
 Elevation: 1190
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH05 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.26 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0609

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.18	7.18	7.18	7.18	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.18	7.18	7.18	7.18	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.066	0.066	0.066	0.066	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	155.4	155.4	155.4	155.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	11.8	11.8	11.8	11.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0609

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0610

NPS Station ID: SHEN0610
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.696920/ -78.305810

Depth of Water: 0
 Elevation: 1480
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH08
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TH08 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.18 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0610

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.17	7.17	7.17	7.17	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.17	7.17	7.17	7.17	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.068	0.068	0.068	0.068	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.95	1.95	1.95	1.95	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.33	0.33	0.33	0.33	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	13.	13.	13.	13.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0610

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0611

NPS Station ID: SHEN0611
 Location: North Fork Thornton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.696948/ -78.283865

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1F031
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0611

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/21/95-08/21/95	1	20.3	20.3	20.3	20.3	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/21/95-08/21/95	1	49.	49.	49.	49.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/21/95-08/21/95	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/21/95-08/21/95	1	6.92	6.92	6.92	6.92	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/21/95-08/21/95	1	6.92	6.92	6.92	6.92	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/21/95-08/21/95	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	08/21/95-08/21/95	1	30.	30.	30.	30.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0611

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00					
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0612

NPS Station ID: SHEN0612
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.697670/ -78.285671

Depth of Water: 0
 Elevation: 1190
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH11 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0612

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	46.	46.	46.	46.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.056	0.056	0.056	0.056	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	44.	44.	44.	44.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	22.8	22.8	22.8	22.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.11	2.11	2.11	2.11	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.34	0.34	0.34	0.34	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	13.5	13.5	13.5	13.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0612

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0613

NPS Station ID: SHEN0613
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.701115/ -78.264171

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1F003
 Within Park Boundary: No

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle just outside Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0613

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/07/96-07/28/98	3	17.9	17.2	18.	15.7	1.69	1.3	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/07/96-07/28/98	3	41.	41.	42.	40.	1.	1.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/07/96-07/28/98	3	8.3	9.633	12.6	8.	6.623	2.574	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/07/96-07/28/98	3	7.02	7.033	7.27	6.81	0.053	0.23	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/07/96-07/28/98	3	7.02	6.994	7.27	6.81	0.055	0.235	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/07/96-07/28/98	3	0.095	0.101	0.155	0.054	0.003	0.051	**	**	**
30207	GAGE HEIGHT, ABOVE DATUM METERS	07/28/98-07/28/98	1	1.44	1.44	1.44	1.44	0.	0.	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/28/98-07/28/98	1	25.	25.	25.	25.	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	08/07/96-07/28/98	3	6.1	5.467	6.6	3.7	2.403	1.55	**	**	**
83509	STREAM, WIDTH METER	08/07/96-07/28/98	3	4.9	5.1	5.7	4.7	0.28	0.529	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	08/07/96-07/28/98	3	0.03	0.03	0.05	0.01	0.	0.02	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0613

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0613

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00										
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0614

NPS Station ID: SHEN0614
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.701115/-78.266115

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_LTEM_1L309
 Within Park Boundary: No

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle outside Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0614

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/89-05/27/97	39	15.5	15.469	20.5	11.	5.567	2.36	11.8	14.	17.	18.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-05/27/97	6	36.	34.333	46.	14.	117.467	10.838	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/26/89-05/27/97	32	9.65	9.547	12.	6.8	1.466	1.211	8.	8.7	10.475	11.
00406	PH, FIELD, STANDARD UNITS SU	05/23/91-05/27/97	16	7.01	7.337	9.84	5.71	1.444	1.202	6.151	6.675	7.255	9.791
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/23/91-05/27/97	16	6.999	6.621	9.84	5.71	1.99	1.411	6.151	6.675	7.255	9.791
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/91-05/27/97	16	0.1	0.239	1.95	0.	0.223	0.472	0.	0.056	0.212	0.905
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-05/27/97	6	23.	22.167	30.	9.	50.167	7.083	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0614

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Standard	Exceed	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	32	0	0.00	15	0	0.00	17	0	0.00	9	3	0.33	9	1	0.11			
00406	PH, FIELD	Fresh Chronic	9.	16	3	0.19	7	0	0.00	9	3	0.33	9	3	0.33	9	1	0.11			
		Other-Lo Lim.	6.5	16	2	0.13	7	1	0.14	9	1	0.11									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0614

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/89-05/27/97	19	16.	16.805	20.5	14.	3.863	1.965	14.4	15.1	18.	20.5
00300	OXYGEN, DISSOLVED MG/L	06/26/89-05/27/97	15	9.6	9.2	11.	6.8	1.604	1.267	7.16	8.	10.	11.
00406	PH, FIELD, STANDARD UNITS SU	05/23/91-05/27/97	7	7.11	6.913	7.18	6.34	0.118	0.343	**	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/23/91-05/27/97	7	7.11	6.782	7.18	6.34	0.138	0.371	**	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/91-05/27/97	7	0.078	0.165	0.457	0.066	0.023	0.153	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0614

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/26/89-05/27/97	20	14.25	14.2	18.	11.	3.995	1.999	11.51	11.85	15.5	16.88
00300	OXYGEN, DISSOLVED MG/L	06/26/89-05/27/97	17	9.7	9.853	12.	8.	1.224	1.106	8.32	9.	10.95	11.2
00406	PH, FIELD, STANDARD UNITS SU	05/23/91-05/27/97	9	6.89	7.667	9.84	5.71	2.34	1.53	5.71	6.69	9.505	9.84
00406	CONVERTED PH, FIELD, STANDARD UNITS	05/23/91-05/27/97	9	6.89	6.528	9.84	5.71	3.799	1.949	5.71	6.69	9.505	9.84
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/91-05/27/97	9	0.129	0.297	1.95	0.	0.391	0.625	0.	0.	0.205	1.95

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0615

NPS Station ID: SHEN0615
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.701142/ -78.263948

Depth of Water: 0
 Elevation: 1160
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P101
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P101 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0615

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	12.5	12.571	19.	5.	28.202	5.311	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	35.	36.857	45.	33.	18.476	4.298	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	7.1	7.046	7.14	6.8	0.015	0.122	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	7.1	7.029	7.14	6.8	0.015	0.123	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.079	0.093	0.158	0.072	0.001	0.031	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	33.	35.571	44.	32.	18.286	4.276	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	256.9	230.014	343.5	127.5	5699.895	75.498	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	2.9	2.914	3.6	2.4	0.195	0.441	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	1.5	1.471	1.7	1.3	0.029	0.17	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.87	1.901	2.48	1.57	0.097	0.312	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.28	0.276	0.33	0.21	0.001	0.036	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.971	1.	0.9	0.002	0.049	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.7	2.857	3.8	2.2	0.316	0.562	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	13.9	13.9	17.7	10.7	5.697	2.387	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	0.3	1.115	3.6	0.008	2.125	1.458	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.08	0.096	0.16	0.07	0.001	0.031	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0615

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	7	3	0.43	2	1	0.50	2	0	0.00	3	2	0.67			
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0616

NPS Station ID: SHEN0616
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.701142/ -78.263948

 Depth of Water: 0
 Elevation: 1140
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_VT60
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT60 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0616

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-04/26/95	21	11.	11.029	19.4	2.5	32.982	5.743	2.7	4.75	16.	19.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/12/87-04/26/95	33	36.	37.152	49.	25.	30.633	5.535	29.8	34.	41.5	45.2
00400	PH (STANDARD UNITS)	08/12/87-04/26/95	33	7.03	7.02	7.32	6.56	0.03	0.172	6.778	6.94	7.145	7.226
00400	CONVERTED PH (STANDARD UNITS)	08/12/87-04/26/95	33	7.03	6.984	7.32	6.56	0.031	0.176	6.778	6.94	7.145	7.226
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/87-04/26/95	33	0.093	0.104	0.275	0.048	0.002	0.048	0.059	0.072	0.115	0.167
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/12/87-04/26/95	33	35.	36.182	48.	24.	30.278	5.503	28.8	33.	40.5	44.2
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/12/87-04/26/95	33	249.1	253.945	421.7	96.1	8386.263	91.577	138.5	180.55	326.8	383.62
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/12/87-04/26/95	33	2.8	2.915	3.8	2.2	0.196	0.442	2.34	2.5	3.3	3.52
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/87-04/26/95	33	1.4	1.473	1.9	1.2	0.042	0.205	1.2	1.3	1.6	1.76
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/87-04/26/95	33	1.77	1.857	2.61	1.15	0.118	0.344	1.514	1.6	2.075	2.394
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/87-04/26/95	33	0.27	0.29	0.54	0.18	0.007	0.084	0.204	0.23	0.32	0.414
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/12/87-04/26/95	33	1.	0.976	1.	0.6	0.006	0.075	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/12/87-04/26/95	33	3.	3.067	5.4	2.	0.4	0.633	2.34	2.55	3.4	3.74
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/12/87-04/26/95	33	12.8	13.664	18.3	8.3	6.588	2.567	10.78	11.9	16.2	17.46
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	6	9.212	8.582	15.458	2.037	22.392	4.732	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	6	10.134	10.56	13.829	8.349	5.207	2.282	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/12/87-04/26/95	33	0.9	1.405	5.9	0.	2.531	1.591	0.	0.01	2.85	3.38
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/12/87-04/26/95	33	0.09	0.105	0.28	0.05	0.002	0.049	0.06	0.07	0.12	0.168

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0616

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	33	0	0.00	8	0	0.00	17	0	0.00	8	0	0.00			
	Other-Lo Lim.	6.5	33	0	0.00	8	0	0.00	17	0	0.00	8	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	33	11	0.33	8	2	0.25	17	5	0.29	8	4	0.50			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	33	0	0.00	8	0	0.00	17	0	0.00	8	0	0.00			
	Drinking Water	250.	33	0	0.00	8	0	0.00	17	0	0.00	8	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	33	0	0.00	8	0	0.00	17	0	0.00	8	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	33	0	0.00	8	0	0.00	17	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0617

NPS Station ID: SHEN0617
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.701142/ -78.263948

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_VTS60
 Within Park Boundary: No

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle just outside Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0617

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-04/26/95	1	12.4	12.4	12.4	12.4	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-04/26/95	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/26/95-04/26/95	1	10.4	10.4	10.4	10.4	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/26/95-04/26/95	1	7.22	7.22	7.22	7.22	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/26/95-04/26/95	1	7.22	7.22	7.22	7.22	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/95-04/26/95	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-04/26/95	1	21.	21.	21.	21.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0617

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard	Exceed	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00							1	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00							1	0	0.00					
	Other-Lo Lim.	6.5	1	0	0	0.00							1	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0618

NPS Station ID: SHEN0618
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.701392/ -78.263615

 Depth of Water: 0
 Elevation: 1140
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_VTSSS_RA03
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION RA03 IS LOCATED ON THE THORTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.66 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0618

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.21	7.21	7.21	7.21	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.21	7.21	7.21	7.21	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.062	0.062	0.062	0.062	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	04/26/87-04/26/87	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0618

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0619

NPS Station ID: SHEN0619
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.701671/ -78.289892

 Depth of Water: 0
 Elevation: 1260
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH12 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 11.93 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0619

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	46.	46.	46.	46.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.059	0.059	0.059	0.059	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	14.4	14.4	14.4	14.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.07	2.07	2.07	2.07	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	13.2	13.2	13.2	13.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0619

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0620

NPS Station ID: SHEN0620
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.703031/ -78.268671

Depth of Water: 0
 Elevation: 1180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_PINE
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PINE IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA, WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0620

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	251	10.5	11.078	22.	0.	29.46	5.428	4.	6.5	16.	18.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	256	35.	36.16	46.	29.	14.708	3.835	32.	33.	39.	42.
00400	PH (STANDARD UNITS)	09/01/92-07/28/97	256	7.11	7.083	7.39	6.38	0.028	0.169	6.837	7.	7.2	7.28
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/28/97	256	7.11	7.046	7.39	6.38	0.03	0.173	6.837	7.	7.2	7.28
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/28/97	256	0.078	0.09	0.417	0.041	0.002	0.045	0.052	0.063	0.1	0.146
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/28/97	256	34.	35.055	46.	28.	14.397	3.794	31.	32.	37.	41.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	256	204.2	216.245	371.1	101.9	3776.932	61.457	145.44	163.7	266.675	310.89
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	05/02/95-07/28/97	27	0.8	0.9	2.1	0.5	0.138	0.372	0.58	0.6	1.2	1.42
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	256	2.8	2.852	3.7	2.1	0.136	0.369	2.4	2.6	3.1	3.43
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	256	1.4	1.427	1.9	1.1	0.029	0.169	1.2	1.3	1.575	1.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	256	1.77	1.825	2.65	1.25	0.075	0.273	1.537	1.62	1.99	2.203
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	256	0.28	0.28	0.7	0.19	0.003	0.058	0.21	0.24	0.31	0.34
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	256	1.	0.989	1.	0.7	0.002	0.039	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	256	3.	3.034	5.5	2.	0.26	0.51	2.4	2.7	3.3	3.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	256	12.9	13.482	18.9	9.2	4.103	2.026	11.2	12.	15.1	16.43
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	75	7.785	10.601	65.491	4.03	81.452	9.025	4.784	5.964	11.041	23.373
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	10/01/96-04/29/97	6	0.004	0.004	0.01	0.	0.	0.004	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	256	1.3	1.393	4.	0.	1.003	1.001	0.05	0.5	2.2	2.7
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	256	0.08	0.091	0.42	0.04	0.002	0.045	0.05	0.06	0.1	0.15

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0620

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	256	0	0.00	71	0	0.00	110	0	0.00	75	0	0.00				
	Other-Lo Lim.	6.5	256	1	0.00	71	0	0.00	110	1	0.01	75	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	256	124	0.48	71	56	0.79	110	61	0.55	75	7	0.09				
00941	CHLORIDE, DISSOLVED IN WATER	860.	256	0	0.00	71	0	0.00	110	0	0.00	75	0	0.00				
	Fresh Acute	860.	256	0	0.00	71	0	0.00	110	0	0.00	75	0	0.00				
	Drinking Water	250.	256	0	0.00	71	0	0.00	110	0	0.00	75	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	256	0	0.00	71	0	0.00	110	0	0.00	75	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	256	0	0.00	71	0	0.00	110	0	0.00	75	0	0.00				
	Drinking Water	44.	256	0	0.00	71	0	0.00	110	0	0.00	75	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1992 - Station SHEN0620

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	14	8.	8.786	16.5	0.	20.412	4.518	2.	6.375	11.5	16.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	17	36.	35.824	38.	34.	1.404	1.185	34.	35.	36.5	38.
00400	PH (STANDARD UNITS)	17	7.08	7.091	7.36	6.67	0.033	0.181	6.79	7.005	7.285	7.312
00400	CONVERTED PH (STANDARD UNITS)	17	7.08	7.053	7.36	6.67	0.034	0.186	6.79	7.005	7.285	7.312
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	17	0.083	0.089	0.214	0.044	0.002	0.042	0.049	0.052	0.099	0.164
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	17	35.	34.824	37.	33.	1.404	1.185	33.	34.	35.5	37.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	17	157.8	155.318	169.4	131.2	113.048	10.632	136.	147.8	162.45	168.68
00915	CALCIUM, DISSOLVED (MG/L AS CA)	17	2.8	2.806	3.1	2.6	0.016	0.125	2.68	2.7	2.9	3.02
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	17	1.4	1.412	1.6	1.3	0.005	0.07	1.3	1.4	1.4	1.52
00930	SODIUM, DISSOLVED (MG/L AS NA)	17	1.71	1.699	1.95	1.51	0.012	0.111	1.526	1.645	1.76	1.854
00935	POTASSIUM, DISSOLVED (MG/L AS K)	17	0.27	0.268	0.31	0.23	0.001	0.028	0.23	0.24	0.285	0.31
00941	CHLORIDE, DISSOLVED IN WATER MG/L	17	1.	0.982	1.	0.9	0.002	0.039	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	17	3.2	3.294	4.5	2.6	0.327	0.572	2.68	2.8	3.8	4.26
00955	SILICA, DISSOLVED (MG/L AS SI02)	17	12.9	12.918	14.9	10.9	0.94	0.97	11.3	12.35	13.55	14.1
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	17	2.	1.765	3.	0.2	0.965	0.982	0.28	0.8	2.7	3.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	17	0.08	0.089	0.22	0.04	0.002	0.044	0.048	0.05	0.1	0.164

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0620

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	54	12.	11.802	20.	2.	30.122	5.488	4.25	6.375	17.	19.25
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	55	37.	38.145	46.	31.	23.83	4.882	33.	34.	43.	45.4
00400	PH (STANDARD UNITS)	55	7.16	7.141	7.39	6.59	0.025	0.157	6.91	7.06	7.26	7.304
00400	CONVERTED PH (STANDARD UNITS)	55	7.16	7.108	7.39	6.59	0.026	0.161	6.91	7.06	7.26	7.304
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	55	0.069	0.078	0.257	0.041	0.001	0.037	0.05	0.055	0.087	0.123
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	55	36.	36.8	46.	30.	23.274	4.824	31.6	33.	42.	44.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	55	222.9	226.807	371.1	101.9	7105.176	84.292	127.38	136.9	306.9	341.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	55	2.9	2.942	3.7	2.3	0.19	0.436	2.4	2.6	3.4	3.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	55	1.5	1.5	1.9	1.2	0.044	0.211	1.3	1.3	1.7	1.8
00930	SODIUM, DISSOLVED (MG/L AS NA)	55	1.83	1.951	2.65	1.25	0.153	0.391	1.496	1.62	2.3	2.498
00935	POTASSIUM, DISSOLVED (MG/L AS K)	55	0.3	0.299	0.42	0.21	0.003	0.059	0.22	0.25	0.34	0.39
00941	CHLORIDE, DISSOLVED IN WATER MG/L	55	1.	0.989	1.	0.9	0.001	0.031	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	55	3.	3.062	5.5	2.	0.409	0.64	2.36	2.7	3.3	3.68
00955	SILICA, DISSOLVED (MG/L AS SI02)	55	13.6	14.249	18.9	9.2	6.888	2.624	10.92	12.2	16.6	17.84
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	55	1.8	1.721	4.	0.004	1.413	1.189	0.009	0.6	2.6	3.3
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	55	0.07	0.079	0.26	0.04	0.001	0.038	0.05	0.06	0.09	0.12

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0620

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	50	11.5	11.4	19.	1.	27.02	5.198	4.	7.375	16.5	18.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	51	36.	35.961	43.	30.	14.278	3.779	31.2	32.	39.	42.
00400	PH (STANDARD UNITS)	51	7.11	7.08	7.32	6.38	0.025	0.157	6.892	7.02	7.18	7.248
00400	CONVERTED PH (STANDARD UNITS)	51	7.11	7.044	7.32	6.38	0.026	0.161	6.892	7.02	7.18	7.248
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	51	0.078	0.09	0.417	0.048	0.003	0.053	0.056	0.066	0.095	0.128
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	51	35.	34.902	42.	29.	15.01	3.874	30.	31.	38.	41.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	51	225.4	228.104	326.9	121.	3471.312	58.918	150.18	181.9	275.3	315.64
00915	CALCIUM, DISSOLVED (MG/L AS CA)	51	2.8	2.808	3.6	2.1	0.161	0.401	2.3	2.4	3.1	3.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	51	1.4	1.404	1.7	1.1	0.03	0.172	1.2	1.2	1.5	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	51	1.82	1.852	2.45	1.47	0.085	0.291	1.5	1.61	2.01	2.33
00935	POTASSIUM, DISSOLVED (MG/L AS K)	51	0.27	0.27	0.7	0.19	0.006	0.076	0.2	0.22	0.31	0.32

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0620

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	51	1.	0.984	1.	0.9	0.001	0.037	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	51	3.	3.029	4.1	2.2	0.274	0.523	2.4	2.6	3.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	51	13.9	13.602	18.	10.4	5.539	2.354	10.7	11.3	15.6
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	27	11.638	17.053	65.491	4.591	157.007	12.53	6.37	8.93	25.093
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	51	0.4	0.894	3.	0.004	1.045	1.022	0.007	0.08	2.1
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	51	0.08	0.092	0.42	0.05	0.003	0.054	0.06	0.07	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0620

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	52	9.5	10.798	22.	0.5	31.493	5.612	2.95	7.5	15.875
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	52	35.	35.577	42.	29.	11.229	3.351	32.	33.	38.75
00400	PH (STANDARD UNITS)	09/01/92-07/28/97	52	7.11	7.096	7.32	6.77	0.017	0.131	6.923	7.003	7.2
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/28/97	52	7.11	7.076	7.32	6.77	0.018	0.133	6.923	7.003	7.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/28/97	52	0.078	0.084	0.17	0.048	0.001	0.028	0.055	0.063	0.099
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/01/92-07/28/97	52	34.	34.577	41.	28.	9.857	3.14	31.	32.	37.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	52	204.7	210.573	319.4	133.7	3173.358	56.333	148.07	156.95	258.625
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	52	2.85	2.875	3.5	2.3	0.123	0.351	2.5	2.525	3.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	52	1.4	1.425	1.7	1.2	0.023	0.151	1.2	1.3	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	52	1.8	1.794	2.17	1.4	0.043	0.206	1.553	1.61	1.963
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	52	0.265	0.265	0.35	0.19	0.002	0.044	0.203	0.223	0.3
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	52	1.	0.998	1.	0.9	0.	0.014	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	52	3.1	3.023	4.2	2.1	0.196	0.443	2.4	2.7	3.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	52	12.75	13.338	17.	10.4	3.291	1.814	11.3	11.9	15.
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	23	7.304	7.596	12.669	4.03	5.026	2.242	4.414	6.057	9.358
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	52	1.25	1.175	2.8	0.	0.617	0.786	0.036	0.425	1.875
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	52	0.08	0.084	0.17	0.05	0.001	0.028	0.06	0.06	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0620

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	51	12.	11.582	21.	2.	32.068	5.663	4.	6.	16.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	51	35.	35.078	45.	30.	10.994	3.316	31.	33.	36.
00400	PH (STANDARD UNITS)	09/01/92-07/28/97	51	7.01	6.993	7.34	6.55	0.034	0.183	6.742	6.87	7.14
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/28/97	51	7.01	6.953	7.34	6.55	0.035	0.188	6.742	6.87	7.14
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/28/97	51	0.098	0.111	0.282	0.046	0.003	0.052	0.061	0.072	0.135
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	09/01/92-07/28/97	51	34.	33.98	44.	28.	12.14	3.484	30.	32.	35.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	51	196.2	211.224	326.1	146.7	2236.422	47.291	165.08	174.4	232.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	51	2.7	2.804	3.6	2.3	0.122	0.349	2.4	2.5	3.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	51	1.4	1.382	1.7	1.1	0.022	0.148	1.2	1.3	1.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	51	1.7	1.744	2.15	1.49	0.035	0.187	1.54	1.6	1.84
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	51	0.29	0.291	0.45	0.19	0.003	0.056	0.23	0.24	0.33
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	51	1.	0.988	1.	0.7	0.003	0.052	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	51	2.9	3.022	4.1	2.3	0.184	0.429	2.5	2.7	3.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	51	12.5	13.043	16.3	10.9	2.267	1.506	11.52	12.	13.9
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	15	5.964	6.379	11.041	4.675	2.714	1.647	4.774	5.154	7.237
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	51	1.2	1.352	3.1	0.001	0.643	0.802	0.3	0.7	2.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	51	0.1	0.113	0.28	0.05	0.003	0.053	0.06	0.07	0.14

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0620

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/01/92-07/28/97	30	9.75	9.933	19.	0.5	27.806	5.273	3.05	5.	13.5	17.95
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/01/92-07/28/97	30	35.	35.9	45.	31.	10.507	3.241	33.	34.	37.5	41.
00400	PH (STANDARD UNITS)	09/01/92-07/28/97	30	7.15	7.106	7.37	6.67	0.034	0.183	6.755	7.1	7.208	7.298
00400	CONVERTED PH (STANDARD UNITS)	09/01/92-07/28/97	30	7.15	7.063	7.37	6.67	0.035	0.188	6.755	7.1	7.207	7.298
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/01/92-07/28/97	30	0.071	0.086	0.214	0.043	0.002	0.045	0.05	0.062	0.079	0.176
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	09/01/92-07/28/97	30	34.	34.9	44.	30.	10.024	3.166	32.	33.	36.25	39.9
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	09/01/92-07/28/97	30	217.6	229.617	327.9	186.9	1574.621	39.681	191.28	195.825	255.15	302.76
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/01/92-07/28/97	30	2.75	2.833	3.7	2.4	0.104	0.322	2.5	2.6	3.025	3.29
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/01/92-07/28/97	30	1.4	1.42	1.8	1.2	0.022	0.149	1.3	1.3	1.5	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/01/92-07/28/97	30	1.76	1.81	2.16	1.61	0.03	0.173	1.621	1.668	1.92	2.117
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/01/92-07/28/97	30	0.28	0.278	0.37	0.22	0.002	0.042	0.221	0.24	0.313	0.339
00941	CHLORIDE, DISSOLVED IN WATER MG/L	09/01/92-07/28/97	30	1.	0.987	1.	0.7	0.003	0.057	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	09/01/92-07/28/97	30	2.8	2.883	4.1	2.3	0.148	0.384	2.5	2.675	3.	3.3
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/01/92-07/28/97	30	12.75	13.19	15.7	11.4	1.698	1.303	11.71	12.175	13.85	15.48
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	05/16/94-07/28/97	10	6.711	6.422	9.237	4.11	2.552	1.597	4.162	4.927	7.454	9.092
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/01/92-07/28/97	30	1.9	1.877	3.6	0.5	0.604	0.777	0.72	1.375	2.525	2.89
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	09/01/92-07/28/97	30	0.07	0.087	0.22	0.04	0.002	0.046	0.05	0.06	0.08	0.178

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0621

NPS Station ID: SHEN0621
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.703031/ -78.268671

 Depth of Water: 0
 Elevation: 1180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_PN0A
 Within Park Boundary: Yes

Date Created: 05/01/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PN0A IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0621

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-07/24/97	219	38.	37.653	45.	29.	14.879	3.857	32.	35.	40.	43.
00400	PH (STANDARD UNITS)	04/16/93-07/24/97	219	7.03	6.996	7.32	6.4	0.034	0.184	6.77	6.85	7.14	7.23
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/24/97	219	7.03	6.955	7.32	6.4	0.035	0.188	6.77	6.85	7.14	7.23
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/24/97	219	0.093	0.111	0.398	0.048	0.003	0.052	0.059	0.072	0.141	0.17
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	04/16/93-07/24/97	219	37.	36.457	44.	28.	13.561	3.683	31.	34.	39.	41.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/24/97	219	195.9	181.63	292.9	-0.5	5612.222	74.915	85.	133.7	248.5	266.
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	01/18/96-07/24/97	72	2.15	2.289	5.1	0.4	1.053	1.026	1.13	1.5	3.	3.7
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/24/97	219	3.	2.998	4.6	2.2	0.137	0.371	2.5	2.7	3.2	3.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/24/97	219	1.5	1.473	1.8	1.1	0.026	0.162	1.2	1.4	1.6	1.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/24/97	219	1.64	1.69	2.22	0.93	0.094	0.307	1.33	1.47	1.97	2.1
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/24/97	219	0.34	0.371	1.13	0.21	0.016	0.127	0.24	0.3	0.42	0.54
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/24/97	219	1.	0.934	2.	0.6	0.014	0.119	0.8	0.9	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/24/97	219	3.7	3.807	5.9	2.2	0.614	0.784	2.9	3.3	4.2	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/24/97	219	12.3	12.548	16.5	7.1	5.255	2.292	9.8	10.8	14.8	15.6
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-06/27/97	108	9.061	10.536	36.952	3.673	30.832	5.553	6.167	7.188	11.243	16.637
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	09/04/96-07/24/97	32	0.02	0.048	0.28	0.	0.004	0.064	0.001	0.005	0.075	0.134
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/24/97	219	1.9	1.858	3.8	0.002	0.67	0.818	0.7	1.2	2.5	2.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/24/97	219	0.09	0.112	0.4	0.05	0.003	0.053	0.06	0.07	0.14	0.17

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0621

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	219	0	0.00	79	0	0.00	59	0	0.00	81	0	0.00			
	Other-Lo Lim.	6.5	219	1	0.00	79	0	0.00	59	0	0.00	81	1	0.01			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	219	121	0.55	79	53	0.67	59	56	0.95	81	12	0.15			
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	219	0	0.00	79	0	0.00	59	0	0.00	81	0	0.00			
	Drinking Water	250.	219	0	0.00	79	0	0.00	59	0	0.00	81	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	219	0	0.00	79	0	0.00	59	0	0.00	81	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	219	0	0.00	79	0	0.00	59	0	0.00	81	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1993 - Station SHEN0621

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-07/24/97	62	38.5	38.161	45.	31.	19.121	4.373	31.3	35.	42.	44.
00400	PH (STANDARD UNITS)	04/16/93-07/24/97	62	7.095	7.06	7.32	6.77	0.031	0.176	6.796	6.87	7.22	7.274
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/24/97	62	7.095	7.024	7.32	6.77	0.032	0.18	6.796	6.87	7.22	7.274
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/24/97	62	0.08	0.095	0.17	0.048	0.002	0.039	0.053	0.06	0.135	0.16
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/16/93-07/24/97	62	36.5	36.742	43.	30.	18.063	4.25	30.3	33.	40.	42.7
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/24/97	62	140.8	180.561	276.5	95.4	4220.854	64.968	101.92	129.775	255.55	264.
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/24/97	62	3.05	2.94	3.5	2.2	0.159	0.399	2.3	2.6	3.3	3.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/24/97	62	1.5	1.471	1.8	1.2	0.026	0.162	1.2	1.4	1.6	1.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/24/97	62	1.615	1.75	2.2	1.13	0.114	0.338	1.253	1.46	2.073	2.117
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/24/97	62	0.335	0.359	0.74	0.21	0.017	0.129	0.22	0.278	0.39	0.594
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/24/97	62	1.	1.011	2.	0.9	0.017	0.129	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/24/97	62	3.5	3.732	5.9	2.5	0.957	0.978	2.6	3.3	3.725	5.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/24/97	62	12.3	12.869	15.9	8.1	6.362	2.522	9.13	10.675	15.225	15.67
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-06/27/97	4	9.14	8.989	14.004	3.673	17.92	4.233	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/24/97	62	2.55	2.348	3.8	0.1	0.576	0.759	1.33	1.775	2.925	3.2
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/24/97	62	0.08	0.096	0.17	0.05	0.002	0.039	0.053	0.06	0.14	0.16

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0621

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-07/24/97	61	39.	38.59	45.	31.	17.946	4.236	32.	36.5	41.	45.
00400	PH (STANDARD UNITS)	04/16/93-07/24/97	61	7.	6.949	7.31	6.4	0.042	0.204	6.638	6.825	7.095	7.24
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/24/97	61	7.	6.899	7.31	6.4	0.044	0.21	6.638	6.825	7.095	7.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/24/97	61	0.1	0.126	0.398	0.049	0.004	0.066	0.058	0.08	0.15	0.23
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/16/93-07/24/97	61	38.	37.623	44.	30.	16.372	4.046	31.2	35.5	39.5	44.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/24/97	61	233.6	218.816	292.9	126.7	2487.473	49.875	141.2	167.7	264.75	277.54
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/24/97	61	3.2	3.089	3.7	2.3	0.162	0.402	2.5	2.75	3.3	3.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/24/97	61	1.5	1.511	1.8	1.2	0.03	0.174	1.3	1.3	1.6	1.78
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/24/97	61	1.87	1.826	2.22	1.35	0.087	0.295	1.43	1.505	2.09	2.15
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/24/97	61	0.33	0.363	0.76	0.22	0.015	0.121	0.23	0.295	0.42	0.544
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/24/97	61	0.9	0.875	1.	0.6	0.013	0.114	0.7	0.8	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/24/97	61	3.8	3.869	5.6	2.7	0.516	0.718	3.	3.35	4.25	5.
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/24/97	61	14.	13.613	16.5	10.	4.588	2.142	10.6	11.3	15.55	16.06
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-06/27/97	14	20.276	20.46	36.952	8.735	75.669	8.699	9.156	11.786	27.698	33.678
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/24/97	61	1.	1.326	2.8	0.008	0.546	0.739	0.52	0.7	1.85	2.5
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/24/97	61	0.1	0.128	0.4	0.05	0.004	0.067	0.06	0.08	0.15	0.236

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0621

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-07/24/97	22	37.	36.455	38.	34.	2.165	1.471	34.	35.	38.	38.
00400	PH (STANDARD UNITS)	04/16/93-07/24/97	22	6.98	6.928	7.14	6.53	0.027	0.165	6.637	6.805	7.053	7.098
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/24/97	22	6.98	6.894	7.14	6.53	0.028	0.169	6.637	6.805	7.053	7.098
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/24/97	22	0.105	0.128	0.295	0.072	0.003	0.057	0.08	0.089	0.157	0.232
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	04/16/93-07/24/97	22	36.	35.591	37.	33.	2.158	1.469	33.	34.	37.	37.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/24/97	22	114.45	120.755	173.7	78.6	1197.893	34.611	80.85	84.85	158.9	170.66
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/24/97	22	3.	2.918	3.1	2.6	0.026	0.162	2.7	2.7	3.	3.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/24/97	22	1.4	1.409	1.5	1.3	0.007	0.081	1.3	1.3	1.5	1.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/24/97	22	1.48	1.47	1.59	1.3	0.008	0.091	1.323	1.395	1.543	1.58
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/24/97	22	0.44	0.48	1.13	0.29	0.04	0.199	0.31	0.328	0.55	0.788
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/24/97	22	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0621

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/24/97	22	4.3	4.182	4.7	3.4	0.236	0.486	3.4	3.675	4.6	4.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/24/97	22	11.25	11.232	12.1	10.	0.529	0.727	10.13	10.575	12.	12.1
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-06/27/97	22	10.53	10.704	17.42	5.034	13.957	3.736	6.132	7.22	14.132	16.237
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/24/97	22	1.85	1.741	2.5	0.8	0.209	0.457	0.96	1.375	2.025	2.27
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/24/97	22	0.105	0.13	0.3	0.07	0.003	0.059	0.083	0.09	0.16	0.235

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0621

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-07/24/97	52	37.	36.173	41.	29.	11.205	3.347	31.	33.25	38.	40.7
00400	PH (STANDARD UNITS)	04/16/93-07/24/97	52	6.98	6.968	7.19	6.67	0.022	0.15	6.759	6.842	7.1	7.14
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/24/97	52	6.98	6.942	7.19	6.67	0.023	0.152	6.759	6.842	7.1	7.14
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/24/97	52	0.105	0.114	0.214	0.065	0.002	0.042	0.072	0.079	0.144	0.174
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	04/16/93-07/24/97	52	36.	35.038	39.	28.	10.116	3.181	30.	32.5	37.	39.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/24/97	52	208.55	209.154	259.2	136.9	875.025	29.581	178.51	195.975	230.225	250.82
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/24/97	52	2.95	2.935	4.6	2.4	0.154	0.393	2.43	2.7	3.1	3.47
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/24/97	52	1.5	1.419	1.7	1.1	0.029	0.172	1.13	1.3	1.5	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/24/97	52	1.665	1.522	1.81	0.93	0.073	0.27	1.036	1.435	1.71	1.761
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/24/97	52	0.33	0.36	0.64	0.24	0.008	0.09	0.263	0.293	0.418	0.484
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/24/97	52	0.9	0.902	1.	0.7	0.008	0.087	0.8	0.8	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/24/97	52	4.	3.867	5.	2.2	0.461	0.679	3.	3.325	4.3	4.8
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/24/97	52	12.15	11.275	15.6	7.1	4.629	2.152	7.53	10.125	12.575	13.61
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-06/27/97	52	8.547	8.667	14.932	4.878	5.231	2.287	5.715	6.89	10.466	11.282
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/24/97	52	2.2	2.104	3.1	0.002	0.512	0.716	1.06	1.725	2.675	2.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/24/97	52	0.11	0.116	0.22	0.07	0.002	0.043	0.07	0.08	0.148	0.177

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0621

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/16/93-07/24/97	22	38.	38.318	43.	30.	7.561	2.75	37.	37.	40.25	42.
00400	PH (STANDARD UNITS)	04/16/93-07/24/97	22	7.14	7.076	7.24	6.75	0.027	0.164	6.823	6.875	7.213	7.23
00400	CONVERTED PH (STANDARD UNITS)	04/16/93-07/24/97	22	7.14	7.044	7.24	6.75	0.028	0.167	6.823	6.875	7.212	7.23
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/16/93-07/24/97	22	0.072	0.09	0.178	0.058	0.001	0.038	0.059	0.061	0.133	0.15
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	04/16/93-07/24/97	22	37.	36.636	40.	29.	4.814	2.194	35.	36.	37.5	39.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	04/16/93-07/24/97	22	4.1	77.35	274.2	-0.5	14399.157	119.996	2.05	2.8	265.25	270.74
00915	CALCIUM, DISSOLVED (MG/L AS CA)	04/16/93-07/24/97	22	3.1	3.136	3.5	2.9	0.031	0.176	2.9	3.	3.225	3.47
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	04/16/93-07/24/97	22	1.55	1.564	1.7	1.4	0.007	0.085	1.5	1.5	1.6	1.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/16/93-07/24/97	22	1.78	1.759	1.97	1.59	0.021	0.145	1.6	1.62	1.93	1.947
00935	POTASSIUM, DISSOLVED (MG/L AS K)	04/16/93-07/24/97	22	0.345	0.348	0.45	0.27	0.003	0.054	0.283	0.308	0.385	0.43
00941	CHLORIDE, DISSOLVED IN WATER MG/L	04/16/93-07/24/97	22	0.9	0.891	1.	0.7	0.007	0.081	0.8	0.8	0.925	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	04/16/93-07/24/97	22	3.15	3.327	4.1	2.4	0.34	0.583	2.53	2.775	3.9	4.07
00955	SILICA, DISSOLVED (MG/L AS SI02)	04/16/93-07/24/97	22	12.9	13.014	15.2	11.2	1.536	1.24	11.52	11.975	14.425	14.77
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/27/93-06/27/97	16	7.869	8.082	10.553	5.499	2.308	1.519	6.032	6.589	9.498	10.04
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/16/93-07/24/97	22	1.55	1.482	2.3	0.2	0.42	0.648	0.29	1.	2.025	2.17
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	04/16/93-07/24/97	22	0.07	0.091	0.18	0.06	0.001	0.038	0.06	0.06	0.133	0.15

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0622

NPS Station ID: SHEN0622
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.703031/ -78.268671

Depth of Water: 0
 Elevation: 1180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_PN01
 Within Park Boundary: Yes

Date Created: 05/01/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION PN01 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.59 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0622

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-05/16/95	211	36.	36.104	44.	31.	8.427	2.903	32.	34.	38.	40.
00400	PH (STANDARD UNITS)	11/01/92-05/16/95	211	7.1	7.087	7.35	6.73	0.017	0.13	6.89	7.01	7.18	7.24
00400	CONVERTED PH (STANDARD UNITS)	11/01/92-05/16/95	211	7.1	7.067	7.35	6.73	0.017	0.132	6.89	7.01	7.18	7.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/01/92-05/16/95	211	0.079	0.086	0.186	0.045	0.001	0.028	0.058	0.066	0.098	0.129
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/01/92-05/16/95	211	35.	35.171	42.	29.	8.228	2.868	31.	33.	37.	39.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-05/16/95	211	173.7	184.964	327.8	93.6	2335.13	48.323	133.08	154.4	206.9	264.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-05/16/95	211	2.8	2.799	3.4	2.3	0.07	0.265	2.4	2.6	3.	3.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-05/16/95	211	1.4	1.417	1.7	1.2	0.015	0.123	1.3	1.3	1.5	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-05/16/95	211	1.68	1.693	2.45	1.19	0.045	0.213	1.462	1.56	1.78	1.98
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-05/16/95	211	0.26	0.276	0.55	0.18	0.004	0.064	0.21	0.24	0.3	0.35
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-05/16/95	211	1.	1.01	2.	0.7	0.026	0.161	0.92	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-05/16/95	211	3.5	3.566	5.4	2.2	0.429	0.655	2.8	3.1	3.9	4.4
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-05/16/95	211	12.4	12.455	17.7	8.2	2.735	1.654	10.7	11.4	13.	14.98
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	11/26/93-05/16/95	42	9.434	10.974	22.042	4.21	21.14	4.598	6.223	7.683	13.826	19.733
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-05/16/95	211	2.	1.978	4.9	0.006	1.083	1.041	0.5	1.2	2.8	3.
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-05/16/95	211	0.08	0.087	0.19	0.05	0.001	0.028	0.06	0.07	0.1	0.13

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0622

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH		211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			
	Fresh Chronic	9.	211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			
	Other-Lo Lim.	6.5	211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	211	147	0.70	20	20	1.00	118	101	0.86	73	26	0.36			
00941	CHLORIDE, DISSOLVED IN WATER	860.	211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			
	Fresh Acute	860.	211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			
	Drinking Water	250.	211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	250.	211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			
	Drinking Water	44.	211	0	0.00	20	0	0.00	118	0	0.00	73	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1992 - Station SHEN0622

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-05/16/95	55	37.	37.145	42.	32.	5.201	2.28	34.6	36.	39.	40.4
00400	PH (STANDARD UNITS)	11/01/92-05/16/95	55	7.02	6.991	7.16	6.75	0.012	0.11	6.816	6.9	7.08	7.114
00400	CONVERTED PH (STANDARD UNITS)	11/01/92-05/16/95	55	7.02	6.977	7.16	6.75	0.012	0.111	6.816	6.9	7.08	7.114
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/01/92-05/16/95	55	0.095	0.106	0.178	0.069	0.001	0.029	0.077	0.083	0.126	0.153
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/01/92-05/16/95	55	36.	36.164	41.	31.	4.991	2.234	33.6	35.	37.	39.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-05/16/95	55	166.9	163.695	196.2	93.6	503.45	22.438	129.2	153.7	181.9	189.64
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-05/16/95	55	2.8	2.833	3.3	2.4	0.041	0.203	2.6	2.7	3.	3.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-05/16/95	55	1.4	1.444	1.7	1.2	0.01	0.101	1.3	1.4	1.5	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-05/16/95	55	1.68	1.661	1.86	1.34	0.008	0.09	1.528	1.63	1.7	1.73
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-05/16/95	55	0.26	0.288	0.55	0.19	0.005	0.071	0.23	0.24	0.32	0.384
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-05/16/95	55	1.	0.998	1.	0.9	0.	0.013	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-05/16/95	55	3.6	3.705	5.1	2.7	0.36	0.6	2.9	3.3	4.2	4.6
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-05/16/95	55	12.5	12.416	14.	10.	0.447	0.668	11.5	12.3	12.7	12.8
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-05/16/95	55	2.5	2.233	3.	0.2	0.563	0.751	1.08	1.8	2.8	2.9
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-05/16/95	55	0.1	0.107	0.18	0.07	0.001	0.029	0.08	0.08	0.13	0.154

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0622

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-05/16/95	53	35.	36.302	44.	31.	14.907	3.861	31.	33.5	39.5	42.
00400	PH (STANDARD UNITS)	11/01/92-05/16/95	53	7.09	7.056	7.24	6.73	0.013	0.115	6.864	6.985	7.13	7.17
00400	CONVERTED PH (STANDARD UNITS)	11/01/92-05/16/95	53	7.09	7.04	7.24	6.73	0.013	0.116	6.864	6.985	7.13	7.17
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/01/92-05/16/95	53	0.081	0.091	0.186	0.058	0.001	0.028	0.068	0.074	0.104	0.137
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/01/92-05/16/95	53	34.	35.321	42.	29.	13.607	3.689	30.	33.	38.	41.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-05/16/95	53	159.9	191.566	327.8	128.7	4130.784	64.271	131.72	136.95	260.05	283.3
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-05/16/95	53	2.7	2.792	3.4	2.3	0.102	0.319	2.4	2.6	3.1	3.2
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-05/16/95	53	1.4	1.425	1.7	1.2	0.021	0.144	1.2	1.3	1.5	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-05/16/95	53	1.62	1.731	2.45	1.19	0.104	0.322	1.428	1.475	2.055	2.184
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-05/16/95	53	0.28	0.283	0.46	0.21	0.003	0.051	0.22	0.25	0.31	0.346
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-05/16/95	53	1.	0.991	2.	0.7	0.024	0.156	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-05/16/95	53	3.3	3.349	5.4	2.2	0.558	0.747	2.4	2.9	3.7	4.52
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-05/16/95	53	11.9	12.789	17.7	8.2	5.548	2.355	10.58	11.1	15.	16.46
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-05/16/95	53	2.4	2.364	4.9	0.006	1.95	1.396	0.8	1.1	3.15	4.46
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-05/16/95	53	0.08	0.093	0.19	0.06	0.001	0.028	0.07	0.08	0.105	0.14

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0622

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-05/16/95	47	35.	35.064	42.	31.	7.191	2.682	32.	33.	37.	39.
00400	PH (STANDARD UNITS)	11/01/92-05/16/95	47	7.16	7.159	7.35	6.85	0.013	0.114	7.02	7.07	7.24	7.33
00400	CONVERTED PH (STANDARD UNITS)	11/01/92-05/16/95	47	7.16	7.144	7.35	6.85	0.013	0.115	7.02	7.07	7.24	7.33
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/01/92-05/16/95	47	0.069	0.072	0.141	0.045	0.	0.019	0.047	0.058	0.085	0.095
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11/01/92-05/16/95	47	33.	33.745	40.	30.	6.803	2.608	31.	32.	36.	38.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-05/16/95	47	185.	191.483	318.6	93.7	3534.773	59.454	109.3	158.7	221.9	286.44
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-05/16/95	47	2.6	2.734	3.4	2.3	0.108	0.328	2.4	2.4	3.	3.3
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-05/16/95	47	1.3	1.364	1.7	1.2	0.019	0.137	1.2	1.3	1.4	1.6
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-05/16/95	47	1.68	1.71	2.21	1.49	0.04	0.199	1.5	1.55	1.74	2.142
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-05/16/95	47	0.25	0.264	0.51	0.18	0.005	0.069	0.198	0.21	0.3	0.33
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-05/16/95	47	1.	0.974	1.	0.8	0.003	0.057	0.9	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-05/16/95	47	3.5	3.443	4.4	2.3	0.32	0.566	2.48	3.1	3.9	4.12
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-05/16/95	47	12.6	12.723	16.6	9.9	3.444	1.856	10.58	11.	13.3	16.14

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0622

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-05/16/95	47	1.	1.323	3.1	0.03	0.927	0.963	0.28	0.5	2.3	2.82
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-05/16/95	47	0.07	0.074	0.14	0.05	0.	0.019	0.05	0.06	0.09	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0622

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/01/92-05/16/95	56	36.	35.768	41.	32.	4.8	2.191	33.	34.	37.	39.
00400	PH (STANDARD UNITS)	11/01/92-05/16/95	56	7.18	7.151	7.29	6.84	0.011	0.105	6.991	7.13	7.217	7.26
00400	CONVERTED PH (STANDARD UNITS)	11/01/92-05/16/95	56	7.18	7.137	7.29	6.84	0.011	0.106	6.991	7.13	7.217	7.26
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/01/92-05/16/95	56	0.066	0.073	0.145	0.051	0.	0.02	0.055	0.061	0.074	0.102
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	11/01/92-05/16/95	56	35.	35.25	41.	31.	5.209	2.282	33.	33.25	37.	39.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11/01/92-05/16/95	56	198.8	194.134	264.2	146.9	943.505	30.717	157.87	164.15	216.425	233.79
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11/01/92-05/16/95	56	2.8	2.825	3.3	2.5	0.037	0.192	2.6	2.7	3.	3.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11/01/92-05/16/95	56	1.4	1.427	1.6	1.3	0.009	0.094	1.3	1.3	1.5	1.5
00930	SODIUM, DISSOLVED (MG/L AS NA)	11/01/92-05/16/95	56	1.72	1.675	1.95	1.24	0.032	0.178	1.35	1.59	1.808	1.87
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11/01/92-05/16/95	56	0.26	0.268	0.53	0.19	0.004	0.064	0.21	0.223	0.28	0.346
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11/01/92-05/16/95	56	1.	1.07	2.	0.9	0.068	0.261	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11/01/92-05/16/95	56	3.65	3.738	5.4	2.9	0.382	0.618	3.07	3.2	3.975	4.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/01/92-05/16/95	56	12.25	11.954	13.4	8.6	1.453	1.206	10.04	11.225	12.9	13.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11/01/92-05/16/95	56	1.9	1.913	3.	0.007	0.385	0.62	1.2	1.425	2.275	2.83
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11/01/92-05/16/95	56	0.07	0.074	0.15	0.05	0.	0.021	0.06	0.06	0.08	0.103

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0623

NPS Station ID: SHEN0623
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.703420/ -78.268892

Depth of Water: 0
 Elevation: 1240
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P103
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P103 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.15 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0623

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	11.	12.143	18.5	5.5	23.976	4.897	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	36.	37.857	46.	34.	19.81	4.451	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	7.05	7.047	7.2	6.86	0.018	0.136	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	7.05	7.029	7.2	6.86	0.019	0.137	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.089	0.094	0.138	0.063	0.001	0.029	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	35.	36.429	45.	32.	23.286	4.826	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	175.	197.471	280.3	115.8	4208.262	64.871	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	3.	2.943	3.6	2.4	0.186	0.431	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	1.5	1.486	1.8	1.3	0.038	0.195	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.86	1.893	2.5	1.56	0.104	0.322	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.26	0.269	0.34	0.21	0.002	0.041	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.971	1.	0.9	0.002	0.049	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.7	2.886	3.7	2.4	0.238	0.488	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	13.6	13.9	18.	10.9	6.087	2.467	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	0.4	1.146	3.7	0.009	2.446	1.564	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.09	0.094	0.14	0.06	0.001	0.03	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0623

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	4	0.57	2	1	0.50	2	1	0.50	3	2	0.67				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0624

NPS Station ID: SHEN0624
 Location: North Fork Thornton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.703531/ -78.291754

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1FVA2
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0624

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/21/97-07/14/98	2	19.05	19.05	19.6	18.5	0.605	0.778	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/21/97-07/14/98	2	56.5	56.5	58.	55.	4.5	2.121	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/21/97-07/14/98	2	5.25	5.25	5.9	4.6	0.845	0.919	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/21/97-07/14/98	2	6.385	6.385	6.39	6.38	0.	0.007	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/21/97-07/14/98	2	6.385	6.385	6.39	6.38	0.	0.007	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/21/97-07/14/98	2	0.412	0.412	0.417	0.407	0.	0.007	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/14/98-07/14/98	1	35.	35.	35.	35.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/21/97-07/14/98	2	2.89	2.89	2.89	2.89	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	07/21/97-07/14/98	2	3.5	3.5	4.1	2.9	0.72	0.849	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/21/97-07/14/98	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0624

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Prop.			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0	0.00	2	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	2	0	0	0.00	2	0	0.00									
	Other-Lo Lim.	6.5	2	2	1.00	1.00	2	2	1.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0625

NPS Station ID: SHEN0625
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.704948/ -78.270587

Depth of Water: 0
 Elevation: 1250
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P102
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P102 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.94 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0625

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	6	10.25	11.167	17.	5.	21.467	4.633	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	6	27.5	26.833	31.	23.	11.367	3.371	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	6	6.9	6.892	7.06	6.66	0.023	0.151	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	6	6.9	6.869	7.06	6.66	0.024	0.153	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	6	0.126	0.135	0.219	0.087	0.002	0.049	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	6	26.	25.667	30.	22.	10.667	3.266	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	6	269.4	249.1	361.7	128.7	6762.16	82.232	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	6	1.75	1.783	2.1	1.5	0.062	0.248	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	6	0.75	0.767	0.9	0.7	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	6	2.16	2.142	2.41	1.89	0.056	0.236	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	6	0.415	0.418	0.47	0.38	0.001	0.034	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	6	1.5	1.8	2.8	1.3	0.372	0.61	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	6	18.35	18.05	20.7	15.	5.947	2.439	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	6	0.01	0.024	0.1	0.007	0.001	0.037	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	6	0.13	0.137	0.22	0.09	0.002	0.049	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0625

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	6	2	0.33	1	1	1.00	2	1	0.50	3	0	0.00			
	Fresh Acute	860.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0626

NPS Station ID: SHEN0626
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.704948/ -78.270587

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_PI02
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0626

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/95-05/22/95	1	12.8	12.8	12.8	12.8	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-05/22/95	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/22/95-05/22/95	1	9.6	9.6	9.6	9.6	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/22/95-05/22/95	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/22/95-05/22/95	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/95-05/22/95	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-05/22/95	1	17.	17.	17.	17.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0626

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00									1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00									1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00									1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0627

NPS Station ID: SHEN0627
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.705253/ -78.355560

Depth of Water: 0
 Elevation: 1580
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR19
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR19 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.44 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0627

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.06	6.06	6.06	6.06	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.06	6.06	6.06	6.06	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.871	0.871	0.871	0.871	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	129.4	129.4	129.4	129.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.62	0.62	0.62	0.62	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	1.29	1.29	1.29	1.29	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.88	0.88	0.88	0.88	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0627

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0628

NPS Station ID: SHEN0628
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.705753/ -78.273309

Depth of Water: 0
 Elevation: 1260
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P104
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P104 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.85 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0628

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	11.	12.143	18.	5.	23.06	4.802	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	37.	39.	49.	35.	27.	5.196	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.97	7.	7.18	6.8	0.019	0.136	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.97	6.982	7.18	6.8	0.019	0.138	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.107	0.104	0.158	0.066	0.001	0.033	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	36.	37.857	47.	33.	25.81	5.08	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	211.1	198.6	326.7	115.	5406.593	73.53	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	3.	3.029	3.7	2.5	0.186	0.431	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	1.6	1.571	1.9	1.3	0.046	0.214	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.79	1.866	2.47	1.55	0.103	0.32	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.25	0.257	0.34	0.2	0.002	0.043	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.971	1.	0.9	0.002	0.049	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.8	3.014	3.8	2.6	0.211	0.46	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	13.1	13.457	17.4	10.5	5.67	2.381	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	0.5	1.233	3.9	0.009	2.687	1.639	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.11	0.107	0.16	0.07	0.001	0.033	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0628

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	7	3	0.43	2	1	0.50	2	0	0.00	3	2	0.67			
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0629

NPS Station ID: SHEN0629
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.705781/ -78.354921

Depth of Water: 0
 Elevation: 1590
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR20
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR20 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.41 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA, WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0629

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.631	0.631	0.631	0.631	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.63	0.63	0.63	0.63	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	1.31	1.31	1.31	1.31	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.64	0.64	0.64	0.64	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0629

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0630

NPS Station ID: SHEN0630
 Location: RT. 626 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103021
 RF3 Index: 02080103001802.67

LAT/LON: 38.705837/ -78.152226

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 4.860
 RF3 Mile Point: 8.41

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-RUS005.24 /VA3-04-X0056/VA3-3X0056
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.06

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN VIRGINIA
 RIVER: RUSH RIVER SECTION: 04 TOPO MAP #: 0074 TOPO MAP NAME: WASHINGTON, VA

Parameter Inventory for Station: SHEN0630

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/17/74-05/15/79	26	13.9	13.231	27.2	0.9	63.168	7.948	1.91	5.45	21.	24.23
00300 OXYGEN, DISSOLVED MG/L	09/17/74-05/15/79	26	9.8	10.15	13.1	6.6	2.379	1.543	8.48	9.15	11.05	12.7
00400 PH (STANDARD UNITS)	09/17/74-05/15/79	26	7.4	7.385	8.6	6.8	0.173	0.416	6.8	7.	7.7	7.8
00400 CONVERTED PH (STANDARD UNITS)	09/17/74-05/15/79	26	7.4	7.226	8.6	6.8	0.199	0.447	6.8	7.	7.7	7.8
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/17/74-05/15/79	26	0.04	0.059	0.158	0.003	0.002	0.048	0.016	0.02	0.1	0.158
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/17/74-05/15/79	26 ##	0.05	0.06	0.2	0.05	0.001	0.032	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	09/17/74-05/15/79	26 ##	0.005	0.005	0.01	0.005	0.	0.001	0.005	0.005	0.005	0.007
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	09/17/74-09/24/76	12	0.215	0.234	0.5	0.025	0.026	0.161	0.033	0.095	0.368	0.494
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/17/74-05/15/79	25	0.2	0.258	2.6	0.05	0.248	0.498	0.05	0.05	0.25	0.34
00630 NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	11/29/76-05/15/79	14	0.145	0.185	0.5	0.015	0.022	0.15	0.02	0.065	0.265	0.47
01002 ARSENIC, TOTAL (UG/L AS AS)	05/25/77-11/02/78	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01027 CADMIUM, TOTAL (UG/L AS CD)	05/25/77-11/02/78	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01034 CHROMIUM, TOTAL (UG/L AS CR)	05/25/77-11/02/78	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01042 COPPER, TOTAL (UG/L AS CU)	05/25/77-11/02/78	2 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01045 IRON, TOTAL (UG/L AS FE)	11/02/78-11/02/78	1	200.	200.	200.	200.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	05/25/77-11/02/78	2 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01055 MANGANESE, TOTAL (UG/L AS MN)	11/02/78-11/02/78	1	30.	30.	30.	30.	0.	0.	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/25/77-11/02/78	2 ##	27.5	27.5	50.	5.	1012.5	31.82	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	05/25/77-11/02/78	2 ##	7.5	7.5	10.	5.	12.5	3.536	**	**	**	**
31616 FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-05/15/79	26	100.	357.692	4100.	50.	669338.462	818.131	50.	50.	300.	950.
31616 LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-05/15/79	26	2.	2.106	3.613	1.699	0.284	0.533	1.699	1.699	2.477	2.966
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	09/17/74-05/15/79	26	2.	2.106	3.613	1.699	0.284	0.533	1.699	1.699	2.477	2.966
50060 CHLORINE, TOTAL RESIDUAL (MG/L)	09/17/74-05/15/79	12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70505 PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	09/17/74-05/15/79	25 ##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.07
70507 PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	09/17/74-05/15/79	26 ##	0.01	0.02	0.07	0.005	0.	0.021	0.005	0.005	0.05	0.05
71900 MERCURY, TOTAL (UG/L AS HG)	05/25/77-11/02/78	2 ##	0.2	0.2	0.25	0.15	0.005	0.071	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0630

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	26	0	0.00	9	0	0.00	10	0	0.00	7	0	0.00			
00400 PH	Fresh Chronic	9.	26	0	0.00	9	0	0.00	10	0	0.00	7	0	0.00			
	Other-Lo Lim.	6.5	26	0	0.00	9	0	0.00	10	0	0.00	7	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	26	0	0.00	9	0	0.00	10	0	0.00	7	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	12	0	0.00	5	0	0.00	3	0	0.00	4	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	14	0	0.00	4	0	0.00	7	0	0.00	3	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	50.	2	0	0.00				1	0	0.00	1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	0 &	0	0.00												
	Drinking Water	5.	0 &	0	0.00												
01034 CHROMIUM, TOTAL	Drinking Water	100.	2	0	0.00				1	0	0.00	1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	1300.	2	0	0.00				1	0	0.00	1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	15.	2	0	0.00				1	0	0.00	1	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	100.	2	0	0.00				1	0	0.00	1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	5000.	2	0	0.00				1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	26	8	0.31	9	2	0.22	10	2	0.20	7	4	0.57			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	12	0	0.00	4	0	0.00	5	0	0.00	3	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	2.	2	0	0.00				1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0631

NPS Station ID: SHEN0631
 Location: RT. 658 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.706116/ -78.446115

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BPSS000.64
 Within Park Boundary: No

Date Created: 06/18/94

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH
 RIVER: PASS RUN SECTION: 02 TOPO MAP #: 0035 TOPO MAP NAME: LURAY, VA

REGION: 6 VALLEY

Parameter Inventory for Station: SHEN0631

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/04/94-07/21/97	5	18.5	18.58	21.2	16.7	3.567	1.889	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-07/21/97	4	3.25	3.625	6.5	1.5	4.356	2.087	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/04/94-07/21/97	4	230.5	228.75	254.	200.	498.25	22.322	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	08/04/94-08/28/96	4	10.05	10.025	10.4	9.6	0.189	0.435	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	08/04/94-07/21/97	4##	0.5	0.875	2.	0.5	0.563	0.75	**	**	**
00340	COD, .25N K2CR2O7 MG/L	08/04/94-07/21/97	4##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	08/04/94-07/21/97	5	8.1	8.08	8.3	7.7	0.062	0.249	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/04/94-07/21/97	5	8.1	8.018	8.3	7.7	0.067	0.258	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/04/94-07/21/97	5	0.008	0.01	0.02	0.005	0.	0.006	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/04/94-07/21/97	4	7.9	7.925	8.2	7.7	0.049	0.222	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/04/94-07/21/97	4	7.889	7.885	8.2	7.7	0.051	0.226	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/04/94-07/21/97	4	0.013	0.013	0.02	0.006	0.	0.006	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/04/94-07/21/97	4	103.	103.75	124.	85.	254.917	15.966	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	08/04/94-07/21/97	4	3.	2.875	4.	1.5	1.063	1.031	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	08/04/94-07/21/97	4##	1.5	1.375	1.5	1.	0.063	0.25	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	08/04/94-07/21/97	4##	1.75	2.	3.	1.5	0.5	0.707	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	08/04/94-07/21/97	4##	0.02	0.028	0.05	0.02	0.	0.015	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	08/04/94-07/21/97	4##	0.008	0.008	0.01	0.005	0.	0.003	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	08/04/94-07/21/97	4	1.065	1.06	1.26	0.85	0.034	0.185	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/04/94-07/21/97	4	0.15	0.188	0.4	0.05	0.024	0.155	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	08/04/94-07/21/97	4##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	08/04/94-08/28/96	3##	0.5	0.667	1.	0.5	0.083	0.289	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/04/94-07/21/97	4	113.	110.5	123.	93.	175.	13.229	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/04/94-07/21/97	4	6.	6.	7.	5.	0.667	0.816	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/04/94-07/21/97	4	6.	5.75	6.	5.	0.25	0.5	**	**	**
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/05/96-08/05/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	08/05/96-08/05/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/05/96-08/05/96	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/05/96-08/05/96	1	24.	24.	24.	24.	0.	0.	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/05/96-08/05/96	1	37.	37.	37.	37.	0.	0.	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/05/96-08/05/96	1	28.	28.	28.	28.	0.	0.	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	08/05/96-08/05/96	1	876.	876.	876.	876.	0.	0.	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/05/96-08/05/96	1	22.	22.	22.	22.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0631

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	08/05/96-08/05/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/05/96-08/05/96	1	126.	126.	126.	126.	0.	0.	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	08/05/96-08/05/96	1	22.	22.	22.	22.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	08/05/96-08/05/96	1	18100.	18100.	18100.	18100.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	08/05/96-08/05/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	08/05/96-08/05/96	1	44400.	44400.	44400.	44400.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/04/94-07/21/97	4	1500.	1350.	2100.	300.	676666.667	822.598	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/04/94-07/21/97	4	3.16	3.03	3.322	2.477	0.151	0.389	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	08/05/96-08/05/96	1 ##	30.	30.	30.	30.	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	08/05/96-08/05/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	1 ##	15.	15.	15.	15.	0.	0.	**	**	**	**
39351	CHLORDANE (TECH MIX&METABS), SEDIMENTS, DRY WGT, UG/KG	08/05/96-08/05/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/05/96-08/05/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	1 ##	60.	60.	60.	60.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	08/05/96-08/05/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	08/05/96-08/05/96	1 ##	10.	10.	10.	10.	0.	0.	**	**	**	**
39526	PCBS TOTAL, IN SEDIMENT, DRY (ISOMER ANALYSES) UG/KG	08/05/96-08/05/96	1 ##	0.015	0.016	0.03	0.005	0.	0.011	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	08/04/94-07/21/97	4	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71921	MERCURY, TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/05/96-08/05/96	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	08/05/96-08/05/96	1 ##	30.	30.	30.	30.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	08/05/96-08/05/96	1 ##										

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0631

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	4	0	0.00	4	0	0.00									
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	4	0	0.00	4	0	0.00									
00400	PH	Fresh Chronic	9.	5	0	0.00	5	0	0.00									
		Other-Lo Lim.	6.5	5	0	0.00	5	0	0.00									
00403	PH, LAB	Fresh Chronic	9.	4	0	0.00	4	0	0.00									
		Other-Lo Lim.	6.5	4	0	0.00	4	0	0.00									
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	4	0	0.00	4	0	0.00									
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	4	0	0.00	4	0	0.00									
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	4	0	0.00	4	0	0.00									
		Drinking Water	250.	4	0	0.00	4	0	0.00									
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	4	0	0.00	4	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	4	4	1.00	4	4	1.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0632

NPS Station ID: SHEN0632
 Location: S FK SHEN RT 675 NEAR LURAY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005032
 RF3 Index: 02070005020100.00
 Description:

LAT/LON: 38.708338/ -78.456392

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.150
 RF3 Mile Point: 0.18

Agency: 1112A9WQ
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): UP-POT-083 /SHEN-083 /083 /S FK 083
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0632

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/72-04/16/73	3	12.	12.667	23.	3.	100.333	10.017	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/19/72-04/16/73	3	10.6	10.833	13.2	8.7	5.103	2.259	**	**	**	**
00400	PH (STANDARD UNITS)	02/13/73-02/13/73	1	7.45	7.45	7.45	7.45	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/13/73-02/13/73	1	7.45	7.45	7.45	7.45	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/13/73-02/13/73	1	0.035	0.035	0.035	0.035	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/19/72-04/16/73	3	0.16	0.145	0.21	0.065	0.005	0.074	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/19/72-04/16/73	3	0.591	0.671	0.875	0.548	0.032	0.178	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/19/72-04/16/73	3	1.25	1.353	1.78	1.03	0.149	0.386	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/19/72-04/16/73	3	0.24	0.28	0.44	0.16	0.021	0.144	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/19/72-02/13/73	2	2.3	2.3	4.3	0.3	8.	2.828	**	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	09/19/72-02/13/73	2	30.05	30.05	35.3	24.8	55.125	7.425	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/19/72-04/16/73	3	0.38	0.37	0.55	0.18	0.034	0.185	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0632

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
		Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0633

NPS Station ID: SHEN0633
 Location: HAWKSBILL CK RT 648NCAR MOUTH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC H
 RF1 Index: 02070005032
 RF3 Index: 02070005003202.61
 Description:

LAT/LON: 38.708338/ -78.456392

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.150
 RF3 Mile Point: 2.65

Agency: 1112A9WQ
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): UP-POT-086 /SHEN-086 /086 /HAWKB1 086
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0633

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/72-04/16/73	4	12.5	11.375	18.5	2.	48.563	6.969	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/22/72-04/16/73	4	9.4	9.	12.1	5.1	8.44	2.905	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/22/72-05/22/72	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	05/22/72-02/13/73	3	6.9	6.933	7.1	6.8	0.023	0.153	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/22/72-02/13/73	3	6.9	6.916	7.1	6.8	0.024	0.154	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/72-02/13/73	3	0.126	0.121	0.158	0.079	0.002	0.04	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	2	40.5	40.5	48.	33.	112.5	10.607	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/22/72-05/22/72	2	8.	8.	10.	6.	8.	2.828	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/22/72-04/16/73	4	0.315	0.465	1.145	0.085	0.229	0.478	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/22/72-04/16/73	4	0.678	0.825	1.546	0.396	0.301	0.548	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/22/72-04/16/73	4	0.835	1.128	2.15	0.69	0.471	0.687	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/22/72-04/16/73	4	0.145	0.275	0.75	0.06	0.105	0.324	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/22/72-02/13/73	3	3.1	3.167	3.6	2.8	0.163	0.404	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/22/72-02/13/73	3	15.8	19.233	31.3	10.6	115.963	10.769	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/22/72-05/22/72	2	20.	20.	34.	6.	392.	19.799	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/22/72-05/22/72	2##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/22/72-05/22/72	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/22/72-05/22/72	2	0.75	0.75	0.8	0.7	0.005	0.071	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/22/72-05/22/72	2##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/22/72-05/22/72	2	0.06	0.06	0.1	0.02	0.003	0.057	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/22/72-05/22/72	2	0.02	0.02	0.02	0.02	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/22/72-04/16/73	4	0.405	0.498	0.99	0.19	0.121	0.348	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/22/72-05/22/72	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0633

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400	PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
		Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00							2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0633

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2	0	0.00						2	0	0.00				
	Drinking Water	5.	2	0	0.00						2	0	0.00				
01042 COPPER, TOTAL	Fresh Acute	18.	2	0	0.00						2	0	0.00				
	Drinking Water	1300.	2	0	0.00						2	0	0.00				
01051 LEAD, TOTAL	Fresh Acute	82.	2	0	0.00						2	0	0.00				
	Drinking Water	15.	2	0	0.00						2	0	0.00				
01092 ZINC, TOTAL	Fresh Acute	120.	2	0	0.00						2	0	0.00				
	Drinking Water	5000.	2	0	0.00						2	0	0.00				
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00						1	0	0.00				
	Drinking Water	2.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0634

NPS Station ID: SHEN0634
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.708531/ -78.300976

Depth of Water: 0
 Elevation: 1420
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH29
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH29 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.13 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0634

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	46.	46.	46.	46.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.24	7.24	7.24	7.24	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.24	7.24	7.24	7.24	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.058	0.058	0.058	0.058	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	-0.6	-0.6	-0.6	-0.6	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.09	2.09	2.09	2.09	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	13.1	13.1	13.1	13.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0634

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0635

NPS Station ID: SHEN0635
 Location: ROUTE 648 BRIDGE BELOW LURAY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005033
 RF3 Index: 02070005003202.61

LAT/LON: 38.708587/ -78.456060

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.100
 RF3 Mile Point: 4.03

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH
 RIVER: HAWKSBILL CREEK SECTION: 02 TOPO MAP #: 0035 TOPO MAP NAME: LURAY, VA

Agency: 21VASWCB
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 1BHSK000.96 /VA1B02-X0017/VA1B6X0017
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.07

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	297	14.3	13.886	27.8	0.5	41.014	6.404	5.5	8.05	19.45	22.02
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/09/88-04/01/92	24	1.8	2.117	4.7	0.1	1.852	1.361	0.4	1.025	3.475	4.1
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	52	3.35	26.663	996.	0.6	19210.696	138.603	1.	1.7	5.275	10.77
00080	COLOR (PLATINUM-COBALT UNITS)	03/12/91-03/02/93	21	10.	12.238	27.	7.	29.69	5.449	7.2	8.5	14.	22.2
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	101	237.	234.337	423.	92.	6350.686	79.691	129.	162.5	302.	329.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	96	224.5	233.052	418.	101.	6010.324	77.526	135.6	169.	300.75	342.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	78	10.7	10.524	15.9	5.9	4.31	2.076	7.89	8.7	12.	13.6
00300p	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	218	9.8	9.605	15.	1.7	6.041	2.458	6.2	8.	11.5	12.8
00310p	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	243	1.	1.902	25.	0.5	5.578	2.362	0.5	1.	2.	4.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	199	5.	7.304	152.	0.5	134.512	11.598	2.	2.5	9.	14.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	294	7.82	7.844	9.5	5.8	0.274	0.523	7.2	7.5	8.2	8.5
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	294	7.82	7.486	9.5	5.8	0.402	0.634	7.2	7.5	8.2	8.5
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	294	0.015	0.033	1.585	0.	0.01	0.099	0.003	0.006	0.032	0.063
00403p	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	154	7.7	7.632	9.7	6.5	0.237	0.486	6.9	7.3	8.	8.2
00403p	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	154	7.7	7.378	9.7	6.5	0.301	0.549	6.9	7.3	8.	8.2
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	154	0.02	0.042	0.316	0.	0.003	0.051	0.006	0.01	0.05	0.126
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	151	85.	87.238	156.	26.	1163.423	34.109	42.2	60.	114.	135.8
00500p	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	120	176.	188.292	504.	75.	5603.704	74.858	105.3	134.25	224.75	282.7
00505p	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	121	46.	64.62	900.	5.	7891.971	88.837	25.	31.	72.	107.4
00510p	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	120	125.5	133.575	326.	13.	3771.86	61.415	62.1	89.75	162.75	225.6
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	283	4.	12.163	860.	0.5	2887.287	53.733	1.5	2.	8.	18.6
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	283	2.5	4.399	145.	0.	110.393	10.507	1.	1.5	3.	8.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	282	2.5	9.266	715.	0.	2086.223	45.675	1.	1.5	5.	11.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	255 ##	0.05	0.157	4.	0.005	0.131	0.363	0.02	0.02	0.1	0.4
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	258	0.02	0.047	1.859	0.005	0.019	0.138	0.005	0.005	0.04	0.12
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	251	1.23	1.3	3.38	0.01	0.207	0.455	0.83	1.	1.51	1.88
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	256	0.3	0.456	6.5	0.05	0.438	0.662	0.1	0.2	0.438	0.9
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	06/22/78-02/06/79	6	1.55	1.435	2.21	0.7	0.366	0.605	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	195	0.1	0.182	7.	0.05	0.282	0.531	0.05	0.05	0.2	0.258
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	119	0.1	0.124	0.7	0.02	0.011	0.103	0.03	0.06	0.16	0.24
00680p	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	200	3.	4.059	33.	0.5	11.825	3.439	1.2	2.	5.15	8.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	140	96.	100.014	177.	29.	1260.086	35.498	56.2	72.	135.5	148.9
00940	CHLORIDE,TOTAL IN WATER MG/L	11/09/88-12/07/98	101	8.	8.46	20.	2.5	13.733	3.706	5.	6.	11.	13.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	101	11.	11.03	23.	6.	5.829	2.414	8.	9.	13.	14.
00951	FLUORIDE, TOTAL (MG/L AS F)	11/09/88-01/11/93	30 ##	0.105	0.107	0.25	0.05	0.004	0.065	0.05	0.05	0.15	0.241
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/15/89-01/11/93	28	9.75	9.936	14.2	5.5	3.61	1.9	7.77	9.025	11.225	12.1
01002	ARSENIC, TOTAL (UG/L AS AS)	04/14/71-08/09/78	11 ##	2.5	1.909	3.	1.	0.791	0.889	1.	1.	2.5	3.
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/20/79-06/25/96	2 ##	15.35	15.35	22.	8.7	88.445	9.405	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/23/83-06/25/96	1 ##	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/14/71-07/07/82	17 ##	5.	4.588	10.	0.5	4.476	2.116	0.5	5.	5.	6.
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-06/25/96	2 ##	0.165	0.165	0.22	0.11	0.006	0.078	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-06/25/96	2	205.95	205.95	392.	19.9	69229.205	263.114	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-07/07/82	28	20.	41.982	620.	0.5	13430.564	115.89	5.	5.	20.	100.
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-07/07/82	27 ##	5.	7.778	20.	5.	23.718	4.87	5.	5.	10.	20.
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/20/79-06/25/96	2	22.9	22.9	41.4	4.4	684.5	26.163	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	06/28/70-07/07/82	5	120.	168.	300.	100.	6920.	83.187	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-07/07/82	26 ##	5.	5.635	20.	1.	23.031	4.799	1.	3.5	5.	13.
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/20/79-06/25/96	2	41.45	41.45	78.5	4.4	2745.405	52.397	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-07/07/82	4	50.	52.5	80.	30.	425.	20.616	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	01/26/73-08/09/78	11 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01067	NICKEL, TOTAL (UG/L AS NI)	07/07/82-07/07/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-06/25/96	2 ##	7.65	7.65	13.1	2.2	59.405	7.707	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/15/69-07/07/82	27 ##	5.	10.926	60.	5.	136.61	11.688	5.	5.	10.	22.
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/20/79-06/25/96	2	89.6	89.6	142.	37.2	5491.52	74.105	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/23/83-06/25/96	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/16/68-10/14/70	13	23000.	96725.385	460000.		230.26958747710.256	164191.193	1978.	7800.	93000.	460000.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	07/16/68-10/14/70	13	4.362	4.362	5.663		2.362	0.796	0.892	3.852	4.968	5.663
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506				23000.432								
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/70-12/07/98	266	200.	2050.752	119000.	50.	100926414.527	10046.214	50.	100.	725.	3100.
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/70-12/07/98	266	2.301	2.477	5.076	1.699	0.483	0.695	1.699	2.	2.86	3.487
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C				300.059								
32240	TANNIN AND LIGNIN (MG/L)	10/19/92-11/17/92	2	0.15	0.15	0.2	0.1	0.005	0.071	**	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/07/82-01/19/83	2	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
34480	THALLIUM DRY WGTBTOTMG/KG	06/23/83-06/25/96	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/07/82	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/23/83-06/25/96	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/07/82-07/07/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631	ATRAZINE IN BOTOM DEPOS (UG/KG DRY SOLIDS)	06/23/83-06/23/83	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	07/07/82-06/29/87	14	0.	0.021	0.3	0.	0.006	0.08	0.	0.	0.	0.15
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	59	0.4	0.705	4.2	0.025	0.587	0.766	0.05	0.2	0.9	1.9
70507p	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	139	0.09	0.272	2.599	0.005	0.197	0.444	0.02	0.04	0.3	0.8
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-07/07/82	24 ##	0.25	0.271	0.7	0.15	0.012	0.109	0.2	0.25	0.25	0.375
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/20/79-06/25/96	2 ##	0.12	0.12	0.2	0.04	0.013	0.113	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/03/92-06/06/94	25	2.	4.316	52.	0.4	101.34	10.067	0.76	1.35	3.35	6.02

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

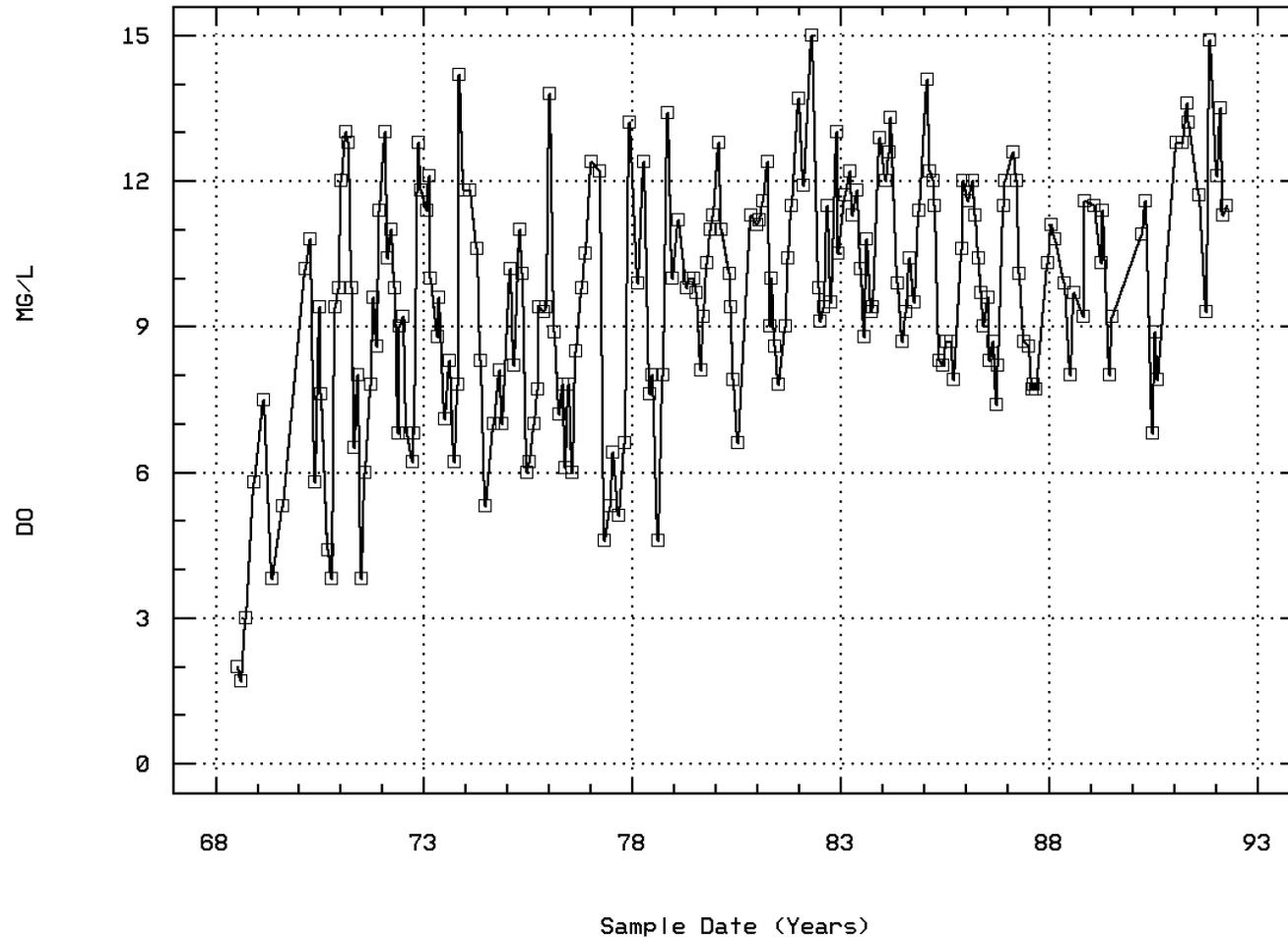
EPA Water Quality Criteria Analysis for Station: SHEN0635

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	24	0	0.00	5	0	0.00	10	0	0.00	9	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	52	3	0.06	19	1	0.05	22	1	0.05	11	1	0.09			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	78	0	0.00	25	0	0.00	33	0	0.00	20	0	0.00			
00300	OXYGEN, DISSOLVED	4.	218	6	0.03	66	5	0.08	82	0	0.00	70	1	0.01			
00400	PH	9.	294	6	0.02	91	0	0.00	113	4	0.04	90	2	0.02			
		6.5	294	2	0.01	91	0	0.00	113	2	0.02	90	0	0.00			
00403	PH, LAB	9.	154	1	0.01	47	0	0.00	62	0	0.00	45	1	0.02			
		6.5	154	1	0.01	47	1	0.02	62	0	0.00	45	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	258	1	0.00	75	1	0.01	102	0	0.00	81	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	251	0	0.00	71	0	0.00	100	0	0.00	80	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	10.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	101	0	0.00	31	0	0.00	43	0	0.00	27	0	0.00			
		250.	101	0	0.00	31	0	0.00	43	0	0.00	27	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	101	0	0.00	31	0	0.00	43	0	0.00	27	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	30	0	0.00	8	0	0.00	13	0	0.00	9	0	0.00			
01002	ARSENIC, TOTAL	360.	11	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00			
		50.	11	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00			
01027	CADMIUM, TOTAL	3.9	4 &	1	0.25	3	1	0.33				1	0	0.00			
		5.	4 &	1	0.25	3	1	0.33				1	0	0.00			
01034	CHROMIUM, TOTAL	100.	28	3	0.11	10	0	0.00	8	2	0.25	10	1	0.10			
01042	COPPER, TOTAL	18.	27	3	0.11	10	1	0.10	8	0	0.00	9	2	0.22			
		1300.	27	0	0.00	10	0	0.00	8	0	0.00	9	0	0.00			
01051	LEAD, TOTAL	82.	26	0	0.00	10	0	0.00	8	0	0.00	8	0	0.00			
		15.	26	2	0.08	10	1	0.10	8	1	0.13	8	0	0.00			
01065	NICKEL, DISSOLVED	1400.	11	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00			
		100.	11	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00			
01067	NICKEL, TOTAL	1400.	1	0	0.00	1	0	0.00									
		100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	120.	27	0	0.00	9	0	0.00	8	0	0.00	10	0	0.00			
		5000.	27	0	0.00	9	0	0.00	8	0	0.00	10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	1000.	13	12	0.92	7	7	1.00	2	1	0.50	4	4	1.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	266	159	0.60	80	52	0.65	107	55	0.51	79	52	0.66			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	20.	2	0	0.00	2	0	0.00									
		1.	2	0	0.00	2	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE	1.1	2	0	0.00	2	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	0.6	2	0	0.00	2	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	1050.	2	0	0.00	2	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	3.	3	0	0.00	3	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	2.4	2	0	0.00	2	0	0.00									
		2.	2	0	0.00	2	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.5	2	0	0.00	2	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	0.18	2	0	0.00	2	0	0.00									
		2.	2	0	0.00	2	0	0.00									
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	40.	2	0	0.00	2	0	0.00									
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	6.	2	0	0.00	2	0	0.00									
		1.	2	0	0.00	2	0	0.00									
50060	CHLORINE, TOTAL RESIDUAL	0.019	14	1	0.07	6	1	0.17	4	0	0.00	4	0	0.00			
71900	MERCURY, TOTAL	2.4	24	0	0.00	10	0	0.00	8	0	0.00	6	0	0.00			
		2.	24	0	0.00	10	0	0.00	8	0	0.00	6	0	0.00			
82078	TURBIDITY, FIELD	50.	25	1	0.04	7	0	0.00	11	0	0.00	7	1	0.14			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station: SHEN0635 Parameter Code: 00300

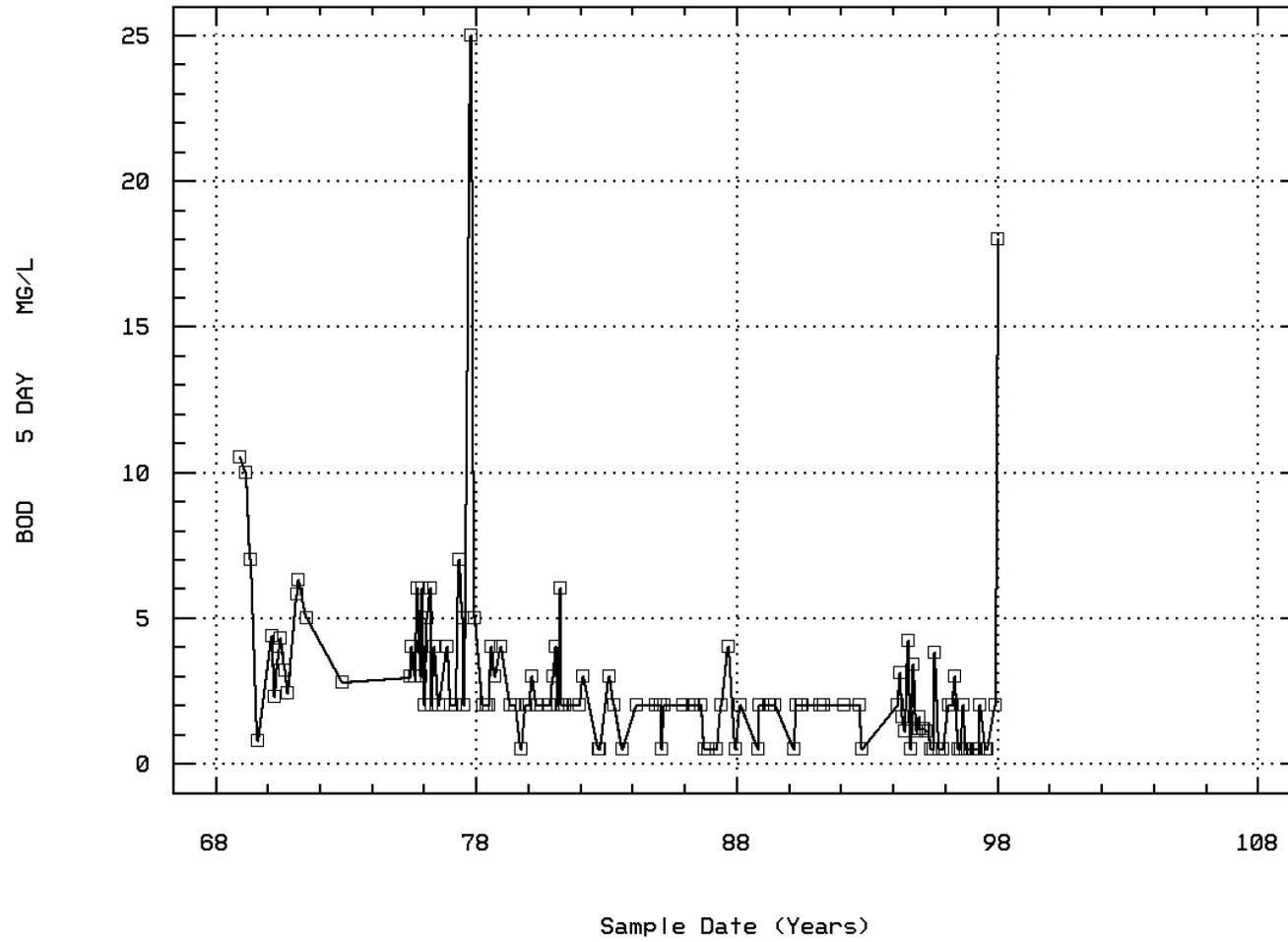
OXYGEN, DISSOLVED



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00310

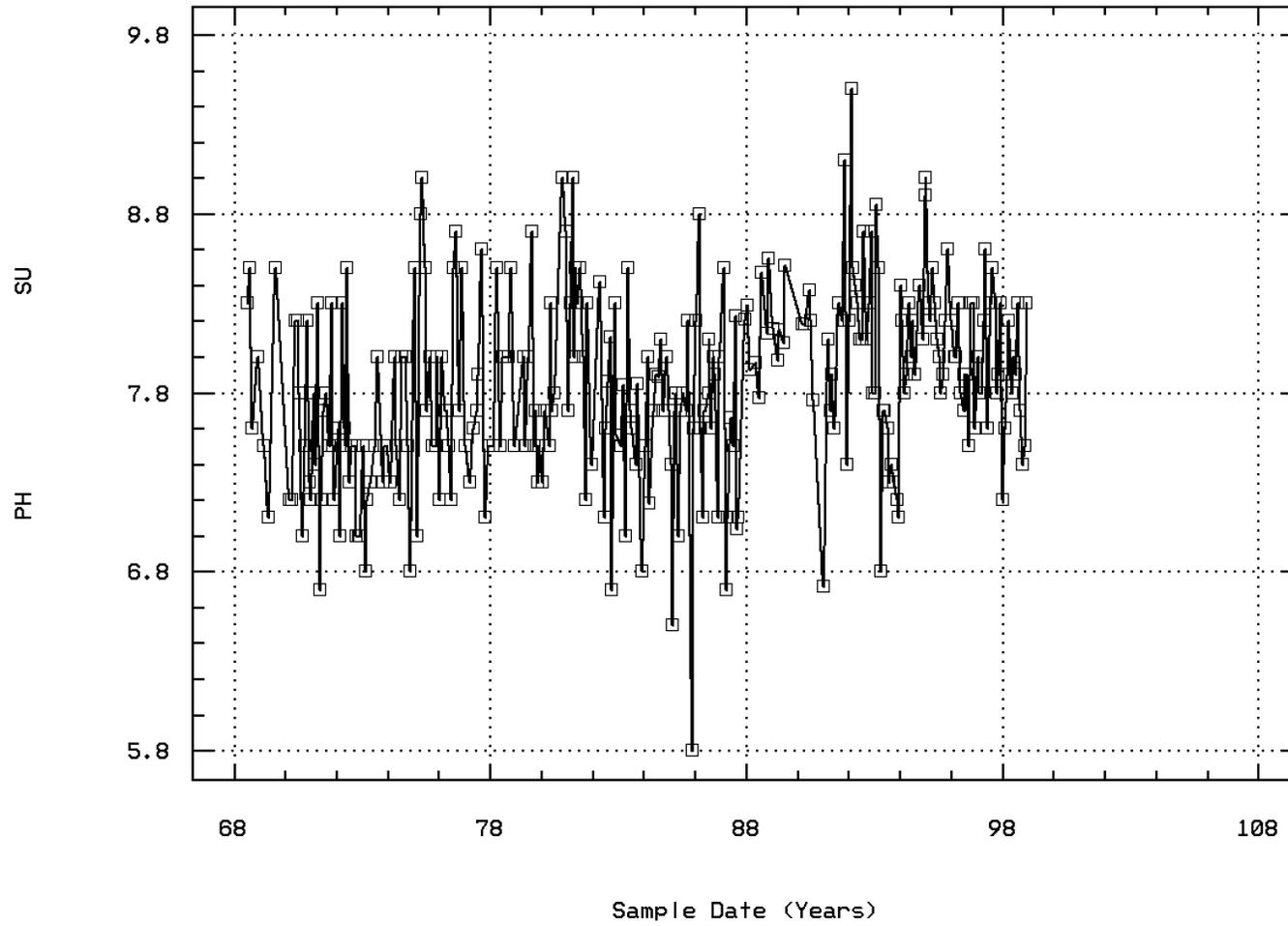
BOD, 5 DAY, 20 DEG C



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00400

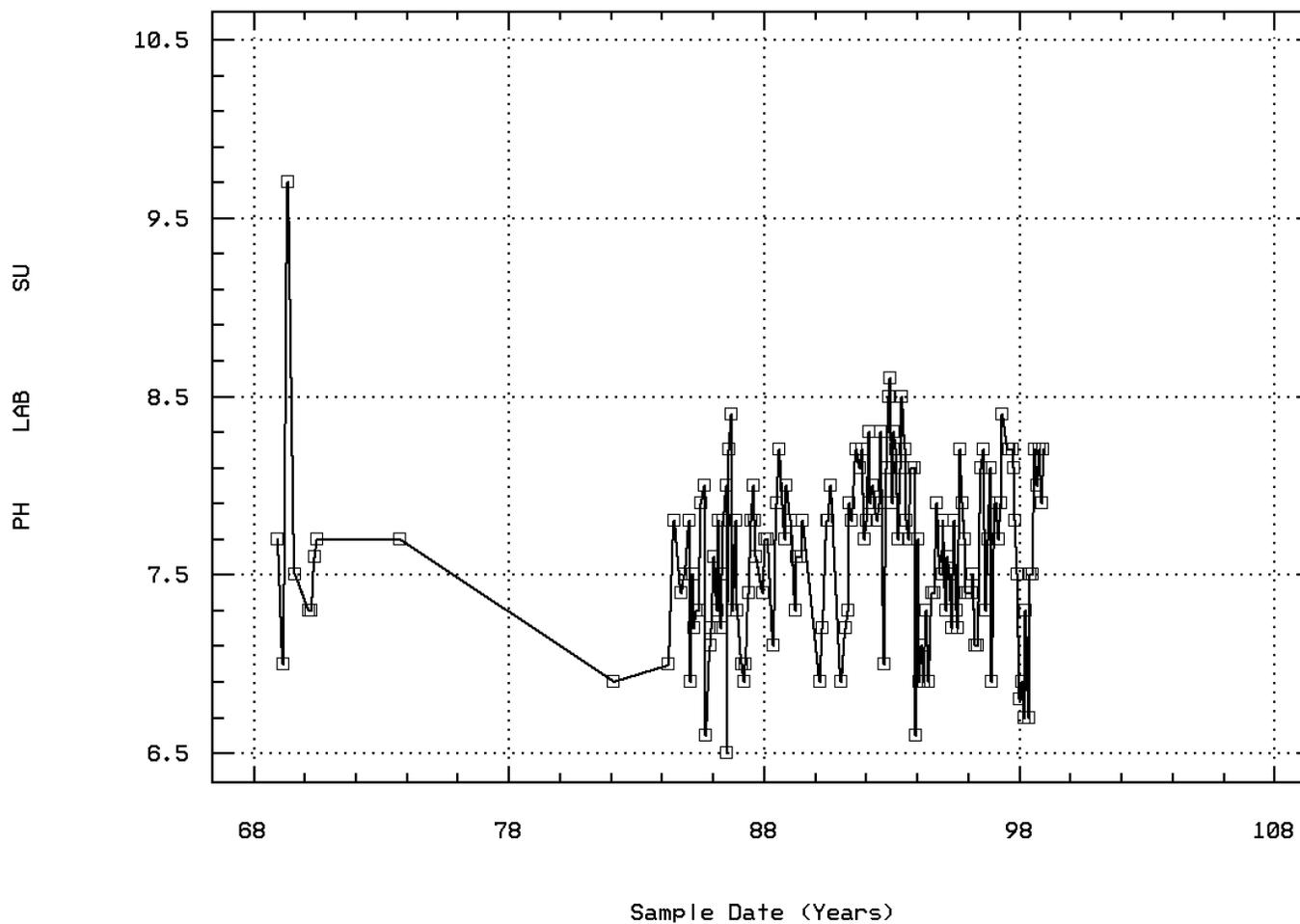
PH (STANDARD UNITS)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00403

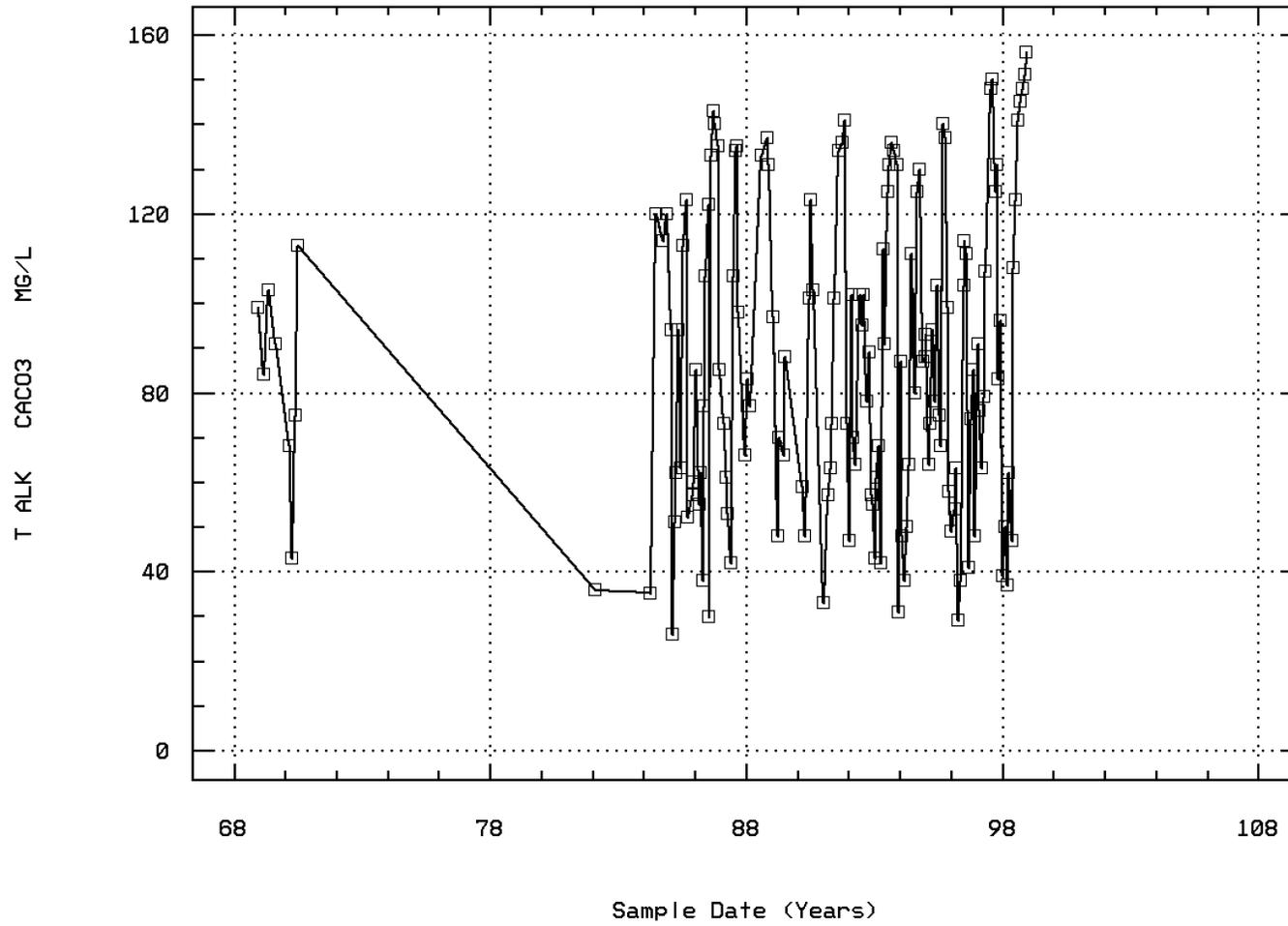
PH, LAB, STANDARD UNITS



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00410

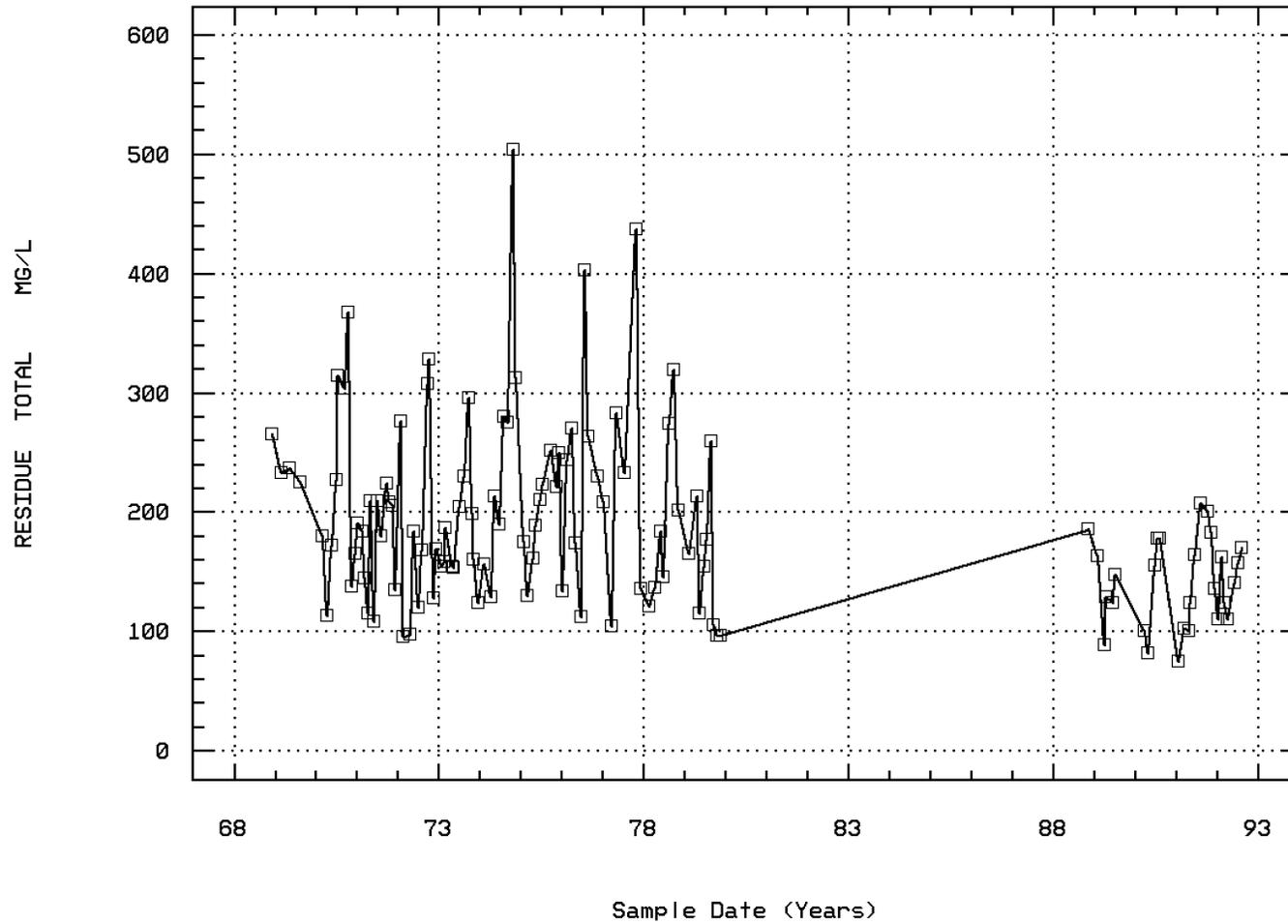
ALKALINITY, TOTAL (MG/L AS CaCO3)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00500

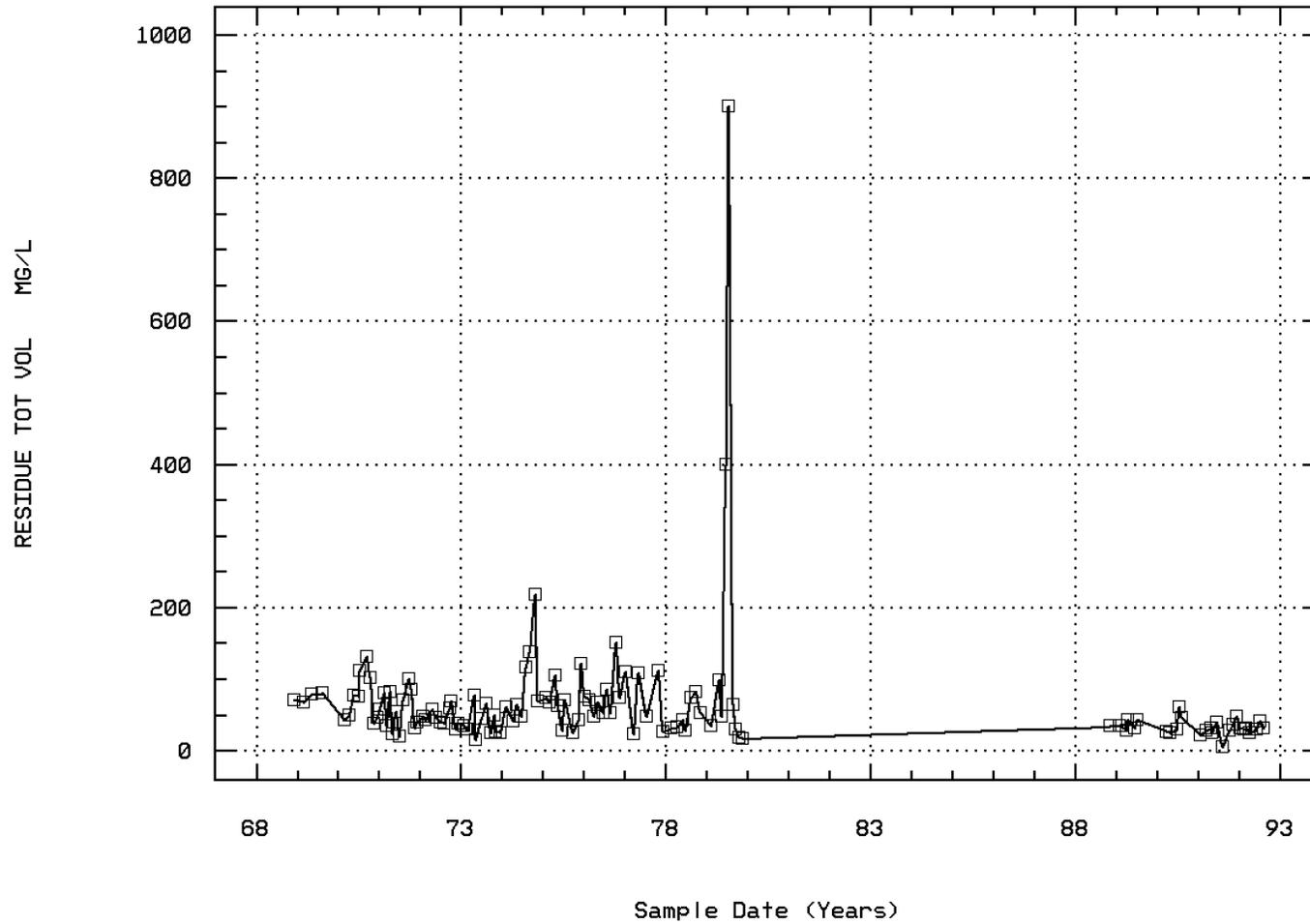
RESIDUE, TOTAL (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00505

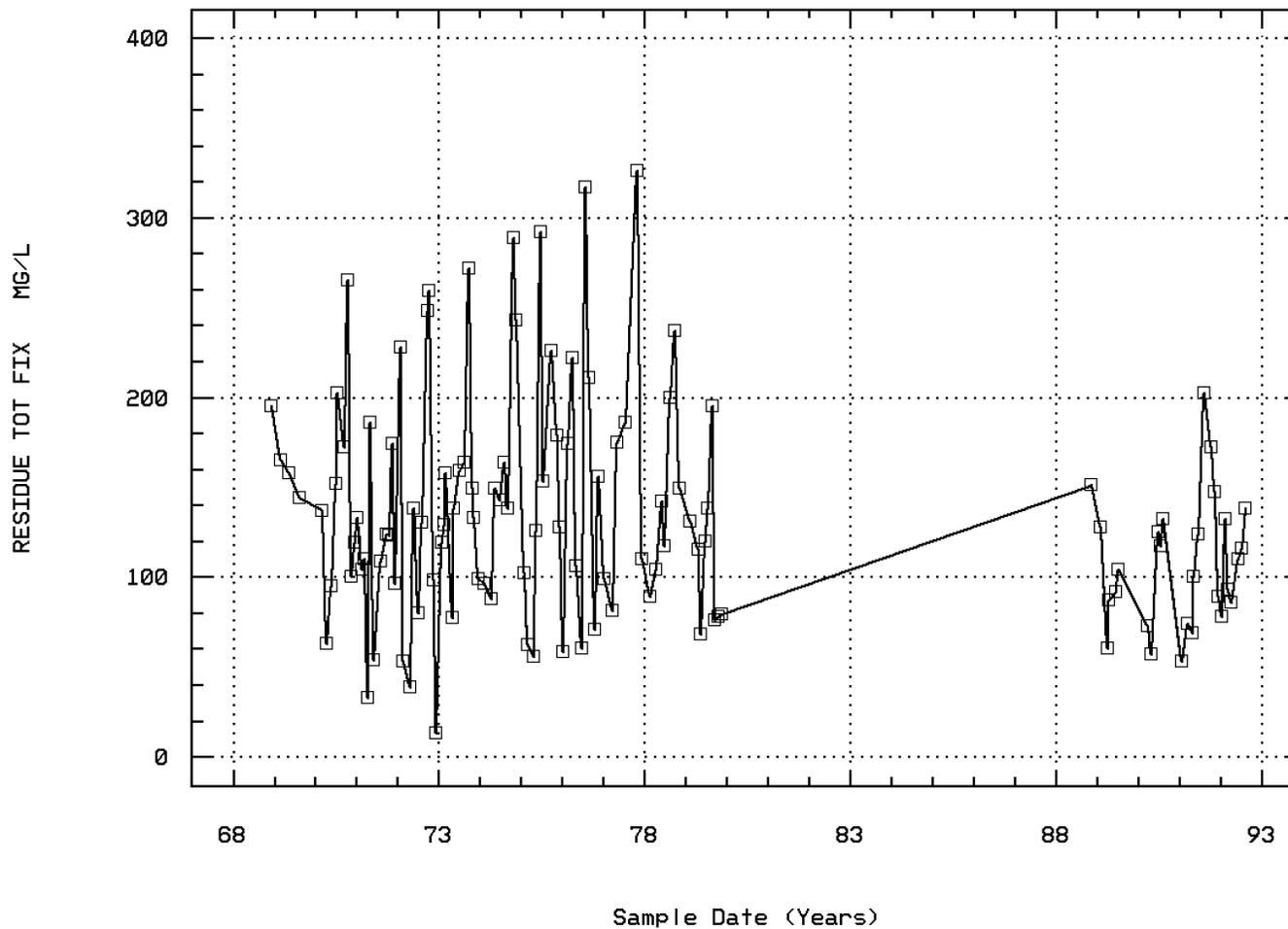
RESIDUE, TOTAL VOLATILE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00510

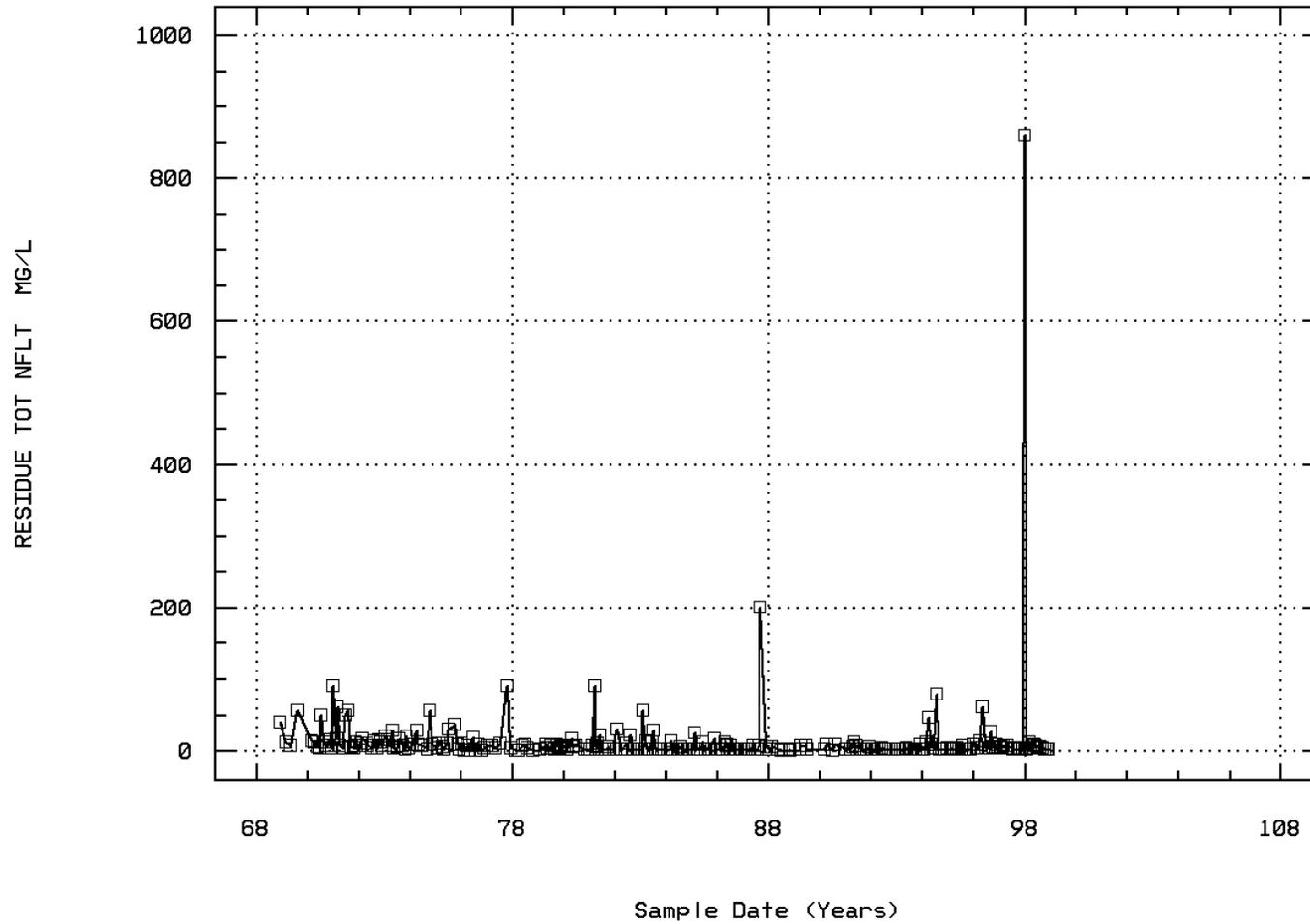
RESIDUE, TOTAL FIXED (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00530

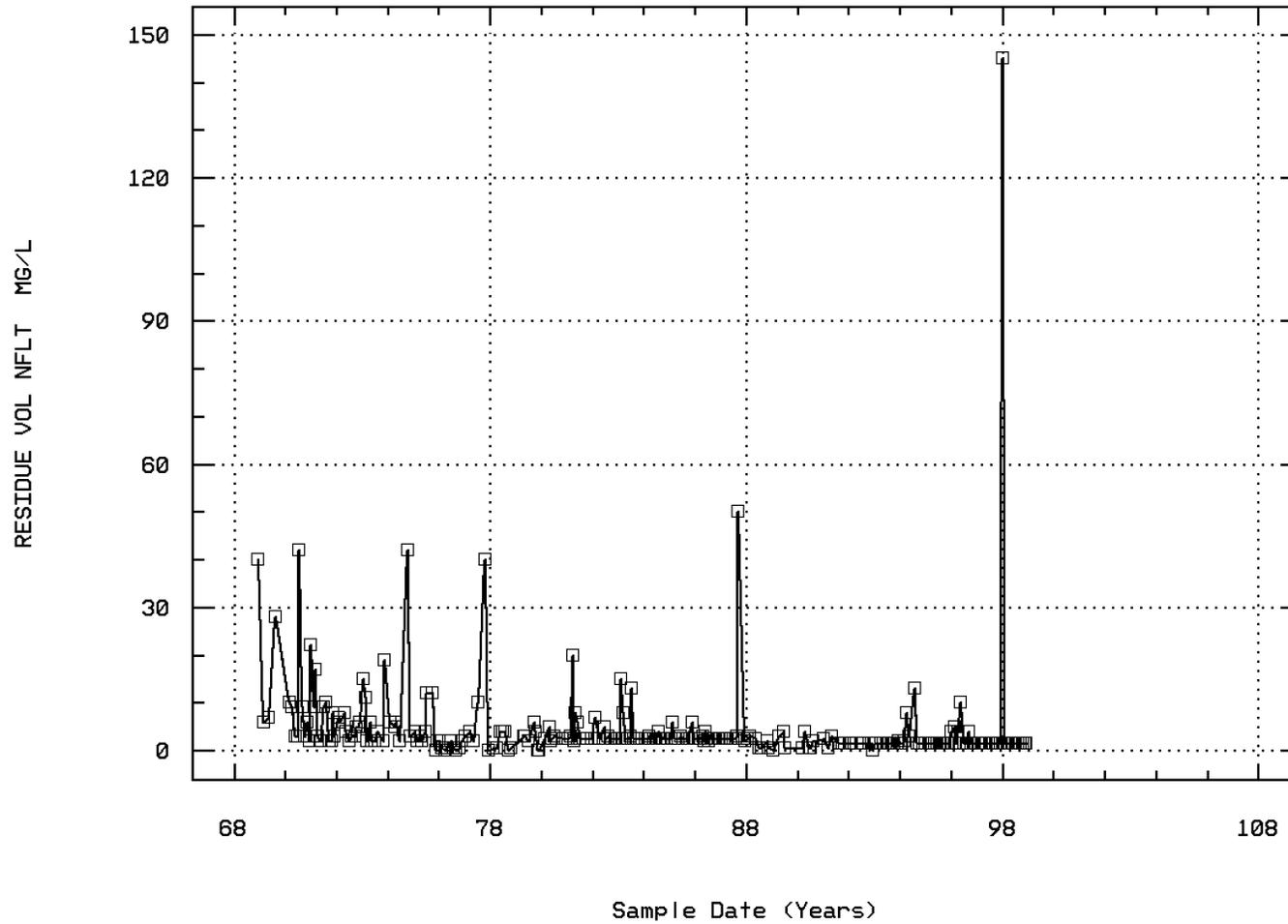
RESIDUE, TOTAL NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00535

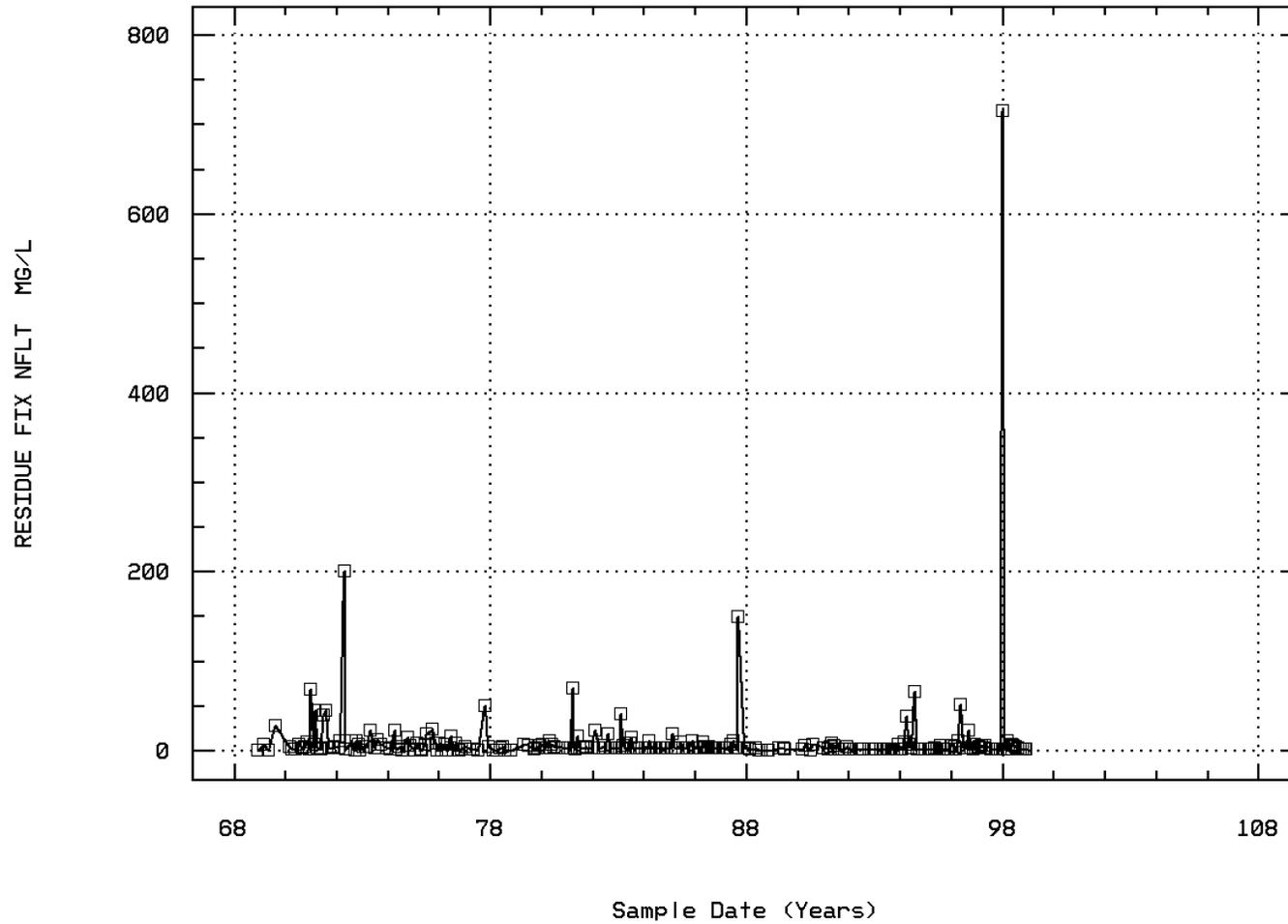
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00540

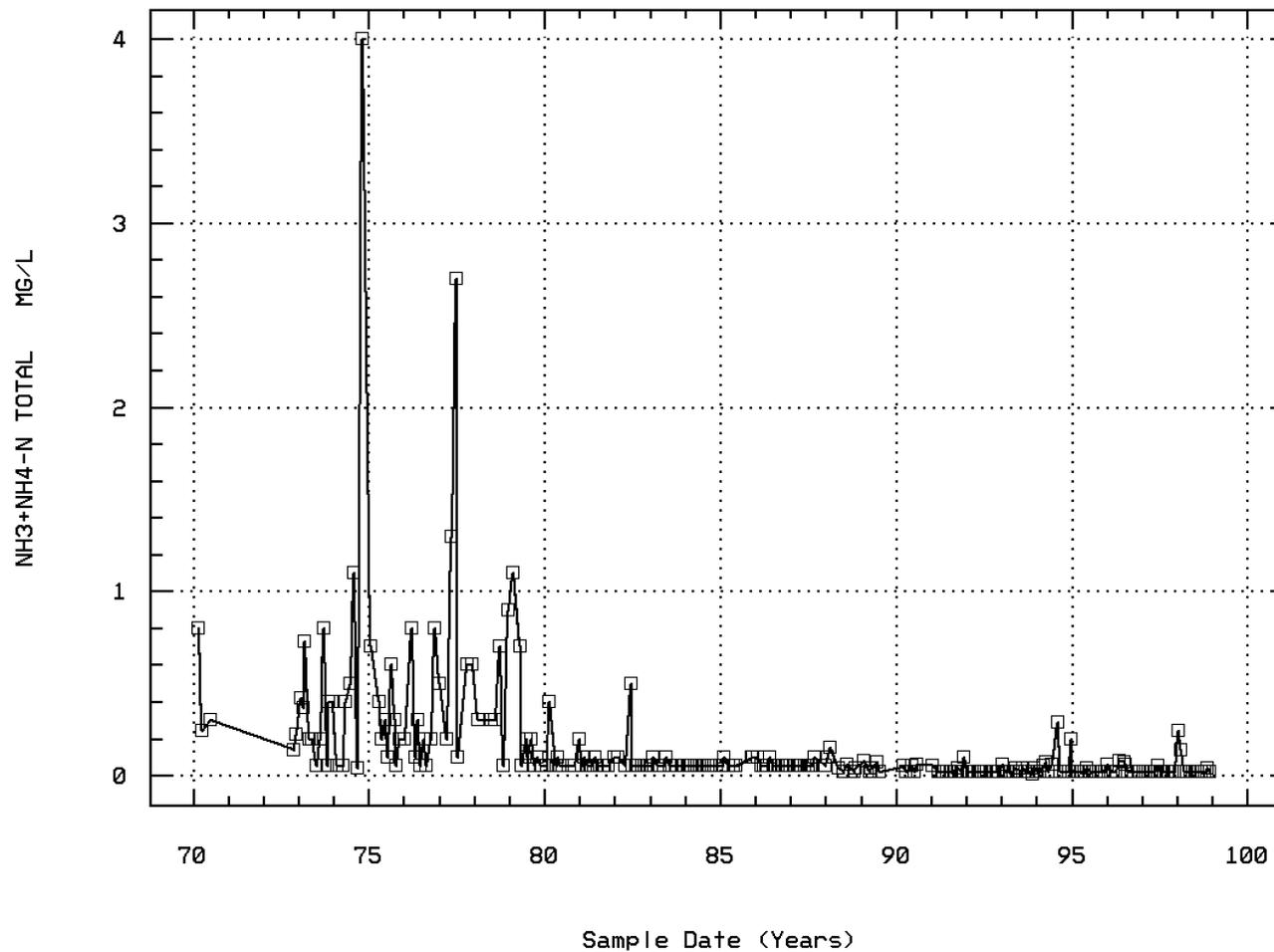
RESIDUE, FIXED NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00610

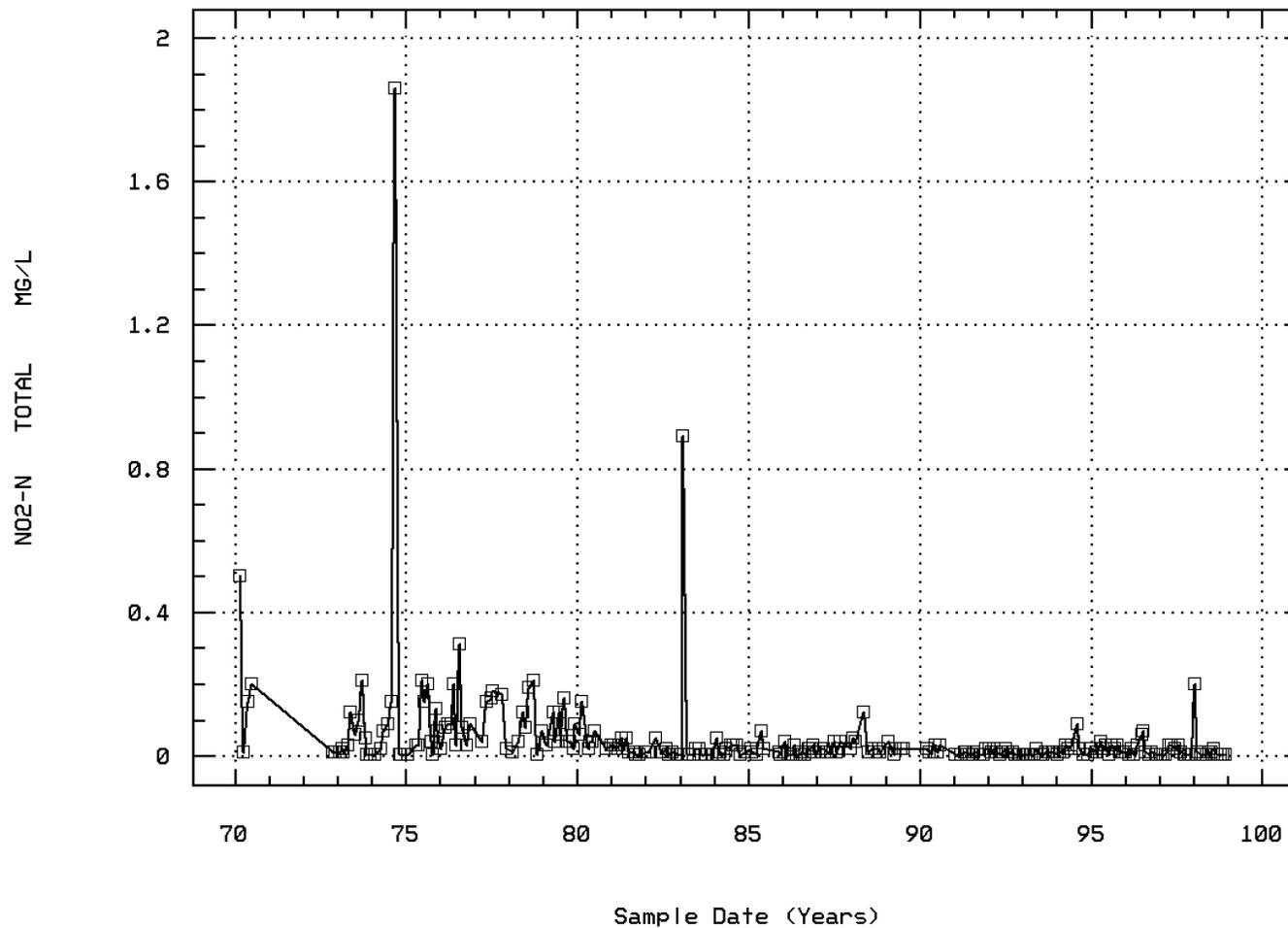
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00615

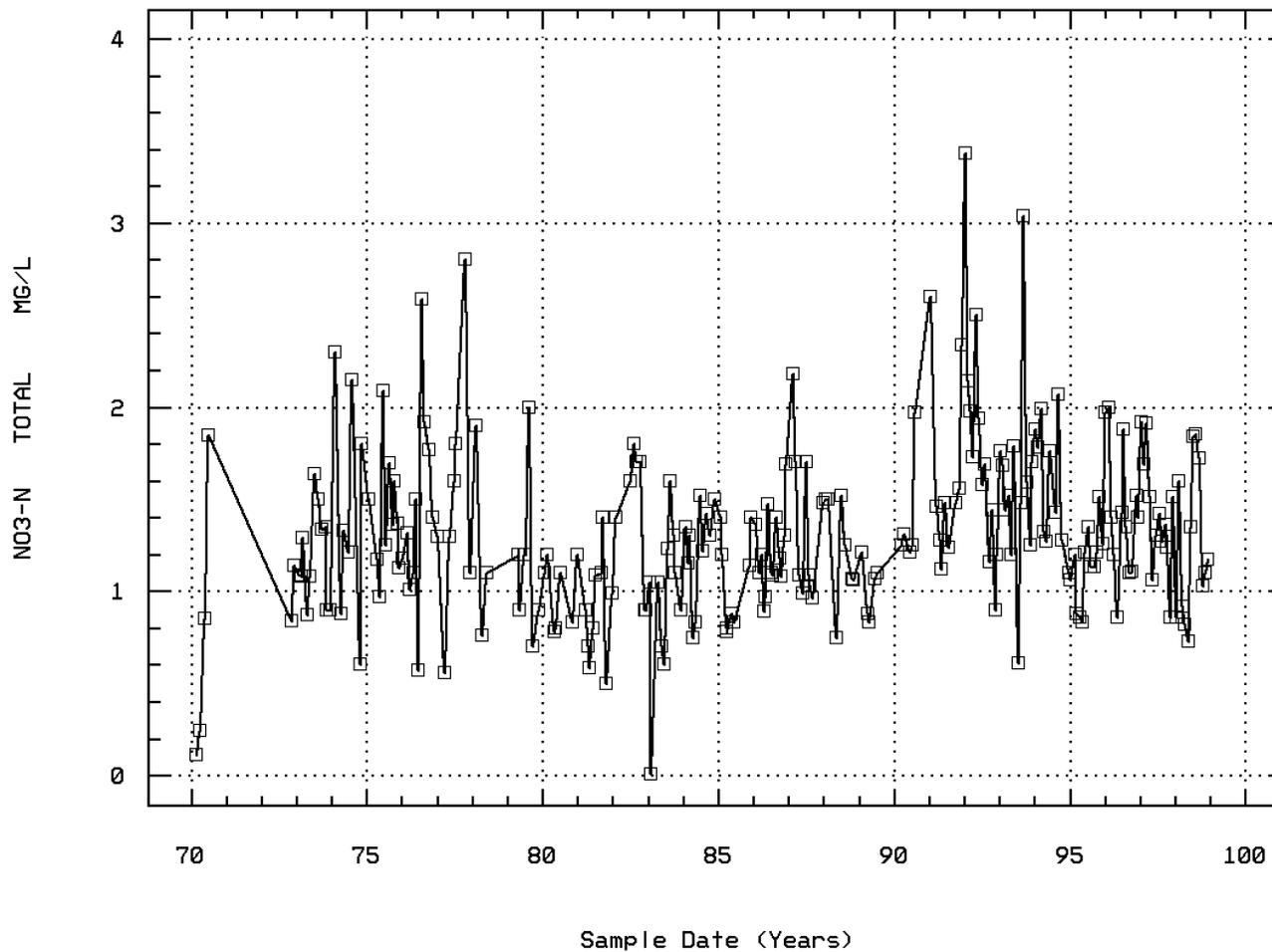
NITRITE NITROGEN, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00620

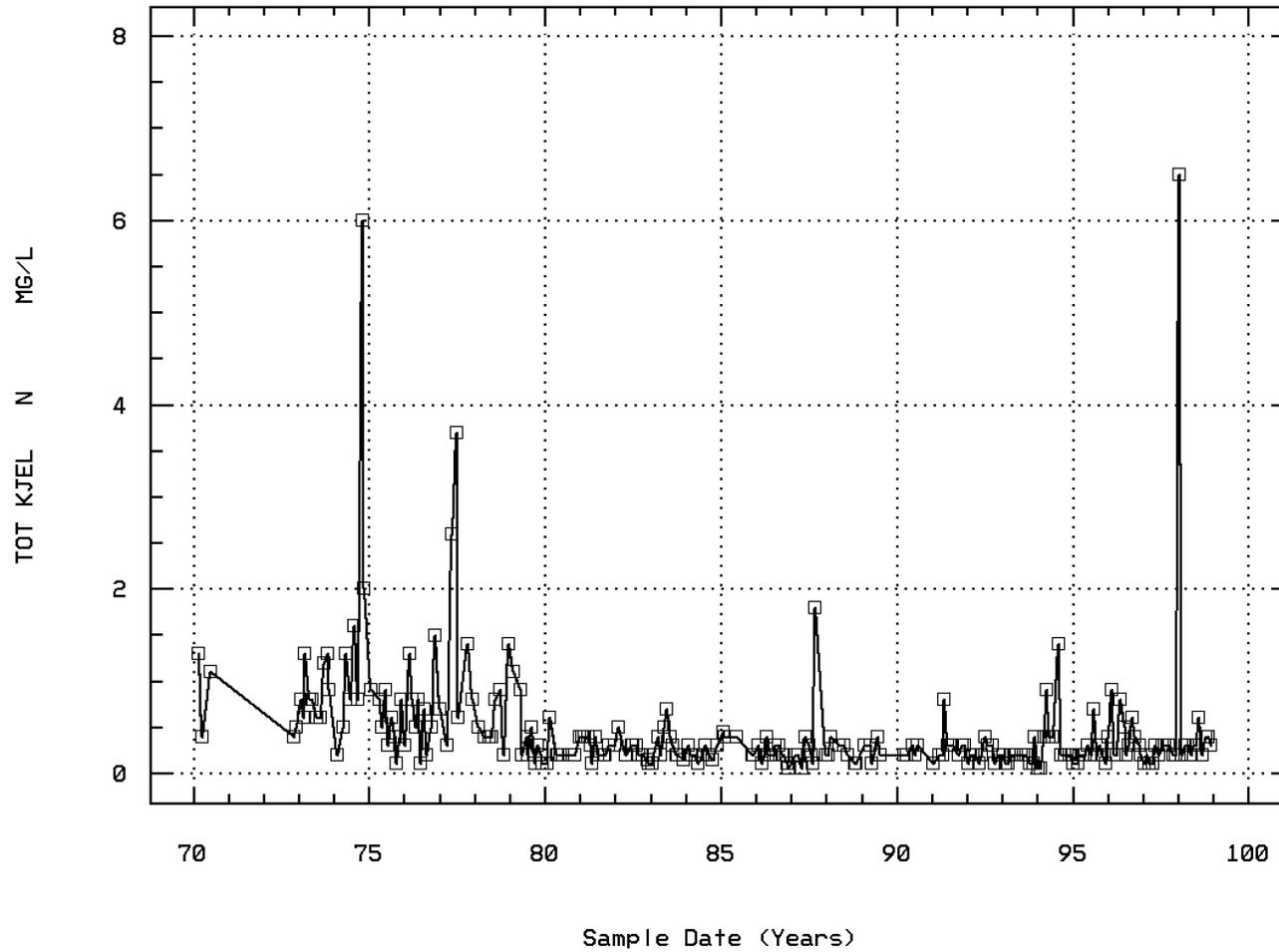
NITRATE NITROGEN, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00625

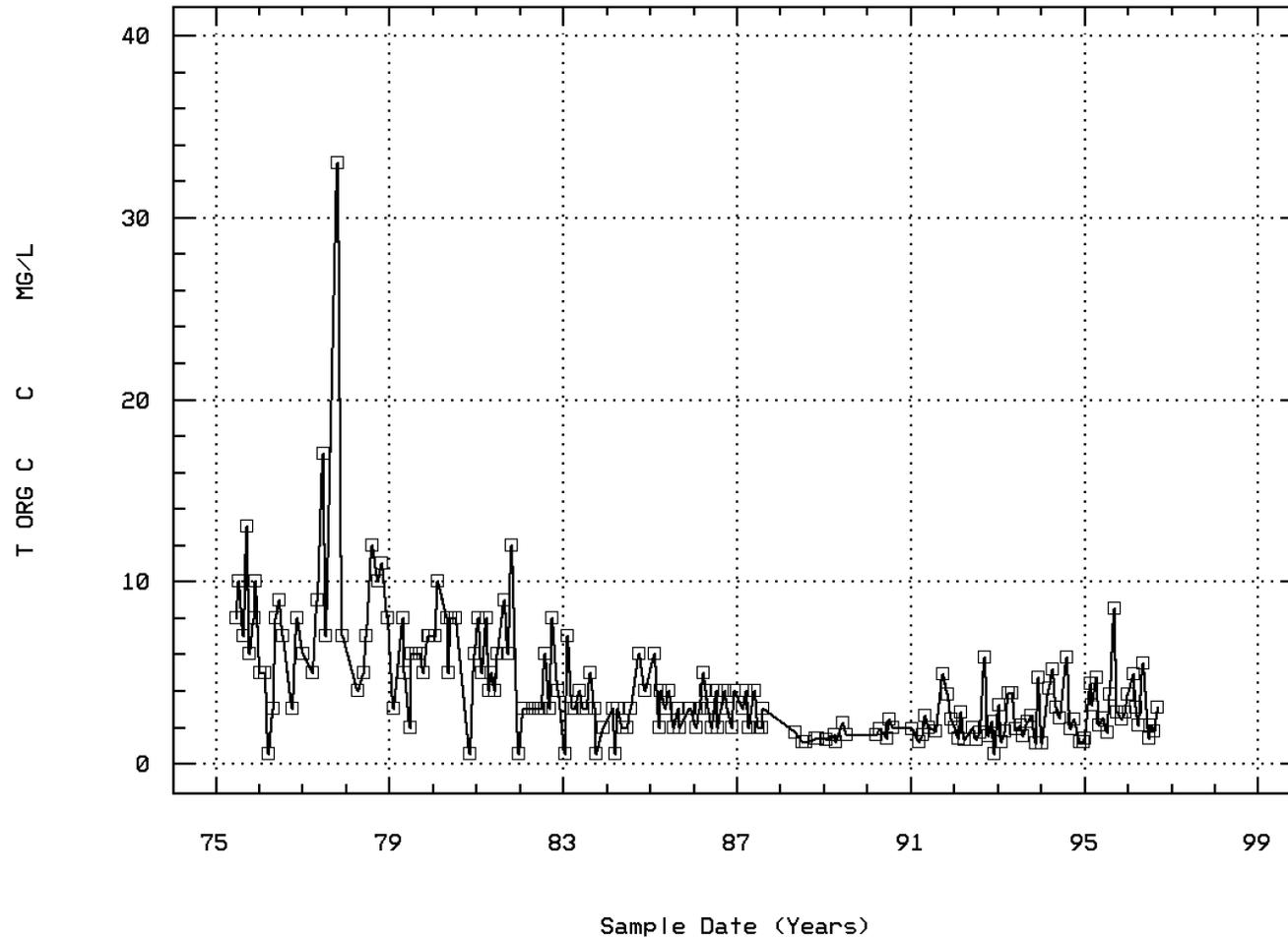
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00680

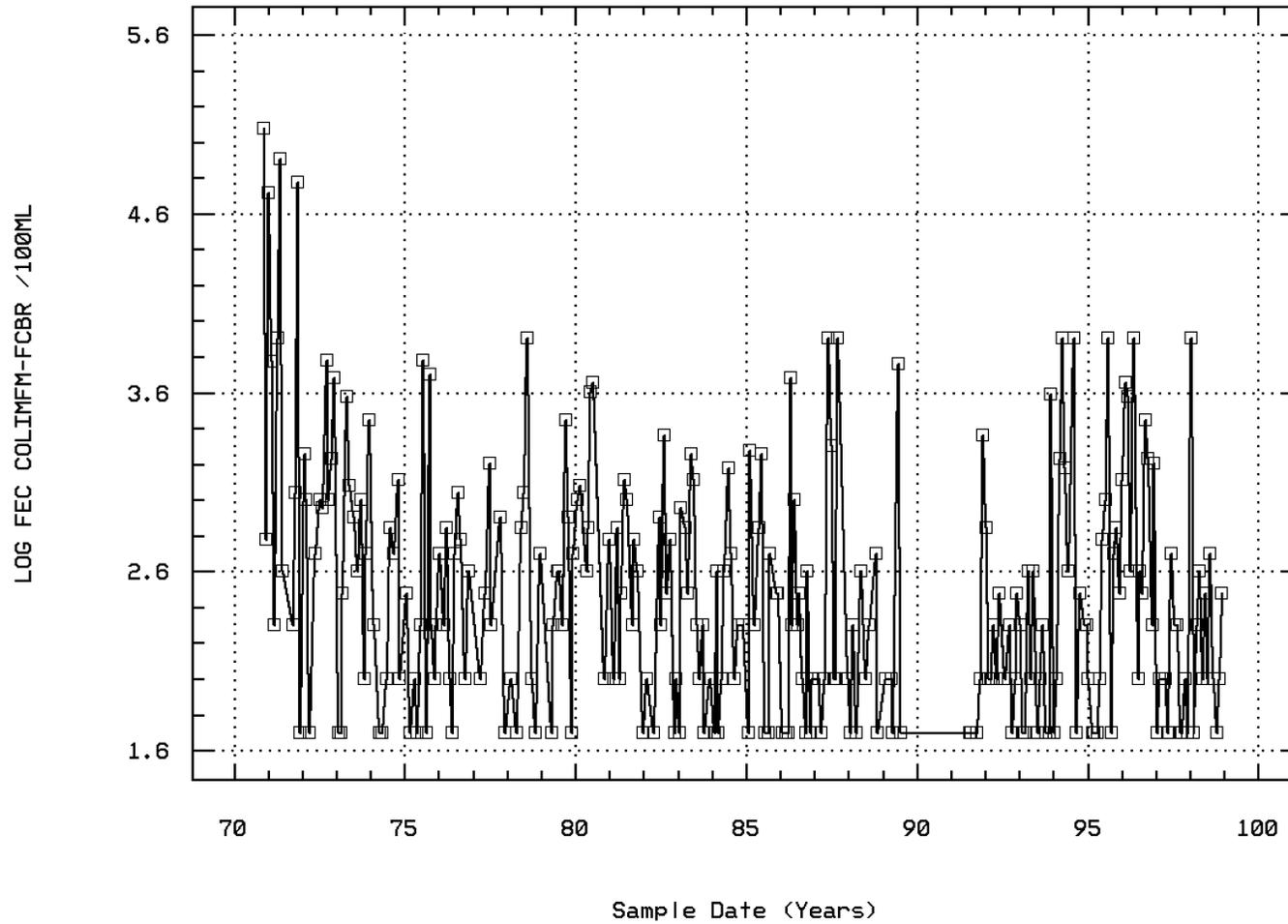
CARBON, TOTAL ORGANIC (MG/L AS C)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 31616

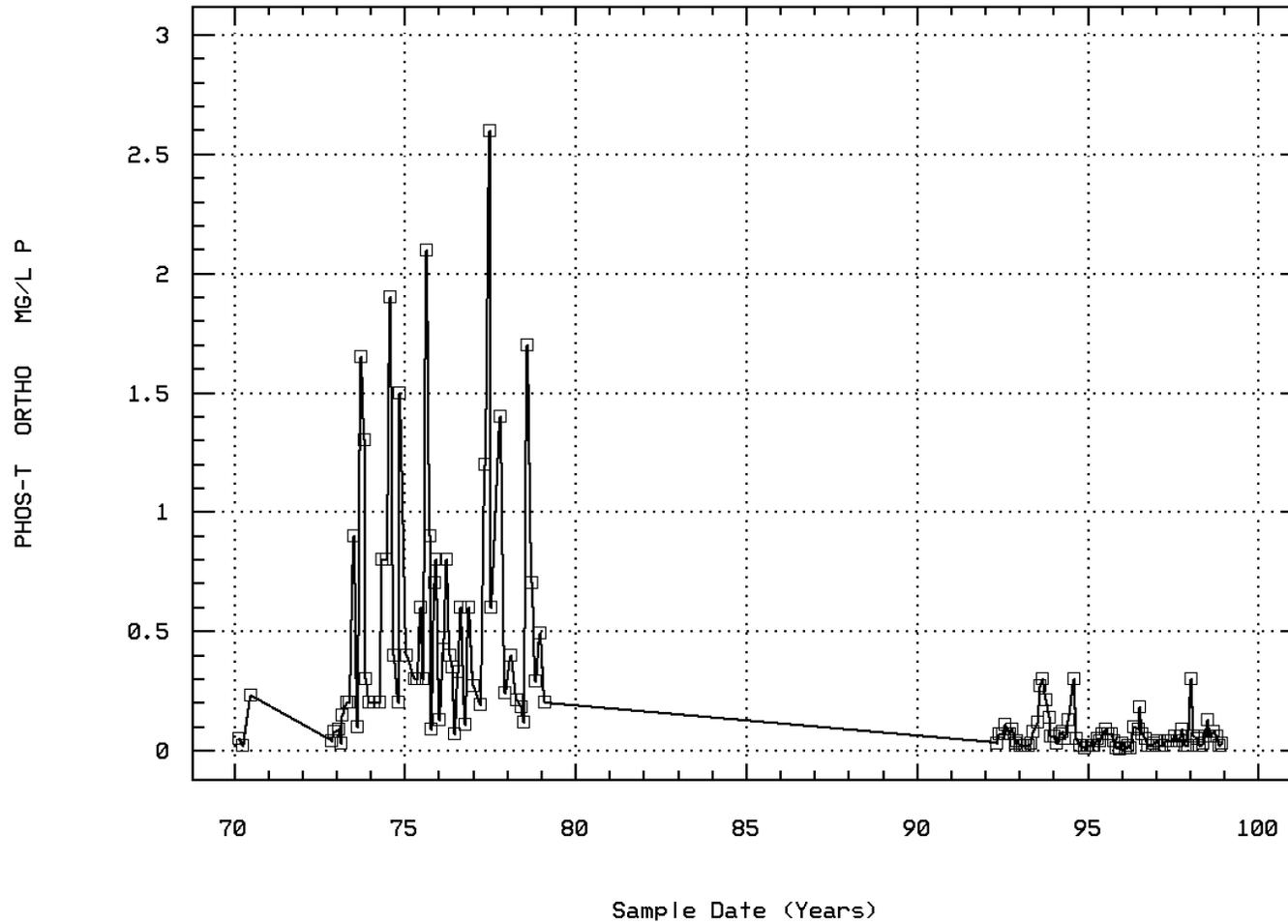
LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 70507

PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



ROUTE 648 BRIDGE BELOW LURAY

Annual Analysis for 1968 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	4	22.2	20.275	27.8	8.9	67.703	8.228	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	4	2.5	3.125	5.8	1.7	3.489	1.868	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
00400p	PH (STANDARD UNITS)	4	8.15	8.1	8.5	7.6	0.153	0.392	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	4	8.125	7.966	8.5	7.6	0.177	0.421	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.008	0.011	0.025	0.003	0.	0.01	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	1	99.	99.	99.	99.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	1	265.	265.	265.	265.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	1	195.	195.	195.	195.	0.	0.	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	1	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3	17.8	14.833	21.1	5.6	66.663	8.165	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	3	5.3	5.533	7.5	3.8	3.463	1.861	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	3	7.	5.933	10.	0.8	22.013	4.692	**	**	**
00400p	PH (STANDARD UNITS)	3	7.5	7.7	8.5	7.1	0.52	0.721	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	3	7.5	7.419	8.5	7.1	0.638	0.799	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.032	0.038	0.079	0.003	0.001	0.039	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	3	7.5	8.067	9.7	7.	2.063	1.436	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	3	7.5	7.357	9.7	7.	2.818	1.679	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.032	0.044	0.1	0.	0.003	0.051	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	3	91.	92.667	103.	84.	92.333	9.609	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	3	233.	231.667	237.	225.	37.333	6.11	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	3	79.	76.	81.	68.	49.	7.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	3	158.	155.667	165.	144.	114.333	10.693	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	3	12.	24.667	55.	7.	696.333	26.388	**	**	**	**
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	3	7.	13.667	28.	6.	154.333	12.423	**	**	**	**
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	3	6.	11.	27.	0.	201.	14.177	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	11.7	13.4	21.7	7.2	37.385	6.114	7.2	7.8	20.25	21.7
00300	OXYGEN, DISSOLVED MG/L	9	9.4	7.911	10.8	3.8	6.921	2.631	3.8	5.1	10.	10.8
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	6	3.4	3.367	4.4	0.819	0.905	**	**	**	**
00400p	PH (STANDARD UNITS)	9	7.5	7.622	8.2	7.	0.237	0.487	7.	7.2	8.2	8.2
00400p	CONVERTED PH (STANDARD UNITS)	9	7.5	7.419	8.2	7.	0.283	0.532	7.	7.2	8.2	8.2
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.032	0.038	0.1	0.006	0.001	0.033	0.006	0.006	0.063	0.1
00403	PH, LAB, STANDARD UNITS SU	4	7.45	7.475	7.7	7.3	0.043	0.206	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	4	7.425	7.44	7.7	7.3	0.044	0.21	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.038	0.036	0.05	0.02	0.	0.016	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	4	71.5	74.75	113.	43.	838.917	28.964	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	9	180.	219.889	367.	113.	7810.611	88.378	113.	151.5	308.5	367.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	9	75.	74.889	131.	38.	1137.111	33.721	38.	44.5	107.	131.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	9	137.	145.	265.	63.	3802.	61.66	63.	97.5	187.	265.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	11.	13.444	49.	4.	195.778	13.992	4.	4.5	14.5	49.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	6.	9.667	42.	2.	156.5	12.51	2.	3.	9.5	42.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	3.	3.778	9.	1.	6.944	2.635	1.	2.	5.5	9.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	3	0.3	0.447	0.8	0.24	0.095	0.307	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	4	0.175	0.215	0.5	0.01	0.043	0.206	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	4	0.545	0.762	1.849	0.11	0.629	0.793	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	4	1.05	0.949	1.299	0.4	0.15	0.387	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	2	59800.	59800.	119000.	600.	7009280000.	83721.443	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	2	3.927	3.927	5.076	2.778	2.639	1.625	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			8449.852								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	3	0.05	0.1	0.23	0.02	0.013	0.114	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	12	12.75	13.1	22.8	4.4	45.995	6.782	4.76	5.6	19.725	22.62
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	12	9.1	9.108	13.	3.8	8.268	2.875	4.46	6.825	11.85	12.94
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	3	5.8	5.7	6.3	5.	0.43	0.656	**	**	**	**
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.5	7.55	8.3	6.7	0.217	0.466	6.85	7.2	7.8	8.3
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.5	7.336	8.3	6.7	0.267	0.517	6.85	7.2	7.8	8.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	12	0.032	0.046	0.2	0.005	0.003	0.053	0.005	0.016	0.063	0.159
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	12	187.5	176.	224.	108.	1609.273	40.116	110.1	137.25	208.75	219.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	12	56.	56.333	100.	19.	737.879	27.164	20.2	31.75	81.5	95.5
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	11	110.	113.273	186.	33.	1994.618	44.661	37.2	96.	133.	183.6
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	12	9.	25.917	90.	3.	883.174	29.718	3.3	4.25	53.5	81.3
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	12	5.5	7.417	22.	2.	42.992	6.557	2.	2.	9.75	20.5
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	12	3.5	18.5	68.	1.	561.727	23.701	1.3	2.25	43.	61.1
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	3500.	20785.	80000.	50.	942677805.556	30703.059	65.	200.	54000.	78000.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	3.406	3.402	4.903	1.699	1.373	1.172	1.759	2.301	4.732	4.891
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			2520.966								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	12	14.45	12.058	22.8	0.6	49.435	7.031	1.26	6.	17.525	21.63
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	12	9.5	9.467	13.	6.2	5.879	2.425	6.38	6.8	11.6	12.94
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.5	7.483	8.5	7.	0.245	0.495	7.	7.	7.6	8.44
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.5	7.299	8.5	7.	0.282	0.531	7.	7.	7.6	8.44
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	12	0.032	0.05	0.1	0.003	0.001	0.039	0.004	0.025	0.1	0.1
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	10	168.5	187.2	328.	95.	7492.178	86.557	95.2	114.25	283.75	325.9
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	10	44.	46.8	69.	30.	141.733	11.905	30.8	38.	58.25	68.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	10	114.	128.6	259.	13.	7959.6	89.217	15.6	49.5	233.	257.9
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	10	10.	9.5	17.	3.	23.833	4.882	3.	5.25	13.5	16.8
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	10	5.	4.9	8.	2.	3.656	1.912	2.1	3.	6.25	7.9
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	10	5.	24.4	200.	0.	3825.6	61.851	0.	0.75	10.25	181.1
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	2	0.18	0.18	0.22	0.14	0.003	0.057	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	2	0.99	0.99	1.139	0.84	0.045	0.211	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	2	0.45	0.45	0.5	0.4	0.005	0.071	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	1000.	1875.	6000.	50.	3786250.	1945.829	95.	800.	2550.	5880.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	3.	3.03	3.778	1.699	0.329	0.574	1.799	2.89	3.362	3.768
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			1070.852								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	2	0.06	0.06	0.08	0.04	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	10	12.75	12.77	24.4	2.8	57.938	7.612	2.85	5.85	19.275	24.18
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	11	9.6	9.755	14.2	6.2	5.877	2.424	6.38	7.8	11.8	13.78
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.5	7.4	8.	6.8	0.103	0.32	6.8	7.25	7.5	8.
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.5	7.293	8.	6.8	0.115	0.34	6.8	7.25	7.5	8.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	9	0.032	0.051	0.158	0.01	0.002	0.043	0.01	0.032	0.057	0.158
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	11	160.	183.455	296.	124.	2287.473	47.828	129.8	154.	204.	282.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	11	29.	38.273	77.	15.	366.018	19.132	16.8	25.	49.	74.8
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	11	138.	145.182	272.	77.	2473.564	49.735	81.4	119.	159.	250.4
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	11	7.	11.364	28.	2.	74.455	8.629	2.2	4.	19.	26.4
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	11	2.	5.909	19.	1.	39.291	6.268	1.	2.	11.	18.2
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	10	4.	6.	22.	1.	41.333	6.429	1.	2.5	7.5	21.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	11	0.37	0.347	0.8	0.05	0.06	0.246	0.05	0.2	0.42	0.786
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	11	0.03	0.056	0.21	0.005	0.004	0.064	0.005	0.01	0.1	0.192
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	11	1.089	1.185	1.639	0.87	0.066	0.257	0.876	0.9	1.349	1.611
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	11	0.8	0.9	1.299	0.6	0.072	0.268	0.6	0.6	1.199	1.299
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	500.	1000.	3800.	50.	1487500.	1219.631	50.	100.	1200.	3600.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	2.699	2.653	3.58	1.699	0.414	0.643	1.699	2.	3.079	3.553
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			449.997								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	11	0.2	0.465	1.649	0.03	0.309	0.556	0.042	0.1	0.9	1.579

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	7	16.1	14.2	18.9	5.6	22.557	4.749	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	7	8.1	8.3	11.8	5.3	4.993	2.235	**	**	**	**
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	8	7.5	7.538	8.	6.8	0.194	0.441	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	8	7.5	7.341	8.	6.8	0.238	0.488	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	8	0.032	0.046	0.158	0.01	0.002	0.05	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	8	244.	257.375	504.	129.	13985.125	118.259	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	8	66.5	94.	218.	41.	3629.714	60.247	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	8	146.	163.75	289.	88.	4801.071	69.29	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	8	8.	14.625	56.	1.	348.839	18.677	**	**	**	**
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	8	4.	8.25	42.	1.	190.214	13.792	**	**	**	**
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	8	3.	6.375	23.	0.	64.268	8.017	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	8	0.45	0.892	4.	0.04	1.751	1.323	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	8	0.045	0.276	1.859	0.005	0.412	0.642	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	7	1.329	1.466	2.299	0.6	0.408	0.639	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	8	1.05	1.65	6.	0.2	3.434	1.853	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	8	150.	375.	1300.	50.	195714.286	442.396	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	8	2.151	2.295	3.114	1.699	0.289	0.537	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			197.071								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	8	0.6	0.75	1.899	0.2	0.417	0.646	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	11	15.	14.1	22.2	6.1	30.528	5.525	6.44	7.8	17.8	21.98
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	11	9.3	8.591	11.	6.	2.839	1.685	6.04	7.	10.1	10.84
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	7	3.	3.714	6.	1.	3.238	1.799	**	**	**	**
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	11	8.	8.	9.	7.	0.398	0.631	7.1	7.5	8.5	8.96
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	11	8.	7.654	9.	7.	0.529	0.728	7.1	7.5	8.5	8.96
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	11	0.01	0.022	0.1	0.001	0.001	0.029	0.001	0.003	0.032	0.086
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	9	210.	201.	251.	130.	1653.75	40.666	130.	168.	236.	251.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	9	68.	66.111	121.	25.	1040.611	32.259	25.	35.	89.	121.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	9	128.	147.111	292.	56.	5832.361	76.37	56.	82.	202.5	292.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	8.	11.889	36.	2.	154.611	12.434	2.	3.	20.	36.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	3.	4.556	12.	0.	19.278	4.391	0.	2.	8.	12.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	6.	7.333	24.	0.	73.	8.544	0.	0.	13.	24.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	9	0.3	0.317	0.7	0.05	0.047	0.218	0.05	0.15	0.5	0.7
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	0.055	0.087	0.21	0.005	0.006	0.079	0.005	0.024	0.163	0.209
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	1.364	1.413	2.089	0.97	0.105	0.325	0.986	1.159	1.624	2.05
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	10	0.55	0.57	0.9	0.1	0.076	0.275	0.12	0.375	0.825	0.9
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	7	8.	8.857	13.	6.	5.476	2.34	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	200.	1113.636	6000.	50.	4759545.455	2181.638	50.	50.	300.	5800.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			2.359	3.778	1.699	0.54	0.735	1.699	1.699	2.477	3.762
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				228.811								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	10	0.5	0.649	2.099	0.09	0.326	0.571	0.111	0.3	0.825	1.979

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	10	14.15	15.01	23.9	2.2	46.341	6.807	3.04	10.6	22.475	23.84
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	10	8.15	8.64	13.8	6.	5.38	2.32	6.01	6.925	9.975	13.47
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	10	2.	2.8	6.	1.	3.289	1.814	1.	1.	4.25	5.9
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	10	7.7	7.87	8.7	7.2	0.291	0.54	7.2	7.425	8.5	8.68
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	10	7.7	7.627	8.7	7.2	0.357	0.597	7.2	7.425	8.5	8.68
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	10	0.02	0.024	0.063	0.002	0.001	0.023	0.002	0.003	0.039	0.063
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	8	237.	228.75	403.	112.	8439.643	91.868	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	9	70.	75.111	150.	48.	951.111	30.84	48.	52.	81.	150.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	9	156.	152.778	317.	58.	7759.694	88.089	58.	65.5	216.5	317.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	4.	5.333	18.	0.5	35.625	5.969	0.5	0.5	9.	18.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	0.5	0.889	2.	0.	0.736	0.858	0.	0.25	2.	2.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	2.	4.667	16.	0.5	28.625	5.35	0.5	0.5	8.	16.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	0.2	0.37	1.	0.05	0.126	0.355	0.05	0.088	0.8	0.98
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	0.085	0.102	0.31	0.02	0.008	0.089	0.021	0.03	0.118	0.299
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	1.359	1.435	2.589	0.57	0.312	0.558	0.614	1.077	1.807	2.522
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	10	0.6	0.67	1.5	0.1	0.207	0.455	0.11	0.275	0.925	1.48
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	10	5.	4.95	9.	0.5	9.136	3.023	0.55	2.5	8.	8.9
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	450.	425.	1100.	50.	108472.222	329.351	55.	100.	625.	1060.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				2.651	2.466	3.041	1.699	0.194	1.729	2.	2.795	3.022

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			292.728								
70507 PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	10	0.375	0.386	0.8	0.07	0.057	0.239	0.074	0.125	0.6	0.78

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	8	16.25	14.2	23.	0.5	84.151	9.173	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	8	6.5	8.225	13.2	4.6	13.631	3.692	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	7	5.	6.857	25.	2.	67.81	8.235	**	**	**	**
00400p PH (STANDARD UNITS)	07/16/68-12/07/98	8	7.55	7.65	8.6	7.1	0.206	0.454	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	8	7.547	7.5	8.6	7.1	0.231	0.481	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	8	0.028	0.032	0.079	0.003	0.001	0.024	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	6	220.5	233.5	437.	104.	14157.9	118.987	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	6	77.5	70.667	111.	23.	1863.467	43.168	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	6	142.5	162.833	326.	81.	8174.167	90.411	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	6	6.5	20.167	90.	4.	1175.367	34.284	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	6	3.5	9.833	40.	0.	229.767	15.158	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	6	3.	10.333	50.	0.	379.867	19.49	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	7	0.6	0.857	2.699	0.1	0.809	0.899	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	6	0.155	0.12	0.18	0.02	0.005	0.071	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	7	1.299	1.493	2.799	0.56	0.485	0.697	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	7	0.8	1.442	3.699	0.3	1.568	1.252	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	7	7.	12.	33.	5.	101.667	10.083	**	**	**	**
31616p FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	6	250.	508.333	1600.	50.	358416.667	598.679	**	**	**	**
31616p LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	6	2.389	2.431	3.204	1.699	0.312	0.559	**	**	**	**
31616p GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			269.601								
70507 PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	7	0.6	0.928	2.599	0.19	0.774	0.88	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	8	14.75	14.063	22.	4.5	39.817	6.31	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	8	8.95	9.238	13.4	4.6	7.943	2.818	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	7	2.	2.571	4.	1.	1.286	1.134	**	**	**	**
00400p PH (STANDARD UNITS)	07/16/68-12/07/98	8	8.	7.938	8.5	7.5	0.174	0.417	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	8	8.	7.785	8.5	7.5	0.201	0.448	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	8	0.01	0.016	0.032	0.003	0.	0.013	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	7	184.	197.286	319.	121.	5512.905	74.249	**	**	**	**
00505 RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	7	42.	49.	82.	28.	459.667	21.44	**	**	**	**
00510 RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	7	142.	148.286	237.	89.	2839.905	53.291	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	7	1.	3.071	8.	0.5	10.786	3.284	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	7	0.5	1.929	4.	0.	3.786	1.946	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	7##	0.5	1.429	4.	0.5	2.119	1.456	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	6	0.3	0.425	0.9	0.05	0.098	0.313	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	8	0.075	0.091	0.21	0.005	0.006	0.077	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	3	1.099	1.253	1.899	0.76	0.342	0.585	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	8	0.45	0.625	1.4	0.2	0.151	0.388	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	7	8.	8.143	12.	4.	9.143	3.024	**	**	**	**
31616p FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	8	300.	1325.	8000.	50.	7418571.429	2723.705	**	**	**	**
31616p LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	8	2.349	2.486	3.903	1.699	0.6	0.775	**	**	**	**
31616p GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			306.063								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	8	0.345	0.511	1.7	0.12	0.266	0.516	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	10	14.45	13.93	21.3	5.	30.329	5.507	5.21	9.275	18.5	21.17
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	9	196.	227.778	411.	128.	7658.944	87.515	128.	160.	281.	411.
00300 OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	10	10.	10.06	11.3	8.1	0.952	0.975	8.21	9.575	11.05	11.29
00310 BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	9	1.	1.278	2.	0.5	0.319	0.565	0.5	1.	2.	2.
00340 COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	9	9.	7.722	14.	0.5	16.319	4.04	0.5	4.5	10.	14.
00400p PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.7	7.8	8.7	7.3	0.182	0.427	7.3	7.5	8.	8.7
00400p CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.7	7.66	8.7	7.3	0.205	0.452	7.3	7.5	8.	8.7
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	9	0.02	0.022	0.05	0.002	0.	0.015	0.002	0.01	0.032	0.05
00500 RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	9	154.	153.333	259.	96.	3225.25	56.791	96.	100.5	195.	259.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	9	47.	178.556	900.	17.	87697.528	296.138	17.	23.5	249.	900.
00510 RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	9	115.	111.111	195.	68.	1683.611	41.032	68.	77.	134.5	195.
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	10	4.	4.8	9.	2.	6.622	2.573	2.	2.75	7.25	8.9
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	10	1.5	2.1	6.	0.	3.656	1.912	0.	0.75	3.25	5.8
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	10	2.5	2.8	6.	1.	3.733	1.932	1.	5.	5.9	5.9
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	0.1	0.26	1.1	0.05	0.126	0.355	0.05	0.05	0.325	1.06
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	0.05	0.072	0.16	0.02	0.002	0.048	0.021	0.038	0.12	0.156
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	9	1.	1.122	2.	0.7	0.137	0.37	0.7	0.9	1.2	2.
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	10	0.25	0.4	1.1	0.1	0.118	0.343	0.1	0.175	0.6	1.08
00665 PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	9	0.2	0.944	7.	0.05	5.167	2.273	0.05	0.125	0.3	7.
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	9	0.21	0.244	0.7	0.08	0.04	0.201	0.08	0.095	0.33	0.7
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	10	6.	5.5	8.	2.	3.389	1.841	2.1	4.5	7.	7.9
31616p FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/70-12/07/98	9	400.	600.	2800.	50.	736875.	858.414	50.	125.	650.	2800.
31616p LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/17/70-12/07/98	9	2.602	2.473	3.447	1.699	0.309	0.556	1.699	2.	2.801	3.447
31616p GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			296.888								
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	8	11.55	12.225	21.	5.	41.642	6.453	**	**	**	**
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	8	264.	255.5	352.	136.	7613.429	87.255	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	8	10.55	10.025	12.8	6.6	4.011	2.003	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	8	2.	1.875	3.	1.	0.696	0.835	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	8	8.	8.688	16.	0.5	32.496	5.7	**	**	**	**
00400p PH (STANDARD UNITS)	07/16/68-12/07/98	8	7.75	8.	9.	7.3	0.363	0.602	**	**	**	**
00400p CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	8	7.747	7.74	9.	7.3	0.44	0.663	**	**	**	**
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	8	0.018	0.018	0.05	0.001	0.	0.017	**	**	**	**
00530p RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	8	5.5	6.063	16.	2.5	19.96	4.468	**	**	**	**
00535p RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	8 ##	2.5	2.625	5.	1.	1.268	1.126	**	**	**	**
00540p RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	8	3.5	4.688	11.	2.5	8.71	2.951	**	**	**	**
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	8 ##	0.05	0.119	0.4	0.05	0.016	0.125	**	**	**	**
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	8	0.04	0.054	0.15	0.02	0.002	0.043	**	**	**	**
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	8	1.05	1.001	1.2	0.78	0.031	0.176	**	**	**	**
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	8	0.2	0.263	0.6	0.1	0.026	0.16	**	**	**	**
00665 PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	8	0.2	0.256	0.6	0.05	0.037	0.192	**	**	**	**
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	8	0.16	0.194	0.5	0.05	0.019	0.14	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	8	7.5	6.563	10.	0.5	8.246	2.872	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	8	850.	1562.5	4500.	100.	2882678.571	1697.845	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	8	2.923	2.945	3.653	2.	0.286	0.535	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			880.989								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	11	16.5	15.464	23.5	6.	35.107	5.925	6.1	10.8	19.8	23.1
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	11	284.	275.909	358.	203.	3529.491	59.41	204.2	212.	322.	356.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	11	10.4	10.473	13.7	7.8	3.22	1.794	7.96	9.	11.6	13.44
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	11	2.	2.182	6.	1.	2.364	1.537	1.	1.	2.	5.6
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	11	8.	7.591	14.	0.5	15.341	3.917	1.2	4.	11.	13.6
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	11	8.3	8.109	9.	7.2	0.273	0.522	7.24	7.7	8.5	8.9
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	11	8.3	7.823	9.	7.2	0.363	0.602	7.24	7.7	8.5	8.9
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	11	0.005	0.015	0.063	0.001	0.	0.019	0.001	0.003	0.02	0.058
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	11	5.	13.682	90.	2.5	674.214	25.966	2.5	2.5	10.	76.4
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	11	2.5	4.773	20.	1.	29.468	5.428	1.2	2.5	6.	17.6
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	11	2.5	10.045	70.	2.	411.523	20.286	2.1	2.5	4.	59.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	11 ##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	11	0.02	0.022	0.05	0.005	0.	0.016	0.005	0.01	0.03	0.05
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	11	0.99	0.915	1.4	0.5	0.066	0.258	0.516	0.7	1.09	1.34
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	11	0.3	0.291	0.4	0.1	0.011	0.104	0.12	0.2	0.4	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	11	0.1	0.155	0.3	0.1	0.005	0.069	0.1	0.1	0.2	0.28
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	11	0.15	0.154	0.3	0.08	0.005	0.071	0.08	0.09	0.22	0.284
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	11	6.	6.136	12.	0.5	9.305	3.05	1.2	4.	8.	11.4
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	350.	475.	1300.	50.	177361.111	421.143	55.	100.	775.	1270.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	2.54	2.482	3.114	1.699	0.224	0.473	1.729	2.	2.884	3.103
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			303.136								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	10	15.75	14.95	22.	4.	30.581	5.53	4.7	11.375	19.625	21.8
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	9	256.	249.444	335.	139.	4498.778	67.073	139.	188.5	308.5	335.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	10	11.	11.27	15.	9.1	3.827	1.956	9.13	9.475	13.	14.8
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	9	1.	1.111	3.	0.5	0.549	0.741	0.5	0.75	1.	3.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	9	6.	7.444	14.	2.	23.028	4.799	2.	3.	13.	14.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.86	7.772	8.42	6.7	0.347	0.589	6.7	7.33	8.3	8.42
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.86	7.39	8.42	6.7	0.512	0.715	6.7	7.33	8.3	8.42
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	9	0.014	0.041	0.2	0.004	0.004	0.064	0.004	0.005	0.053	0.2
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	1	6.9	6.9	6.9	6.9	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	1	0.126	0.126	0.126	0.126	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	9 ##	2.5	8.444	29.	2.5	102.59	10.129	2.5	2.5	16.	29.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	9 ##	2.5	3.333	7.	2.5	2.563	1.601	2.5	2.5	4.	7.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	9 ##	2.5	6.778	22.	2.5	61.757	7.859	2.5	2.5	12.	22.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	9 ##	0.05	0.106	0.5	0.05	0.022	0.149	0.05	0.05	0.075	0.5
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	9	0.01	0.014	0.05	0.005	0.	0.014	0.005	0.005	0.015	0.05
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	9	1.4	1.333	1.8	0.9	0.145	0.381	0.9	0.95	1.7	1.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	9	0.2	0.25	0.5	0.1	0.014	0.117	0.1	0.175	0.3	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	9	0.2	0.248	0.5	0.1	0.018	0.132	0.1	0.15	0.35	0.5
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	9	0.23	0.208	0.47	0.07	0.015	0.123	0.07	0.1	0.26	0.47
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	9	3.	3.778	8.	1.	4.194	2.048	1.	3.	5.	8.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	9	200.	500.	2300.	50.	524375.	724.137	50.	75.	700.	2300.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	9	2.301	2.358	3.362	1.699	0.328	0.573	1.699	1.849	2.841	3.362
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			227.863								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	12	16.	13.667	21.	5.5	26.804	5.177	5.8	9.35	16.	21.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	11	140.	184.909	299.	92.	6710.691	81.919	95.	110.	274.	294.2
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	12	10.5	10.733	12.9	8.8	1.606	1.267	8.95	9.6	11.775	12.69
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	11	1.	1.227	3.	0.5	0.468	0.684	0.6	1.	1.	2.8
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	11	4.	7.364	24.	1.	60.455	7.775	1.	3.	8.	23.4
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	11	7.7	7.599	8.5	6.8	0.201	0.448	6.84	7.4	7.84	8.37
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	11	7.7	7.391	8.5	6.8	0.248	0.498	6.84	7.4	7.84	8.37
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	11	0.02	0.041	0.158	0.003	0.002	0.047	0.005	0.014	0.04	0.147
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	2.5	11.409	56.	2.5	282.191	16.799	2.5	2.5	13.	50.4
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	2.5	5.136	15.	2.5	22.055	4.696	2.5	2.5	8.	14.6
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	2.5	7.864	41.	2.5	135.855	11.656	2.5	2.5	8.	35.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	11 ##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	11 ##	0.005	0.088	0.89	0.005	0.071	0.266	0.005	0.005	0.02	0.716
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	11	1.05	0.958	1.6	0.01	0.174	0.417	0.128	0.7	1.23	1.54
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	11	0.2	0.305	0.7	0.1	0.032	0.18	0.11	0.2	0.4	0.66
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	11	0.1	0.151	0.3	0.05	0.013	0.112	0.05	0.05	0.3	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	11	0.06	0.116	0.28	0.02	0.01	0.099	0.022	0.03	0.21	0.274
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	11	3.	3.091	7.	0.5	3.441	1.855	0.5	2.	4.	6.6
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	200.	518.182	1800.	50.	347136.364	589.183	50.	100.	900.	1700.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	2.301	2.422	3.255	1.699	0.307	0.554	1.699	2.	2.954	3.227
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			264.444								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	9	12.5	12.3	22.5	4.	49.048	7.003	4.	5.25	19.1	22.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	9	169.	200.778	291.	98.	6247.194	79.039	98.	131.	281.	291.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	9	10.4	10.789	13.3	8.7	2.576	1.605	8.7	9.4	12.3	13.3
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	10	1.	1.2	2.	1.	0.178	0.422	1.	1.	1.25	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	10	1.5	1.9	5.	0.5	2.656	1.63	0.5	0.5	3.25	4.9
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.89	7.774	8.1	7.18	0.085	0.291	7.18	7.6	8.	8.1
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.89	7.673	8.1	7.18	0.096	0.31	7.18	7.6	8.	8.1
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	9	0.013	0.021	0.066	0.008	0.	0.018	0.008	0.01	0.026	0.066
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	4	7.45	7.425	7.8	7.	0.109	0.33	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	4	7.447	7.33	7.8	7.	0.121	0.348	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	4	0.036	0.047	0.1	0.016	0.001	0.037	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	4	117.	97.25	120.	35.	1730.25	41.596	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	10 ##	2.5	3.9	14.	2.5	13.211	3.635	2.5	2.5	3.125	13.1
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	10 ##	2.5	2.7	4.	2.5	0.233	0.483	2.5	2.5	2.625	3.9
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	10 ##	2.5	3.2	11.	1.	7.733	2.781	1.15	2.5	2.5	10.15

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	10 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	0.015	0.02	0.05	0.005	0.	0.015	0.005	0.005	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	10	1.3	1.234	1.52	0.75	0.068	0.261	0.758	1.07	1.44
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	10	0.2	0.215	0.3	0.1	0.004	0.067	0.105	0.188	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	10 ##	0.05	0.09	0.2	0.05	0.004	0.061	0.05	0.05	0.125
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	10	0.07	0.073	0.14	0.02	0.002	0.044	0.021	0.03	0.108
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	10	2.5	2.55	6.	0.5	2.692	1.641	0.55	1.	3.25
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	200.	350.	1500.	50.	18888.889	434.613	50.	87.5	425.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	10	2.301	2.308	3.176	1.699	0.223	0.473	1.699	1.925	2.626
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			203.197							3.128

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	11	10.5	12.427	22.	2.	57.516	7.584	2.16	6.	19.2
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	11	170.	218.818	423.	101.	9591.764	97.938	109.2	143.	284.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	11	10.6	10.382	14.1	7.9	4.458	2.111	7.96	8.3	13.72
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	11	1.	1.227	2.	0.5	0.268	0.518	0.6	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	11	4.	4.636	10.	1.	8.255	2.873	1.	2.	7.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	11	7.7	7.382	8.2	5.8	0.48	0.693	5.94	7.	7.8
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	11	7.7	6.706	8.2	5.8	0.982	0.991	5.94	7.	7.8
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	11	0.02	0.197	1.585	0.006	0.22	0.469	0.008	0.016	0.1
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	11	7.3	7.345	8.	6.6	0.183	0.427	6.66	7.1	7.8
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	11	7.3	7.165	8.	6.6	0.219	0.468	6.66	7.1	7.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	11	0.05	0.068	0.251	0.01	0.005	0.069	0.011	0.016	0.079
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	11	62.	72.273	123.	26.	875.618	29.591	31.	52.	94.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	2.5	6.727	25.	2.5	61.018	7.811	2.5	2.5	12.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	2.5	3.182	6.	2.5	1.964	1.401	2.5	2.5	3.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	2.5	5.364	19.	2.5	29.655	5.446	2.5	2.5	9.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	8 ##	0.05	0.069	0.1	0.05	0.001	0.026	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	8	0.015	0.02	0.07	0.005	0.	0.021	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	8	1.01	1.054	1.4	0.78	0.07	0.264	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	5	0.4	0.33	0.45	0.2	0.015	0.12	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	5	0.12	0.134	0.2	0.05	0.004	0.065	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	8	0.085	0.101	0.2	0.03	0.004	0.065	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	11	3.	3.	6.	1.	1.8	1.342	1.2	2.	4.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	10	70.	88.2	160.	34.	1948.844	44.146	35.2	56.5	136.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	300.	550.	1900.	50.	453000.	673.053	50.	50.	700.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	2.477	2.43	3.279	1.699	0.329	0.573	1.699	1.699	2.845
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			269.227							3.274

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	13	14.4	13.085	23.2	1.5	47.503	6.892	2.3	8.	19.75
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	13	294.	259.692	363.	114.	6072.731	77.928	131.6	184.	320.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	13	9.7	9.977	12.	7.4	2.54	1.594	7.72	8.5	11.55
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	13	1.	1.154	2.	0.5	0.266	0.516	0.5	1.	1.5
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	13	4.	4.	9.	0.5	6.458	2.541	0.5	2.	5.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	13	7.8	7.815	8.8	7.1	0.201	0.449	7.1	7.6	8.05
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	13	7.8	7.618	8.8	7.1	0.244	0.494	7.1	7.6	8.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	13	0.016	0.024	0.079	0.002	0.001	0.026	0.003	0.009	0.025	0.079
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	13	7.6	7.592	8.4	6.5	0.244	0.494	6.78	7.3	7.9	8.32
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	13	7.6	7.298	8.4	6.5	0.338	0.581	6.78	7.3	7.9	8.32
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	13	0.025	0.05	0.316	0.004	0.007	0.082	0.005	0.013	0.05	0.215
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	13	85.	93.154	143.	30.	1572.141	39.65	33.2	58.5	134.	141.8
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	13###	2.5	4.192	12.	2.5	8.981	2.997	2.5	2.5	6.	10.4
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	13###	2.5	2.577	4.	2.	0.244	0.494	2.	2.5	2.5	3.6
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	13###	2.5	3.346	9.	2.5	3.308	1.819	2.5	2.5	4.	7.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	13###	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	13	0.01	0.015	0.04	0.005	0.	0.012	0.005	0.005	0.025	0.036
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	13	1.18	1.218	1.69	0.89	0.048	0.22	0.922	1.085	1.38	1.602
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	13	0.2	0.212	0.4	0.05	0.009	0.096	0.07	0.15	0.3	0.36
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	13	0.2	0.15	0.2	0.05	0.003	0.058	0.07	0.1	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	13	0.11	0.122	0.21	0.05	0.003	0.056	0.05	0.075	0.18	0.202
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	13	3.	3.154	5.	2.	0.974	0.987	2.	2.	4.	4.6
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	13	120.	113.692	160.	48.	1285.897	35.859	56.8	82.	145.	155.2
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	13	100.	565.385	4800.	50.	1687243.59	1298.939	50.	50.	350.	3280.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	13	2.	2.22	3.681	1.699	0.369	0.607	1.699	1.699	2.54	3.409
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			165.88								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	9	16.3	14.4	21.3	6.	35.425	5.952	6.	8.05	19.55	21.3
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	9	231.	236.556	325.	149.	3841.278	61.978	149.	182.	298.	325.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	9	8.7	9.5	12.6	7.7	3.46	1.86	7.7	7.75	11.15	12.6
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	9	1.	1.333	4.	0.5	1.188	1.09	0.5	0.75	1.5	4.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	9	4.	9.222	42.	0.5	165.132	12.85	0.5	1.75	10.	42.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.5	7.56	8.5	6.7	0.4	0.633	6.7	7.07	8.22	8.5
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.5	7.24	8.5	6.7	0.516	0.718	6.7	7.07	8.22	8.5
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	9	0.032	0.058	0.2	0.003	0.004	0.064	0.003	0.006	0.085	0.2
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	9	7.4	7.433	8.	6.9	0.16	0.4	6.9	7.	7.8	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	9	7.4	7.28	8.	6.9	0.186	0.432	6.9	7.	7.8	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	9	0.04	0.052	0.126	0.01	0.002	0.044	0.01	0.016	0.1	0.126
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	9	73.	85.333	135.	42.	1183.	34.395	42.	57.	120.	135.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	9###	2.5	25.611	200.	2.5	4279.736	65.42	2.5	2.5	6.5	200.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	9###	2.5	7.778	50.	2.	250.757	15.835	2.	2.5	2.75	50.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	9	3.	20.222	150.	2.5	2374.819	48.732	2.5	2.5	8.	150.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	9###	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	9	0.02	0.021	0.04	0.01	0.	0.012	0.01	0.01	0.03	0.04
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	9	1.09	1.358	2.18	0.96	0.184	0.429	0.96	1.01	1.7	2.18
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	9	0.2	0.383	1.8	0.05	0.293	0.541	0.05	0.15	0.35	1.8
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	9	0.1	0.161	0.6	0.05	0.03	0.175	0.05	0.05	0.2	0.6
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	9	0.07	0.087	0.17	0.02	0.003	0.051	0.02	0.045	0.135	0.17
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	7	3.	2.857	4.	2.	0.81	0.9	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	9	88.	100.444	162.	50.	1483.778	38.52	50.	70.	137.	162.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	9	100.	2061.111	8000.	50.	11727361.111	3424.523	50.	100.	5000.	8000.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	9	2.	2.534	3.903	1.699	0.808	0.899	1.699	2.	3.602	3.903
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			341.995								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	10.	12.814	24.3	6.5	46.901	6.848	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	7	285.	255.429	327.	100.	6790.952	82.407	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	7	9.9	10.043	11.6	8.	1.523	1.234	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	7	1.	1.214	2.	0.5	0.321	0.567	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	7	3.	2.571	5.	0.5	2.869	1.694	**	**	**	**
00400p	PH (STANDARD UNITS)	7	8.13	8.159	8.55	7.77	0.085	0.291	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	7	8.13	8.08	8.55	7.77	0.092	0.303	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.007	0.008	0.017	0.003	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	7	7.7	7.757	8.2	7.1	0.12	0.346	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	7	7.7	7.619	8.2	7.1	0.142	0.376	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.02	0.024	0.079	0.006	0.001	0.025	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	5	131.	112.2	137.	77.	873.2	29.55	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	1	186.	186.	186.	186.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	1	151.	151.	151.	151.	0.	0.	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	7 ##	2.	1.929	5.	0.5	2.702	1.644	**	**	**	**
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	7 ##	2.	1.643	3.	0.5	1.226	1.107	**	**	**	**
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	7 ##	0.5	1.286	2.5	0.5	0.988	0.994	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7	0.04	0.061	0.15	0.02	0.002	0.048	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	7	0.02	0.039	0.12	0.01	0.002	0.039	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	7	1.25	1.236	1.52	0.75	0.086	0.293	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	7	0.2	0.229	0.4	0.1	0.012	0.111	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	7	0.1	0.093	0.1	0.05	0.	0.019	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	7	0.08	0.077	0.13	0.02	0.001	0.034	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	5	1.4	1.38	1.7	1.2	0.042	0.205	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	7	140.	114.286	154.	40.	1843.238	42.933	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	1	16.	16.	16.	16.	0.	0.	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	150.	193.75	500.	50.	29598.214	172.041	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	2.151	2.125	2.699	1.699	0.168	0.41	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			133.352								
	GEOMETRIC MEAN =											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	20.	15.486	21.	5.2	44.771	6.691	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	4	184.	188.25	252.	133.	2386.917	48.856	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	1	228.	228.	228.	228.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	7	9.2	9.657	11.5	8.	2.126	1.458	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	5	2.	1.6	2.	1.	0.3	0.548	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	5	9.	7.	10.	2.	11.5	3.391	**	**	**	**
00400p	PH (STANDARD UNITS)	7	8.15	8.21	8.51	7.98	0.045	0.213	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	7	8.15	8.17	8.51	7.98	0.047	0.217	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.007	0.007	0.01	0.003	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	5	7.6	7.62	7.8	7.3	0.042	0.205	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	5	7.6	7.578	7.8	7.3	0.044	0.21	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	5	0.025	0.026	0.05	0.016	0.	0.014	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	5	70.	73.8	97.	48.	370.2	19.241	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	5	129.	130.2	163.	88.	794.7	28.19	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	5	35.	36.	43.	28.	41.5	6.442	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	5	92.	94.2	128.	60.	616.2	24.823	**	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	5	2.	3.6	7.	1.	7.3	2.702	**	**	**	**
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	5	1.	1.7	4.	0.	2.95	1.718	**	**	**	**
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	5	2.	2.	3.	1.	1.	1.	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	5	0.04	0.046	0.08	0.02	0.001	0.028	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	5	0.02	0.021	0.04	0.005	0.	0.012	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	5	1.07	1.018	1.21	0.83	0.025	0.159	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	5	0.3	0.26	0.4	0.1	0.013	0.114	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	5	0.1	0.09	0.1	0.05	0.001	0.022	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	5	0.05	0.05	0.07	0.03	0.	0.016	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	5	1.6	1.58	2.2	1.2	0.152	0.39	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	5	82.	86.4	110.	58.	440.8	20.995	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	5	7.	7.4	12.	5.	7.3	2.702	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	5	12.	11.6	14.	9.	4.3	2.074	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	5	100.	1220.	5800.	50.	6555750.	2560.42	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	5	2.	2.232	3.763	1.699	0.755	0.869	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			170.716							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	5	20.7	18.48	23.7	12.4	25.122	5.012	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	5	236.	223.4	301.	142.	4461.3	66.793	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	5	8.9	9.22	11.6	6.8	4.047	2.012	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	5	2.	1.5	2.	0.5	0.5	0.707	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	5	8.	8.	10.	5.	3.5	1.871	**	**	**
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	5	8.18	8.138	8.37	7.76	0.051	0.226	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	5	8.18	8.084	8.37	7.76	0.055	0.234	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	5	0.007	0.008	0.017	0.004	0.	0.005	**	**	**
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	5	7.8	7.54	8.	6.9	0.218	0.467	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	5	7.8	7.336	8.	6.9	0.27	0.52	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	5	0.016	0.046	0.126	0.01	0.002	0.049	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	5	101.	86.8	123.	48.	1013.2	31.831	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	5	155.	138.6	178.	82.	2016.8	44.909	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	5	30.	37.8	61.	25.	236.7	15.385	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	5	117.	100.8	132.	57.	1128.2	33.589	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	5	2.	4.3	9.	0.5	18.7	4.324	**	**	**
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	5##	0.5	1.5	4.	0.5	2.375	1.541	**	**	**
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	5	2.	3.1	7.	0.5	7.8	2.793	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	5	0.05	0.04	0.06	0.02	0.	0.019	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	5	0.02	0.02	0.03	0.01	0.	0.01	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	5	1.25	1.398	1.97	1.21	0.104	0.322	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	5	0.2	0.24	0.3	0.2	0.003	0.055	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	5	0.1	0.11	0.2	0.05	0.003	0.055	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	5	0.09	0.086	0.16	0.03	0.002	0.048	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	5	1.9	1.86	2.4	1.4	0.148	0.385	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	5	112.	100.4	134.	60.	1064.8	32.631	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	5	8.	8.	11.	5.	2.236	2.236	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	5	10.	10.4	13.	8.	4.3	2.074	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	9	17.5	13.6	23.3	4.4	46.673	6.832	4.4	7.2	18.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	9	213.	225.667	322.	122.	5242.5	72.405	122.	165.5	302.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	1	11.3	11.3	11.3	11.3	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	7	12.8	12.614	14.9	9.3	3.071	1.753	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	9	1.	1.222	2.	1.	0.194	0.441	1.	1.5	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	9	7.	8.	17.	1.	26.	5.099	1.	11.5	17.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.9	7.891	9.1	6.72	0.438	0.662	6.72	7.5	8.25
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	9	7.9	7.466	9.1	6.72	0.641	0.801	6.72	7.5	8.25
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	9	0.013	0.034	0.191	0.001	0.004	0.06	0.001	0.006	0.032
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	9	7.8	7.7	8.2	6.9	0.22	0.469	6.9	7.25	8.15
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	9	7.8	7.466	8.2	6.9	0.282	0.531	6.9	7.25	8.15
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	9	0.016	0.034	0.126	0.006	0.002	0.04	0.006	0.007	0.057
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	9	73.	90.111	141.	33.	1552.361	39.4	33.	60.	135.
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	9	136.	143.444	207.	75.	2243.528	47.366	75.	101.	191.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	9	28.	29.	47.	5.	143.75	11.99	5.	23.	47.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	9	100.	114.444	202.	53.	2557.778	50.574	53.	71.5	159.5
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	9##	2.5	3.944	11.	1.5	3.206	3.206	1.5	1.5	5.5
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	9##	1.5	1.5	3.	0.5	0.625	0.791	0.5	1.	3.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	9##	2.5	3.278	8.	1.5	4.944	2.224	1.5	1.5	4.5
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	10##	0.02	0.033	0.1	0.02	0.001	0.026	0.02	0.02	0.043
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	10##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.019
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	9	1.48	1.618	2.6	1.12	0.257	0.507	1.12	1.26	1.95
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	10	0.3	0.3	0.8	0.1	0.036	0.189	0.11	0.2	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	10	0.1	0.135	0.2	0.05	0.003	0.058	0.055	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	10	0.08	0.088	0.19	0.03	0.003	0.052	0.031	0.04	0.13
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	9	2.	2.467	4.9	1.2	1.383	1.176	1.2	1.7	3.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	9	84.	104.667	160.	46.	1810.	42.544	46.	71.	152.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	9	7.	7.222	10.	5.	5.444	2.333	5.	5.	10.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	9	12.	11.444	14.	9.	4.778	2.186	9.	9.	13.5
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	5##	50.	510.	2300.	50.	1001750.	1000.875	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	5##	1.699	2.092	3.362	1.699	0.521	0.722	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			123.517							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	12	11.6	13.867	25.3	7.1	38.19	6.18	7.34	8.7	24.31
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	11	202.	209.455	272.	149.	1880.673	43.367	150.2	164.	270.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	8	10.25	10.413	13.1	8.6	2.458	1.568	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	4	11.8	12.1	13.5	11.3	0.987	0.993	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	11	1.	1.136	2.	0.5	0.205	0.452	0.6	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	11	7.	7.636	14.	5.	6.455	2.541	5.	9.	13.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	12	8.3	8.392	9.5	7.8	0.19	0.436	7.89	8.1	8.65
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	12	8.3	8.25	9.5	7.8	0.212	0.46	7.89	8.1	8.65
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	12	0.005	0.006	0.016	0.	0.	0.004	0.001	0.002	0.013
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	11	8.	8.018	8.6	7.	0.19	0.435	7.16	7.8	8.3
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	11	8.	7.761	8.6	7.	0.262	0.512	7.16	7.8	8.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	11	0.01	0.017	0.1	0.003	0.001	0.028	0.003	0.005	0.016
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	11	78.	78.273	102.	47.	432.818	20.804	48.6	57.	102.
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	7	140.	139.	170.	110.	620.333	24.906	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	7	31.	31.429	41.	24.	25.286	5.028	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	7	110.	107.571	138.	78.	525.286	22.919	**	**	**
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	11	1.5	1.682	3.	1.	0.314	0.56	1.	1.5	2.8
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	11##	1.5	1.182	1.5	0.	0.214	0.462	0.2	1.	1.5
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	11	1.5	1.318	2.	1.	0.114	0.337	1.	1.	1.9
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	12##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12	0.01	0.011	0.02	0.005	0.	0.006	0.005	0.018	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12	1.71	1.803	3.38	0.9	0.448	0.669	0.978	1.26	3.116

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	12	0.2	0.208	0.4	0.1	0.008	0.09	0.1	0.125	0.275	0.37
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	12	0.1	0.083	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	4	0.045	0.053	0.09	0.03	0.001	0.026	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	11	1.7	2.055	5.8	0.5	1.907	1.381	0.66	1.3	2.3	5.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	11	86.	93.364	122.	66.	464.855	21.56	66.6	74.	114.	121.6
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	11	7.	6.545	9.	4.	1.873	1.368	4.2	6.	7.	8.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	11	11.	11.455	15.	9.	2.873	1.695	9.	11.	12.	14.6
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	100.	204.545	700.	50.	34227.273	185.006	60.	100.	300.	620.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	11	2.	2.191	2.845	1.699	0.104	0.323	1.759	2.	2.477	2.772
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			155.218								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	8	0.07	0.064	0.11	0.03	0.001	0.029	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	12	13.35	13.283	22.9	3.5	48.182	6.941	3.95	7.025	20.025	22.66
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	12	210.5	238.167	418.	108.	10222.879	101.108	114.6	149.75	331.5	395.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	12	9.9	10.675	15.9	7.6	6.84	2.615	7.69	8.725	12.575	15.39
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	12	1.	1.	1.	1.	0.	1.	1.	1.	1.	1.
00340	COD, 25N K2CR2O7 MG/L	04/24/79-12/07/98	12	5.	5.792	13.	2.5	12.566	3.545	2.5	2.875	8.75	12.4
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.5	7.604	8.85	6.8	0.337	0.58	6.89	7.225	7.775	8.745
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.489	7.358	8.85	6.8	0.403	0.635	6.89	7.225	7.775	8.745
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	12	0.032	0.044	0.158	0.001	0.002	0.043	0.002	0.017	0.06	0.135
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	12	8.1	7.933	8.5	6.6	0.235	0.485	6.93	7.725	8.2	8.44
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	12	8.1	7.518	8.5	6.6	0.423	0.651	6.93	7.725	8.2	8.44
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	12	0.008	0.003	0.251	0.003	0.005	0.07	0.004	0.006	0.019	0.182
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	12	101.5	92.083	136.	31.	1671.902	40.889	34.3	47.5	131.	135.4
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	1.5	2.227	8.	1.5	3.868	1.967	1.5	1.5	1.5	7.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	1.5	1.5	2.	1.	0.05	0.224	1.1	1.5	1.5	1.9
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	1.5	1.955	6.	1.5	1.823	1.35	1.5	1.5	1.5	5.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	12 ##	0.02	0.027	0.06	0.005	0.	0.015	0.01	0.02	0.04	0.054
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12 ##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.017
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12	1.555	1.588	3.04	0.61	0.314	0.561	0.787	1.298	1.745	2.665
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	12	0.2	0.183	0.4	0.1	0.007	0.083	0.1	0.1	0.2	0.34
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	12	0.1	0.138	0.3	0.05	0.01	0.098	0.05	0.05	0.2	0.3
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	12	2.2	2.517	4.7	1.1	1.36	1.166	1.13	1.575	3.725	4.46
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	12	91.	102.833	162.	54.	1665.788	40.814	54.6	64.	141.5	158.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	12	7.5	8.25	13.	3.	12.75	3.571	3.6	5.	11.75	13.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	12	11.	11.167	14.	8.	4.152	2.038	8.3	9.25	13.	14.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	100.	462.5	3900.	50.	1188693.182	1090.272	50.	50.	350.	2850.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	2.	2.158	3.591	1.699	0.327	0.571	1.699	1.699	2.527	3.294
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			143.772								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	12	0.07	0.108	0.3	0.02	0.01	0.102	0.02	0.02	0.193	0.291

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	11	11.	11.209	21.7	3.	43.599	6.603	3.2	5.5	17.4	21.36
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	5	1.6	29.32	140.	1.	3828.437	61.874	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	11	219.	218.727	314.	144.	3657.218	60.475	144.2	155.	266.	312.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	11	11.5	10.755	14.1	6.8	5.319	2.306	7.1	8.3	12.1	14.02

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00310	BOD, 5 DAY, 20 DEG C MG/L	11	1.6	1.873	4.2	0.5	1.402	1.184	0.6	1.	3.1	4.04
00340	COD, .25N K2CR2O7 MG/L	11	7.	8.318	21.	2.5	39.164	6.258	2.5	2.5	14.	20.2
00400p	PH (STANDARD UNITS)	11	8.2	8.191	8.9	7.8	0.097	0.311	7.82	7.9	8.4	8.8
00400p	CONVERTED PH (STANDARD UNITS)	11	8.2	8.108	8.9	7.8	0.105	0.323	7.82	7.9	8.4	8.8
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.006	0.008	0.016	0.001	0.	0.004	0.002	0.004	0.013	0.015
00403	PH, LAB, STANDARD UNITS SU	11	7.4	7.318	7.9	6.9	0.114	0.337	6.9	6.9	7.5	7.86
00403	CONVERTED PH, LAB, STANDARD UNITS	11	7.4	7.207	7.9	6.9	0.127	0.357	6.9	6.9	7.5	7.86
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.04	0.062	0.126	0.013	0.002	0.044	0.014	0.032	0.126	0.126
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11	87.	82.545	130.	38.	952.073	30.856	40.	50.	111.	129.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	3.	14.409	78.	1.5	615.441	24.808	1.5	1.5	11.	71.6
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11 ##	1.5	3.273	13.	1.	14.268	3.777	1.1	1.5	3.	12.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	11 ##	1.5	11.818	65.	1.5	427.214	20.669	1.5	1.5	9.	59.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11 ##	0.02	0.072	0.29	0.02	0.008	0.09	0.02	0.02	0.07	0.272
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	11	0.02	0.022	0.09	0.005	0.001	0.024	0.005	0.005	0.03	0.078
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	11	1.43	1.535	2.07	1.	0.139	0.373	1.02	1.27	1.88	2.054
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11	0.2	0.4	1.4	0.05	0.166	0.407	0.05	0.2	0.4	1.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11	0.1	0.132	0.5	0.05	0.018	0.135	0.05	0.05	0.2	0.44
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11	2.4	2.682	5.8	1.	2.87	1.694	1.02	1.2	4.1	5.68
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11	93.	94.727	140.	60.	850.818	29.169	60.	64.	126.	139.2
00940	CHLORIDE, TOTAL IN WATER MG/L	11	8.	8.182	13.	5.	6.964	2.639	5.	6.	10.	12.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11	11.	10.818	14.	8.	3.764	1.94	8.	9.	12.	13.8
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	300.	1863.636	8000.	50.	9528045.455	3086.753	50.	100.	1700.	8000.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	2.477	2.663	3.903	1.699	0.626	0.791	1.699	2.	3.23	3.903
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			460.151								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11	0.05	0.075	0.3	0.01	0.007	0.082	0.012	0.02	0.08	0.266

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11	15.9	14.809	21.4	1.1	41.075	6.409	2.54	8.6	20.3	21.28
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12	2.35	2.408	5.3	0.6	1.817	1.348	0.69	1.15	3.35	4.73
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	239.5	252.083	370.	180.	4279.538	65.418	181.5	198.25	284.5	369.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11	9.	9.191	12.8	5.9	4.095	2.024	6.22	7.7	10.7	12.4
00310	BOD, 5 DAY, 20 DEG C MG/L	12	1.05	1.133	3.8	0.5	0.797	0.893	0.5	0.5	1.2	3.02
00340	COD, .25N K2CR2O7 MG/L	12	6.5	7.542	19.	2.5	22.475	4.741	2.5	3.375	10.25	16.9
00400p	PH (STANDARD UNITS)	11	8.2	8.264	9.	7.8	0.117	0.341	7.82	8.	8.5	8.92
00400p	CONVERTED PH (STANDARD UNITS)	11	8.2	8.162	9.	7.8	0.128	0.358	7.82	8.	8.5	8.92
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.006	0.007	0.016	0.001	0.	0.004	0.001	0.003	0.01	0.015
00403	PH, LAB, STANDARD UNITS SU	12	7.55	7.575	8.2	7.2	0.098	0.314	7.2	7.3	7.8	8.11
00403	CONVERTED PH, LAB, STANDARD UNITS	12	7.547	7.484	8.2	7.2	0.107	0.328	7.2	7.3	7.8	8.11
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.028	0.033	0.063	0.006	0.	0.02	0.008	0.016	0.05	0.063
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	85.5	90.25	140.	58.	713.841	26.718	59.8	69.25	102.75	139.1
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12 ##	1.5	2.292	7.	1.5	2.839	1.685	1.5	1.5	2.625	6.1
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12 ##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12 ##	1.5	1.917	5.	1.5	1.129	1.062	1.5	1.5	1.5	4.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.034
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	12	0.02	0.02	0.04	0.005	0.	0.011	0.007	0.01	0.03	0.037
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	1.165	1.136	1.51	0.83	0.042	0.204	0.839	0.925	1.248	1.462
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.2	0.233	0.7	0.1	0.026	0.161	0.1	0.125	0.275	0.58
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12	0.1	0.096	0.3	0.05	0.005	0.069	0.05	0.05	0.1	0.24
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	12	2.8	3.358	8.5	1.4	3.635	1.907	1.49	2.175	4.25	7.36
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	94.	99.833	147.	71.	636.152	25.222	71.9	79.75	111.5	146.4
00940	CHLORIDE, TOTAL IN WATER MG/L	12	9.5	10.75	17.	6.	12.932	3.596	6.3	8.	13.75	16.7
00945	SULFATE, TOTAL (MG/L AS SO4)	12	11.5	11.5	15.	9.	3.	1.732	9.3	10.	12.	14.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12	200.	958.333	8000.	50.	5018106.061	2240.113	50.	50.	675.	5900.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	2.239	2.375	3.903	1.699	0.485	0.696	1.699	1.699	2.828	3.632
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			237.061								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	12	0.04	0.042	0.09	0.005	0.001	0.028	0.007	0.02	0.07	0.084

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	12	12.85	13.767	26.7	3.	53.104	7.287	3.84	8.175	18.775	25.65
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	12	6.5	12.008	62.	3.3	268.095	16.374	3.36	4.775	10.425	49.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	12	180.	192.917	323.	101.	5323.72	72.964	105.8	126.	264.25	314.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	12	10.7	10.183	12.8	7.5	3.494	1.869	7.62	8.25	11.675	12.62
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	12	1.	1.208	3.	0.5	0.703	0.838	0.5	0.5	2.	2.7
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	12	6.	8.208	25.	2.5	49.521	7.037	2.5	2.5	12.	22.3
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.95	7.958	8.3	7.5	0.077	0.278	7.53	7.725	8.275	8.3
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.947	7.878	8.3	7.5	0.084	0.29	7.53	7.725	8.275	8.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	12	0.011	0.013	0.032	0.005	0.	0.009	0.005	0.005	0.019	0.03
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	12	7.45	7.575	8.2	6.9	0.207	0.456	6.96	7.15	8.1	8.17
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	12	7.447	7.384	8.2	6.9	0.248	0.497	6.96	7.15	8.1	8.17
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	12	0.036	0.041	0.126	0.006	0.001	0.037	0.007	0.008	0.072	0.112
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	12	58.5	67.5	114.	29.	883.182	29.718	31.7	42.75	99.25	113.1
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	12	6.5	12.667	61.	3.	276.788	16.637	3.3	4.	12.75	50.8
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	12##	1.5	3.125	10.	1.5	6.506	2.551	1.5	1.5	4.	8.5
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	12	3.5	9.583	51.	1.5	205.311	14.329	1.5	3.	9.25	42.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	12##	0.02	0.036	0.08	0.02	0.001	0.024	0.02	0.02	0.06	0.077
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12	0.01	0.02	0.07	0.005	0.001	0.023	0.005	0.005	0.028	0.067
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12	1.4	1.435	2.	0.86	0.129	0.36	0.932	1.133	1.79	1.991
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	12	0.35	0.417	0.9	0.2	0.058	0.241	0.2	0.2	0.575	0.87
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	12	0.1	0.129	0.3	0.05	0.007	0.086	0.05	0.05	0.2	0.27
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	9	3.1	3.089	5.5	1.4	2.009	1.417	1.4	1.95	4.35	5.5
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	12	75.	80.667	134.	48.	774.061	27.822	48.6	57.	108.	127.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	12	7.5	7.	13.	2.5	14.273	3.778	2.5	2.5	9.75	12.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	12	9.	9.167	12.	7.	2.333	1.528	7.	8.	10.	11.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	1450.	2091.667	8000.	100.	5602651.515	2366.992	130.	325.	3550.	6950.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	3.159	3.01	3.903	2.	0.36	0.6	2.09	2.508	3.547	3.828
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			1022.121								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	12	0.03	0.052	0.18	0.01	0.003	0.05	0.01	0.02	0.085	0.156

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	12	15.3	14.9	26.5	2.8	50.485	7.105	4.06	9.5	19.425	25.96
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	11	3.	3.109	5.2	1.5	1.795	1.34	1.54	1.7	4.2	5.12
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	11	260.	274.545	370.	181.	3798.273	61.63	186.6	211.	327.	364.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	11	12.5	12.064	13.9	9.1	2.307	1.519	9.36	11.1	13.6	13.84
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	11##	0.5	0.909	2.	0.5	0.341	0.584	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	12##	2.5	4.292	10.	2.5	6.612	2.571	2.5	2.5	5.75	9.4
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	12	8.1	8.092	8.6	7.6	0.101	0.318	7.66	7.8	8.3	8.57
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	12	8.089	7.992	8.6	7.6	0.112	0.334	7.66	7.8	8.3	8.57
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	12	0.008	0.01	0.025	0.003	0.	0.007	0.003	0.005	0.016	0.022
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	11	7.9	7.982	8.4	7.5	0.07	0.264	7.54	7.8	8.2	8.36
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	11	7.9	7.908	8.4	7.5	0.076	0.275	7.54	7.8	8.2	8.36

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	11	0.013	0.012	0.032	0.004	0.	0.008	0.004	0.006	0.016	0.029
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	11	96.	104.455	150.	63.	899.273	29.988	65.6	79.	131.	149.6
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	11	3.	3.227	7.	1.5	4.068	2.017	1.5	1.5	5.	6.8
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	1.5	1.5	1.5	1.5	0.	0.	1.5	1.5	1.5	1.5
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	11 ##	1.5	2.636	5.	1.5	2.105	1.451	1.5	1.5	4.	5.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	12 ##	0.02	0.023	0.05	0.02	0.	0.009	0.02	0.02	0.02	0.041
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12 ##	0.005	0.013	0.03	0.005	0.	0.011	0.005	0.005	0.028	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12	1.39	1.421	1.92	0.86	0.1	0.316	0.92	1.248	1.645	1.917
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	12	0.2	0.217	0.3	0.1	0.007	0.083	0.1	0.125	0.3	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	12 ##	0.075	0.075	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	12	103.	109.5	150.	73.	755.727	27.49	74.5	88.	138.5	149.7
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	11	9.	10.091	20.	6.	17.291	4.158	6.	7.	13.	18.6
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	11	10.	10.909	13.	9.	2.491	1.578	9.	10.	13.	13.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	100.	129.167	500.	50.	16571.97	128.732	50.	50.	175.	410.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	2.	1.983	2.699	1.699	0.102	0.319	1.699	1.699	2.226	2.58
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98			96.159								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	12	0.04	0.041	0.09	0.02	0.	0.021	0.02	0.02	0.055	0.081

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

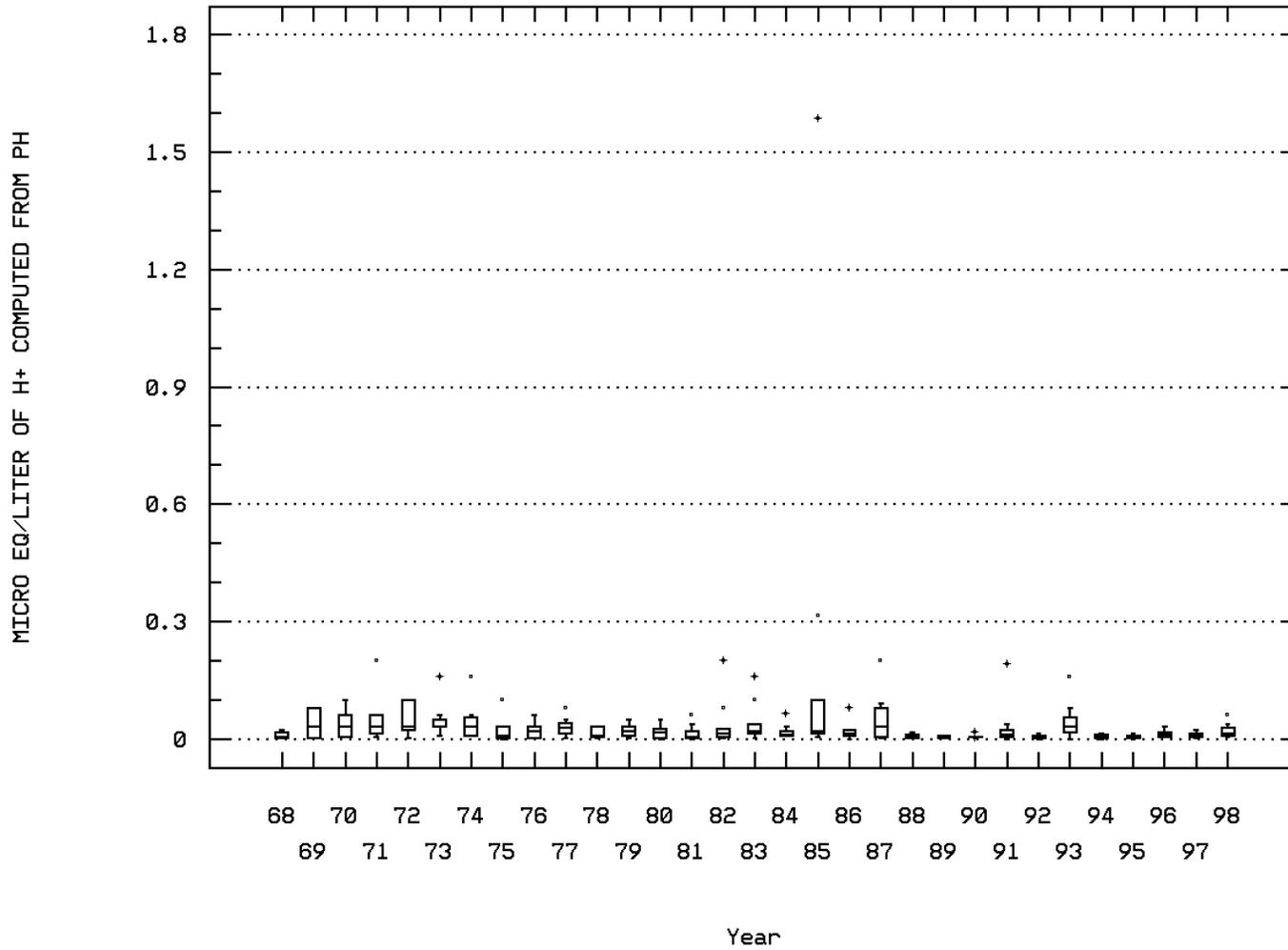
Annual Analysis for 1998 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	12	14.3	15.083	24.9	5.7	29.605	5.441	7.14	11.025	19.225	24.18
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/04/94-12/07/98	12	2.9	86.058	996.	0.8	82121.508	286.569	0.86	1.55	5.15	700.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	12	289.	255.75	387.	112.	12842.75	113.326	112.6	130.5	364.	381.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	12	9.85	10.325	13.8	8.	3.158	1.777	8.12	8.7	11.825	13.32
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	12 ##	1.	2.417	18.	1.	24.083	4.907	1.	1.	1.	12.9
00340	COD, 25N K2CR2O7 MG/L	04/24/79-12/07/98	12	7.	18.958	152.	2.5	1778.839	42.176	2.5	2.5	11.	111.8
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.85	7.817	8.3	7.2	0.125	0.354	7.26	7.525	8.15	8.3
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	12	7.847	7.687	8.3	7.2	0.144	0.379	7.26	7.525	8.15	8.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	12	0.014	0.021	0.063	0.005	0.	0.017	0.005	0.007	0.03	0.056
00403	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	12	7.5	7.492	8.2	6.7	0.368	0.607	6.7	6.825	8.15	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	12	7.5	7.156	8.2	6.7	0.491	0.701	6.7	6.825	8.15	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	12	0.032	0.07	0.2	0.006	0.006	0.078	0.006	0.007	0.15	0.2
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	12	115.5	100.583	156.	37.	2434.447	49.34	37.6	47.75	147.25	154.5
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	12	4.	75.833	860.	1.5	60994.788	246.971	1.5	1.5	8.5	605.6
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	12 ##	1.5	13.458	145.	1.5	1716.021	41.425	1.5	1.5	1.5	101.95
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	12 ##	2.25	62.667	715.	1.5	42209.015	205.448	1.5	1.5	5.75	503.5
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	12 ##	0.02	0.05	0.24	0.02	0.005	0.069	0.02	0.02	0.035	0.21
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12 ##	0.005	0.024	0.2	0.005	0.003	0.056	0.005	0.005	0.01	0.146
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	12	1.135	1.249	1.85	0.73	0.169	0.411	0.757	0.875	1.69	1.847
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	12	0.3	0.833	6.5	0.2	3.197	1.788	0.2	0.225	0.4	4.73
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	12	0.1	0.3	2.6	0.05	0.525	0.725	0.05	0.1	0.1	1.85
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	12	116.	106.583	177.	29.	2735.174	52.299	34.7	52.5	154.	171.9
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	12	9.5	9.375	17.	2.5	31.551	5.617	2.5	3.125	14.5	17.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	12	11.5	11.5	23.	6.	21.364	4.622	6.3	7.25	13.75	20.3
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	150.	850.	8000.	50.	5091363.636	2256.405	50.	100.	375.	5750.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	12	2.151	2.321	3.903	1.699	0.36	0.6	1.699	2.	2.571	3.542
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98			209.626								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	12	0.06	0.075	0.3	0.02	0.006	0.077	0.02	0.03	0.075	0.249

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0635 Parameter Code: 00400

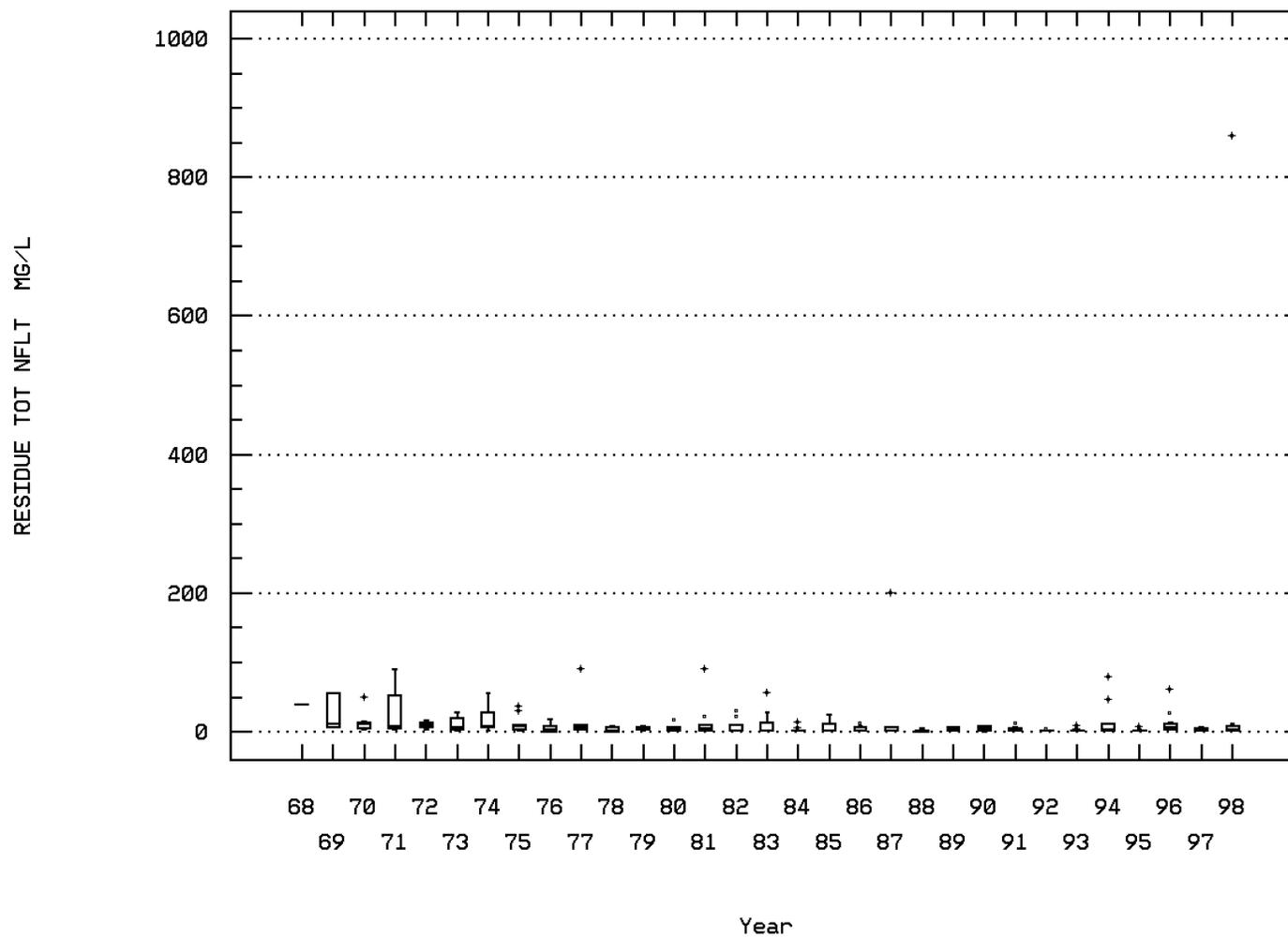
MICRO EQ/LITER OF H+ COMPUTED FROM PH



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00530

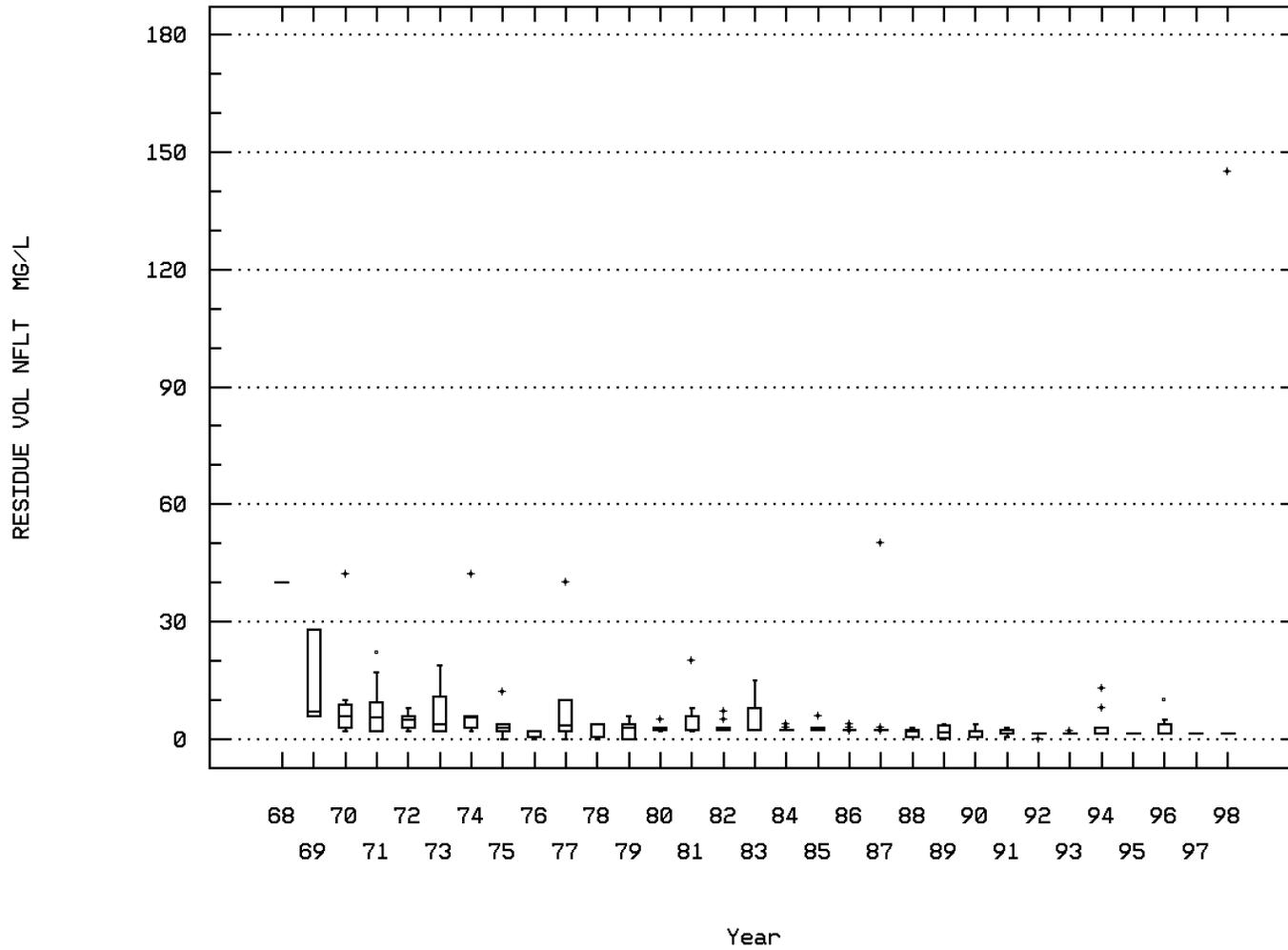
RESIDUE, TOTAL NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00535

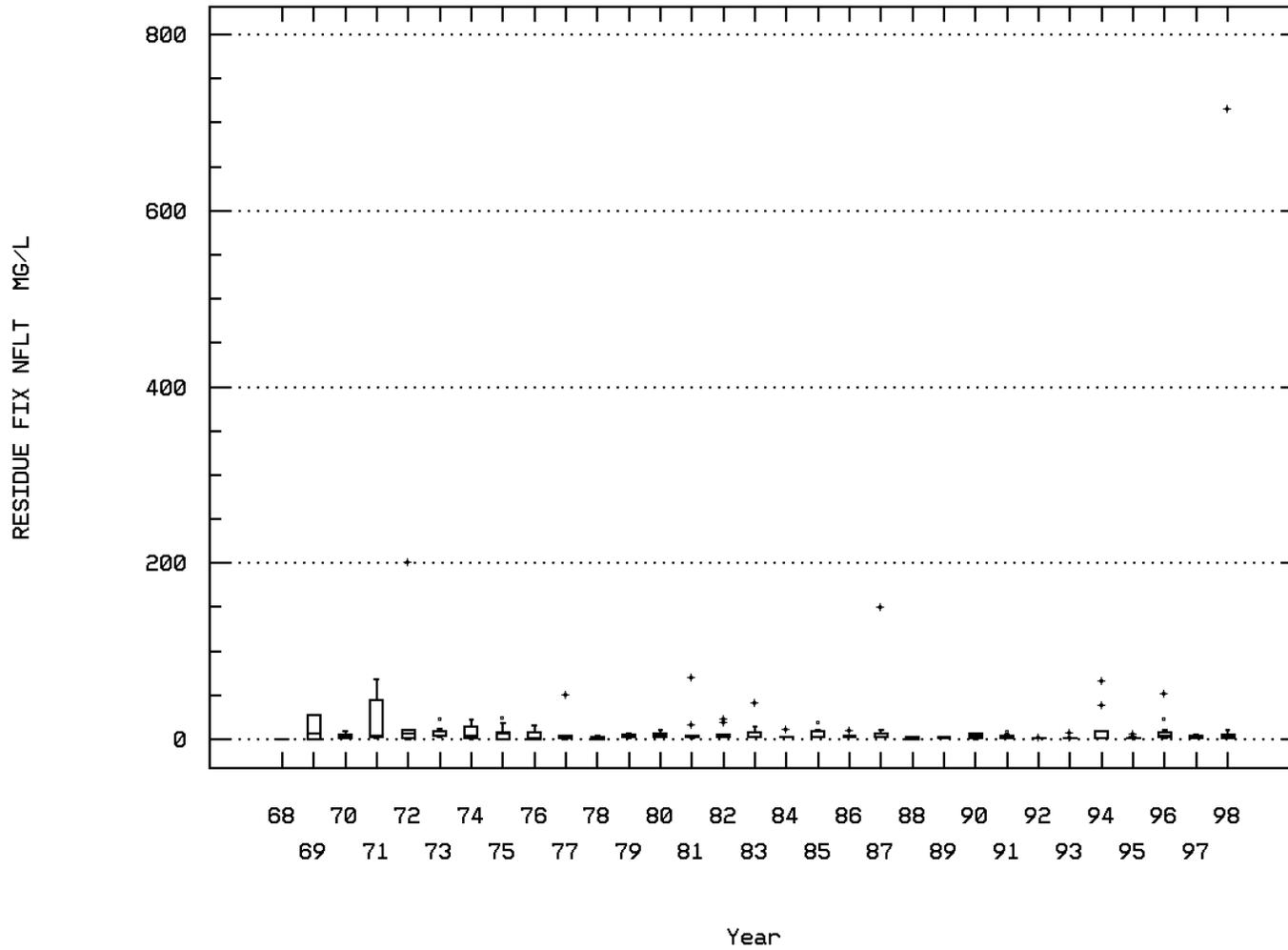
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00540

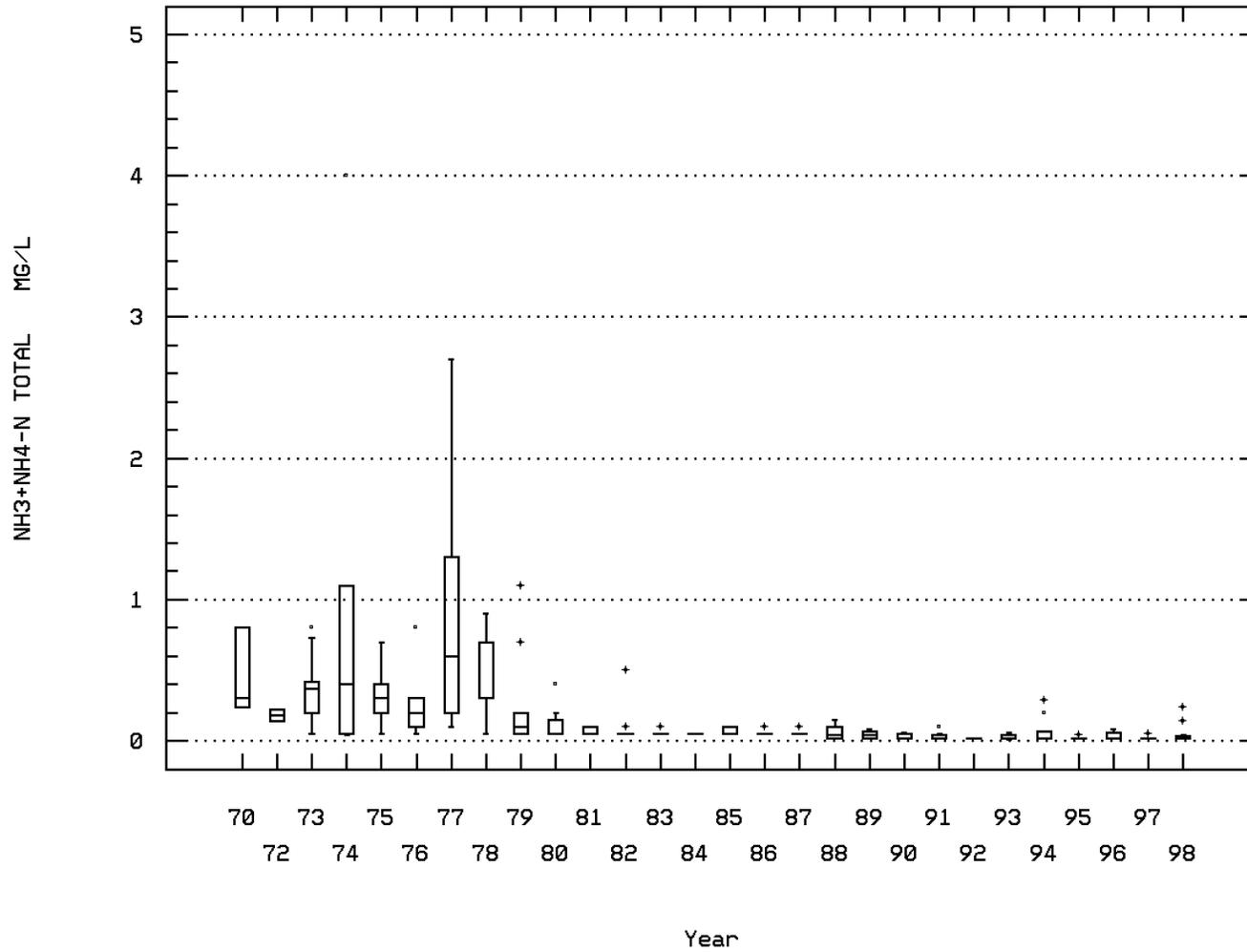
RESIDUE, FIXED NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00610

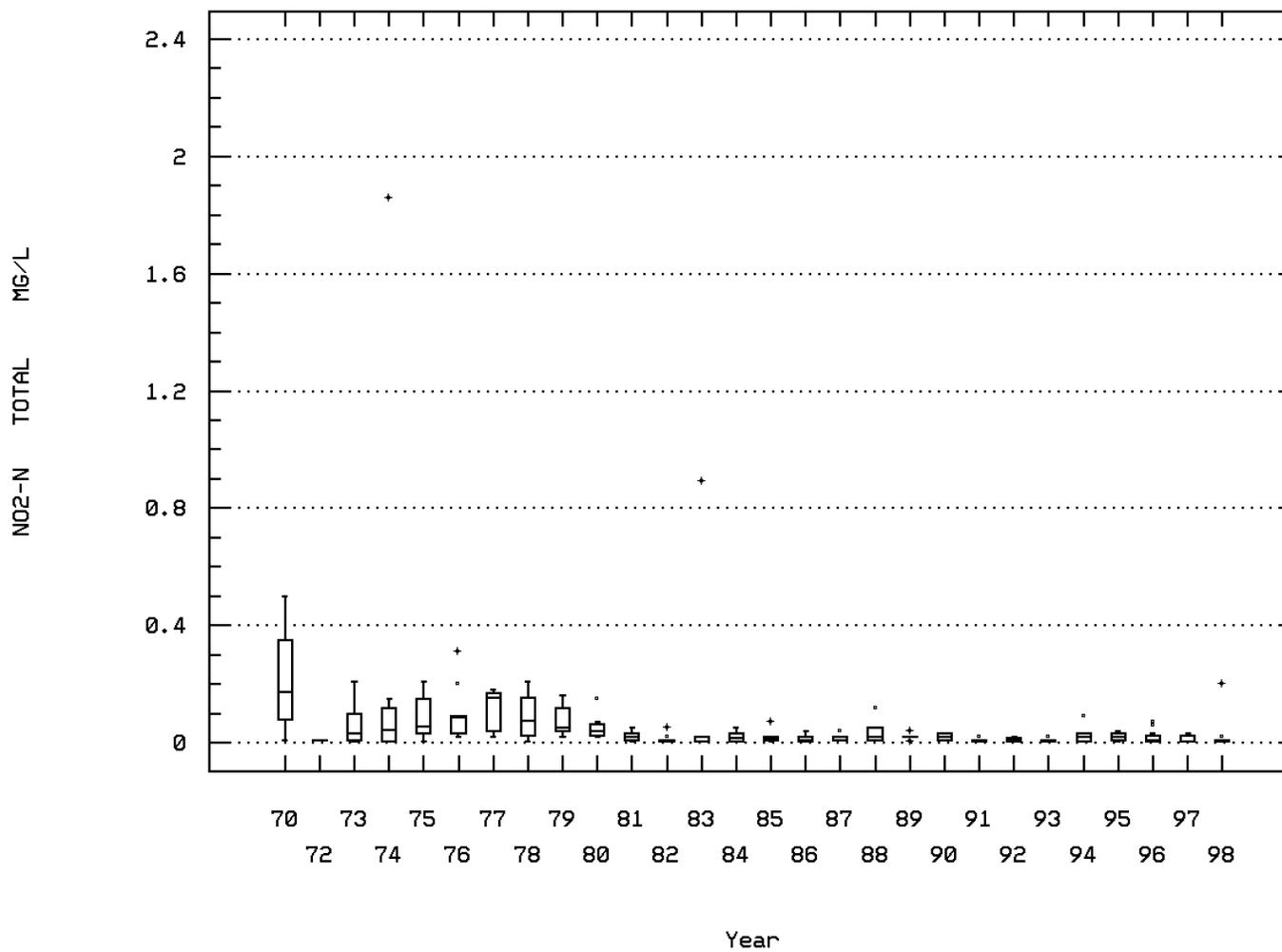
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00615

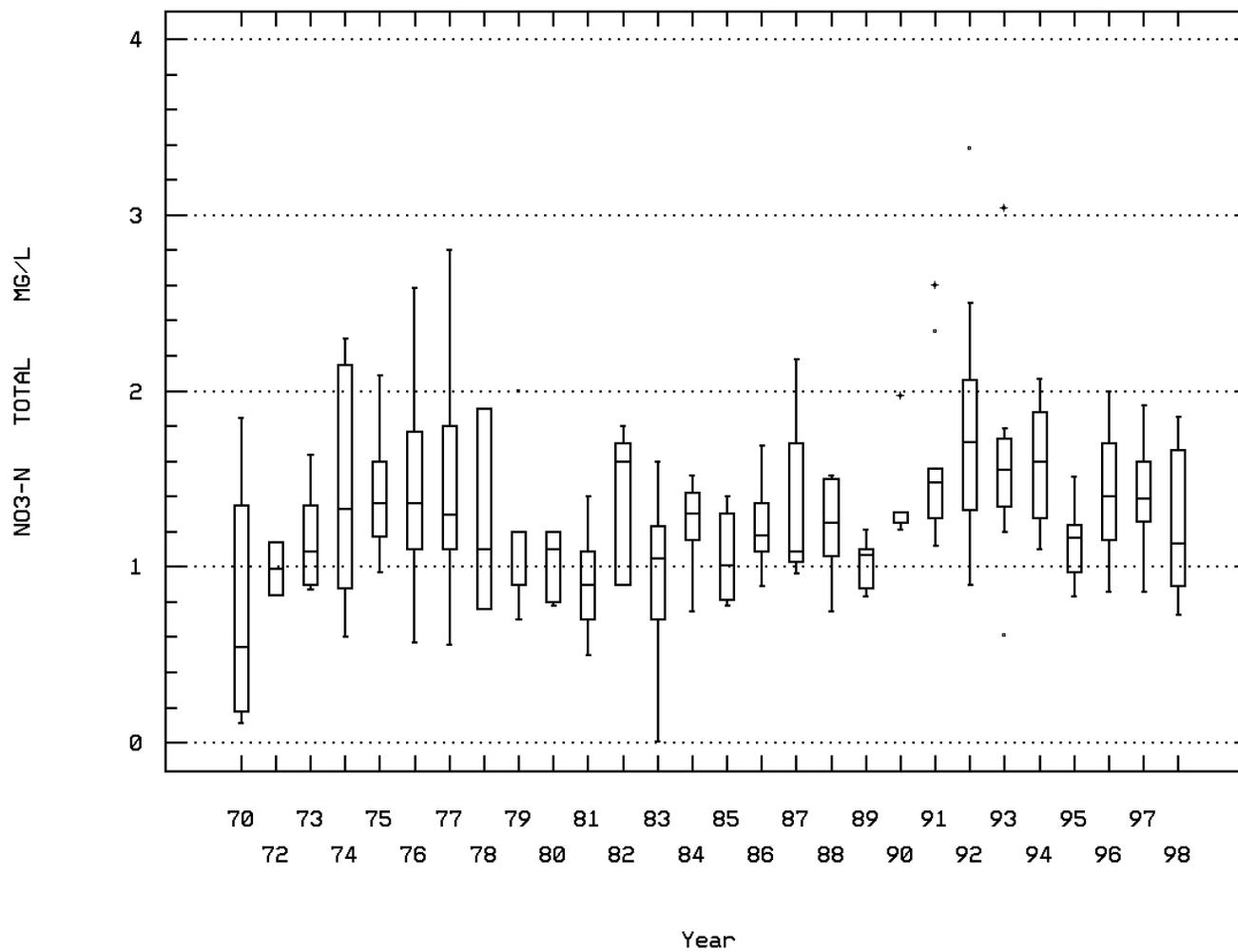
NITRITE NITROGEN, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00620

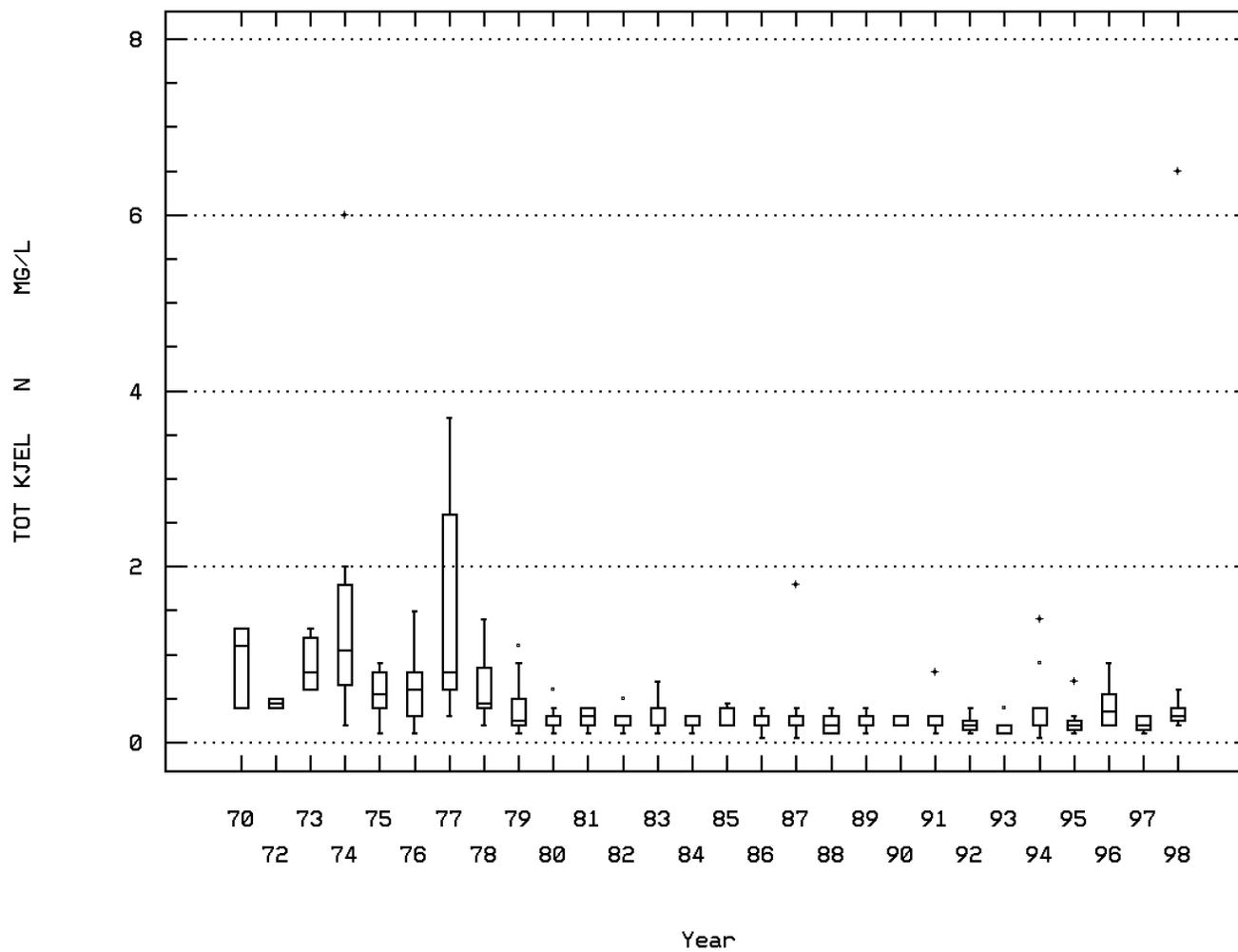
NITRATE NITROGEN, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00625

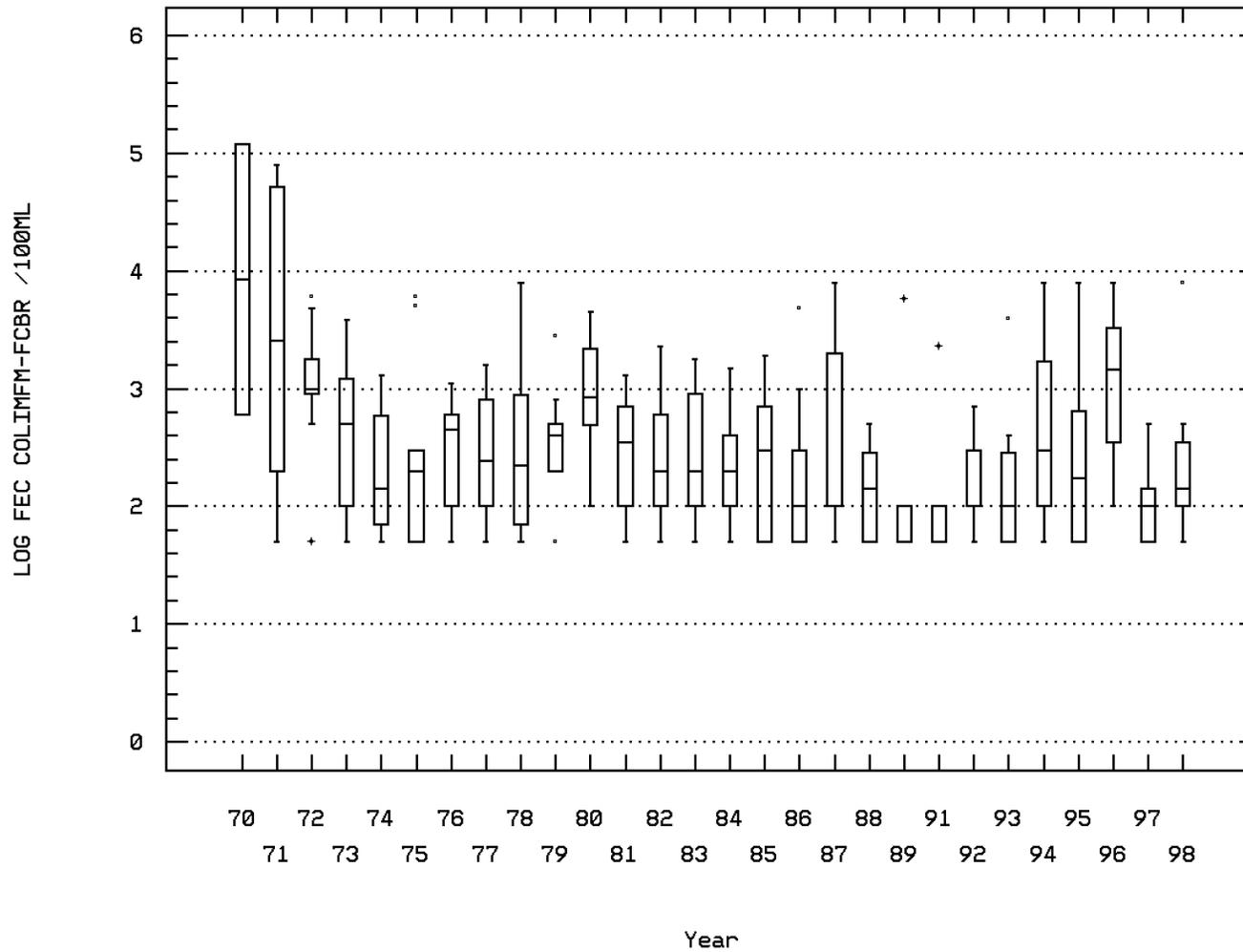
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 31616

LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



ROUTE 648 BRIDGE BELOW LURAY

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	92	20.05	19.991	27.8	12.5	10.232	3.199	15.6	17.825	22.075	24.18
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	30	308.5	302.3	411.	153.	1674.148	40.916	272.2	283.5	322.	339.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	31	307.	296.258	418.	122.	4647.331	68.171	194.2	241.	342.	370.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	25	8.4	8.74	13.6	5.9	2.589	1.609	7.22	7.8	9.5	11.04
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	66	8.05	7.789	11.7	1.7	4.397	2.097	4.54	6.75	9.3	9.73
00310p	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	76	1.	1.438	6.	0.5	1.351	1.162	0.5	1.	1.	3.52
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	62	6.	7.089	42.	0.5	42.447	6.515	2.	2.5	9.	14.7
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	91	7.9	7.885	8.7	6.7	0.181	0.426	7.32	7.6	8.2	8.5
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	91	7.9	7.669	8.7	6.7	0.229	0.478	7.32	7.6	8.2	8.5
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	91	0.013	0.021	0.2	0.002	0.001	0.028	0.003	0.006	0.025	0.048
00403p	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	47	7.9	7.811	8.4	6.5	0.187	0.432	7.28	7.5	8.2	8.2
00403p	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	47	7.9	7.515	8.4	6.5	0.276	0.525	7.28	7.5	8.2	8.2
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	47	0.013	0.031	0.316	0.004	0.003	0.058	0.006	0.006	0.032	0.053
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	45	125.	114.489	150.	30.	883.165	29.718	71.6	96.5	135.5	143.8
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	33	225.	235.576	403.	105.	4920.877	70.149	151.	178.	288.	324.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	34	62.5	89.559	900.	5.	21772.86	147.556	24.5	39.5	89.5	134.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	33	164.	170.333	317.	71.	3690.979	60.753	89.6	127.	206.5	262.6
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	86	2.5	10.506	200.	0.5	628.697	25.074	1.5	1.5	7.	28.6
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	86##	2.	4.145	50.	0.	58.087	7.622	0.85	1.5	3.	10.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	86##	2.5	7.238	150.	0.	346.81	18.623	0.5	1.5	4.	18.3
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	75##	0.05	0.099	1.099	0.02	0.034	0.184	0.02	0.02	0.05	0.236
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	75	0.02	0.066	1.859	0.005	0.048	0.219	0.005	0.005	0.04	0.168
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	71	1.35	1.434	3.04	0.61	0.157	0.396	1.09	1.13	1.69	1.911
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	75	0.3	0.382	1.8	0.1	0.105	0.324	0.2	0.2	0.4	0.74
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	60	0.15	0.291	7.	0.05	0.79	0.889	0.05	0.1	0.208	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	34	0.16	0.189	0.7	0.06	0.015	0.123	0.08	0.1	0.23	0.29
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	62	3.	4.174	13.	0.5	8.181	2.86	1.36	2.	6.	8.35
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	44	140.	132.227	162.	50.	663.017	25.749	88.5	121.	148.	160.
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	31	11.	11.113	20.	2.5	15.595	3.949	6.2	8.	13.	17.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	31	13.	12.613	23.	7.	6.978	2.642	9.	12.	14.	14.
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-07/07/82	10##	5.	11.05	50.	0.5	214.358	14.641	0.95	5.	12.5	47.
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-07/07/82	10##	5.	7.	20.	5.	23.333	4.83	5.	5.	6.25	19.
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-07/07/82	10##	3.5	5.1	20.	1.	35.878	5.99	1.	1.	6.25	19.
01092	ZINC, TOTAL (UG/L AS ZN)	05/15/69-07/07/82	9	10.	15.	60.	5.	306.25	17.5	5.	5.	15.	60.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	80	200.	1046.25	8000.	50.	4073150.316	2018.205	50.	100.	775.	4330.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	80	2.301	2.482	3.903	1.699	0.422	0.649	1.699	2.	2.889	3.633
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				303.705								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	15	0.8	0.903	2.1	0.05	0.484	0.696	0.08	0.4	1.8	1.98
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	41	0.11	0.367	2.099	0.02	0.294	0.542	0.042	0.065	0.365	1.499
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-07/07/82	10##	0.25	0.255	0.5	0.15	0.009	0.096	0.15	0.225	0.25	0.475

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	114	7.2	7.619	19.8	0.5	12.624	3.553	3.	5.425	10.	12.45
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	37	212.	216.649	363.	92.	5835.345	76.389	124.	152.5	266.5	341.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	41	189.	201.561	364.	108.	4010.452	63.328	125.2	155.	234.5	299.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	33	12.	12.127	15.9	9.3	2.043	1.429	10.46	11.15	13.	14.02
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	82	11.5	11.241	14.9	5.8	3.194	1.787	8.69	10.275	12.6	13.27
00310p	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	94	1.	2.278	25.	0.5	11.551	3.399	0.5	1.	2.	4.7
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	78	5.	7.891	152.	0.5	293.92	17.144	1.	2.5	9.	14.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	113	7.8	7.802	9.5	5.8	0.386	0.621	7.04	7.4	8.295	8.53
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	113	7.8	7.322	9.5	5.8	0.618	0.786	7.04	7.4	8.295	8.53
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	113	0.016	0.048	1.585	0.	0.024	0.154	0.003	0.005	0.04	0.092
00403p	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	62	7.6	7.547	8.6	6.6	0.227	0.477	6.9	7.175	7.9	8.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403p	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	62	7.6	7.307	8.6	6.6	0.285	0.534	6.9	7.175	7.9	8.2
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	62	0.025	0.049	0.251	0.003	0.003	0.053	0.006	0.013	0.067	0.126
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	62	71.5	76.161	156.	26.	943.646	30.719	38.3	55.	91.5	131.
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	49	165.	180.673	504.	75.	6313.016	79.454	100.	132.	206.5	265.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	49	39.	51.776	218.	17.	1185.136	34.426	26.	30.5	68.5	85.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	49	119.	126.551	326.	13.	3404.003	58.344	62.	91.	150.	195.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	114	3.	16.009	860.	0.5	6587.385	81.163	1.5	2.	8.25	18.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	114 ##	2.	5.456	145.	0.	223.989	14.966	0.5	1.5	3.	9.5
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	113	2.5	11.451	715.	0.	4551.955	67.468	1.	1.5	4.	10.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	102 ##	0.05	0.197	4.	0.005	0.206	0.453	0.02	0.02	0.143	0.6
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	102	0.01	0.036	0.89	0.005	0.011	0.103	0.005	0.005	0.02	0.07
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	100	1.294	1.354	3.38	0.01	0.249	0.499	0.9	1.06	1.55	1.979
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	103	0.2	0.502	6.5	0.05	0.807	0.898	0.1	0.2	0.4	1.219
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	78	0.1	0.136	2.6	0.05	0.084	0.29	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	45	0.08	0.095	0.26	0.02	0.003	0.058	0.04	0.055	0.11	0.178
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	74	3.	4.069	33.	0.5	19.03	4.362	1.	1.4	5.	8.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	56	81.	87.786	177.	29.	1027.953	32.062	53.6	66.75	102.	144.6
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	43	7.	7.616	15.	2.5	8.962	2.994	3.4	6.	9.	12.6
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	43	10.	10.581	16.	6.	4.297	2.073	8.	9.	12.	14.
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-07/07/82	8	20.	102.5	620.	10.	44592.857	211.17	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-07/07/82	8 ##	7.5	7.5	10.	5.	7.143	2.673	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-07/07/82	8 ##	5.	7.375	20.	4.	29.411	5.423	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/15/69-07/07/82	8 ##	7.5	11.25	30.	5.	83.929	9.161	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	107	200.	2798.598	119000.	50.	187188229.148	13681.675	50.	50.	700.	2400.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	107	2.301	2.405	5.076	1.699	0.534	0.731	1.699	1.699	2.845	3.379
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	107	2.301	2.405	5.076	1.699	0.534	0.731	1.699	1.699	2.845	3.379
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	24	0.45	0.727	4.2	0.05	0.837	0.915	0.05	0.2	0.775	1.95
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	58	0.055	0.205	1.5	0.005	0.112	0.335	0.02	0.02	0.248	0.61
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-07/07/82	8 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-12/07/98	91	16.	15.565	23.5	6.7	17.998	4.242	9.84	12.	19.	21.48
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-06/15/89	34	185.	193.618	423.	98.	5149.274	71.758	108.5	135.5	245.	281.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/06/89-12/07/98	24	205.	205.208	310.	101.	3827.476	61.867	120.5	149.	259.5	281.5
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/07/98	20	9.9	10.11	12.5	7.8	1.923	1.387	8.21	9.025	11.4	11.99
00300	OXYGEN, DISSOLVED MG/L	07/16/68-04/01/92	70	9.8	9.4	15.	3.8	4.728	2.174	6.14	8.	10.85	12.18
00310p	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-12/07/98	73	1.6	1.9	7.	0.5	2.011	1.418	1.	1.	2.	3.84
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/07/98	59	6.	6.754	25.	0.5	23.529	4.851	2.	3.	9.	12.
00400p	PH (STANDARD UNITS)	07/16/68-12/07/98	90	7.8	7.856	9.	6.7	0.228	0.477	7.2	7.6	8.2	8.5
00400p	CONVERTED PH (STANDARD UNITS)	07/16/68-12/07/98	90	7.8	7.601	9.	6.7	0.293	0.542	7.2	7.6	8.2	8.5
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/07/98	90	0.016	0.025	0.2	0.001	0.001	0.033	0.003	0.006	0.025	0.063
00403p	PH, LAB, STANDARD UNITS SU	12/05/68-12/07/98	45	7.5	7.562	9.7	6.7	0.263	0.513	7.	7.2	7.8	8.1
00403p	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-12/07/98	45	7.5	7.361	9.7	6.7	0.305	0.552	7.	7.2	7.8	8.1
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-12/07/98	45	0.032	0.044	0.2	0.	0.002	0.04	0.008	0.016	0.063	0.1
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-12/07/98	44	71.5	74.977	120.	29.	708.209	26.612	40.	50.25	102.75	109.5
00500	RESIDUE, TOTAL (MG/L)	12/05/68-08/04/92	38	153.5	157.053	283.	82.	2503.781	50.038	99.7	114.5	189.25	228.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-08/04/92	38	46.5	58.868	400.	15.	3815.09	61.766	23.9	29.5	69.75	98.7
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-08/04/92	38	105.	110.711	292.	33.	2715.563	52.111	55.8	68.75	139.	176.1
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/07/98	83	6.	8.596	90.	0.5	163.698	12.794	2.	2.5	9.	15.2
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/07/98	83	2.5	3.211	20.	0.	7.714	2.777	1.	1.5	4.	6.6
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/07/98	83	3.	8.392	200.	0.	560.659	23.678	1.	2.	6.	14.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/07/98	78 ##	0.05	0.16	2.699	0.02	0.126	0.355	0.02	0.035	0.1	0.4
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	81	0.03	0.043	0.21	0.005	0.002	0.05	0.005	0.01	0.05	0.12

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

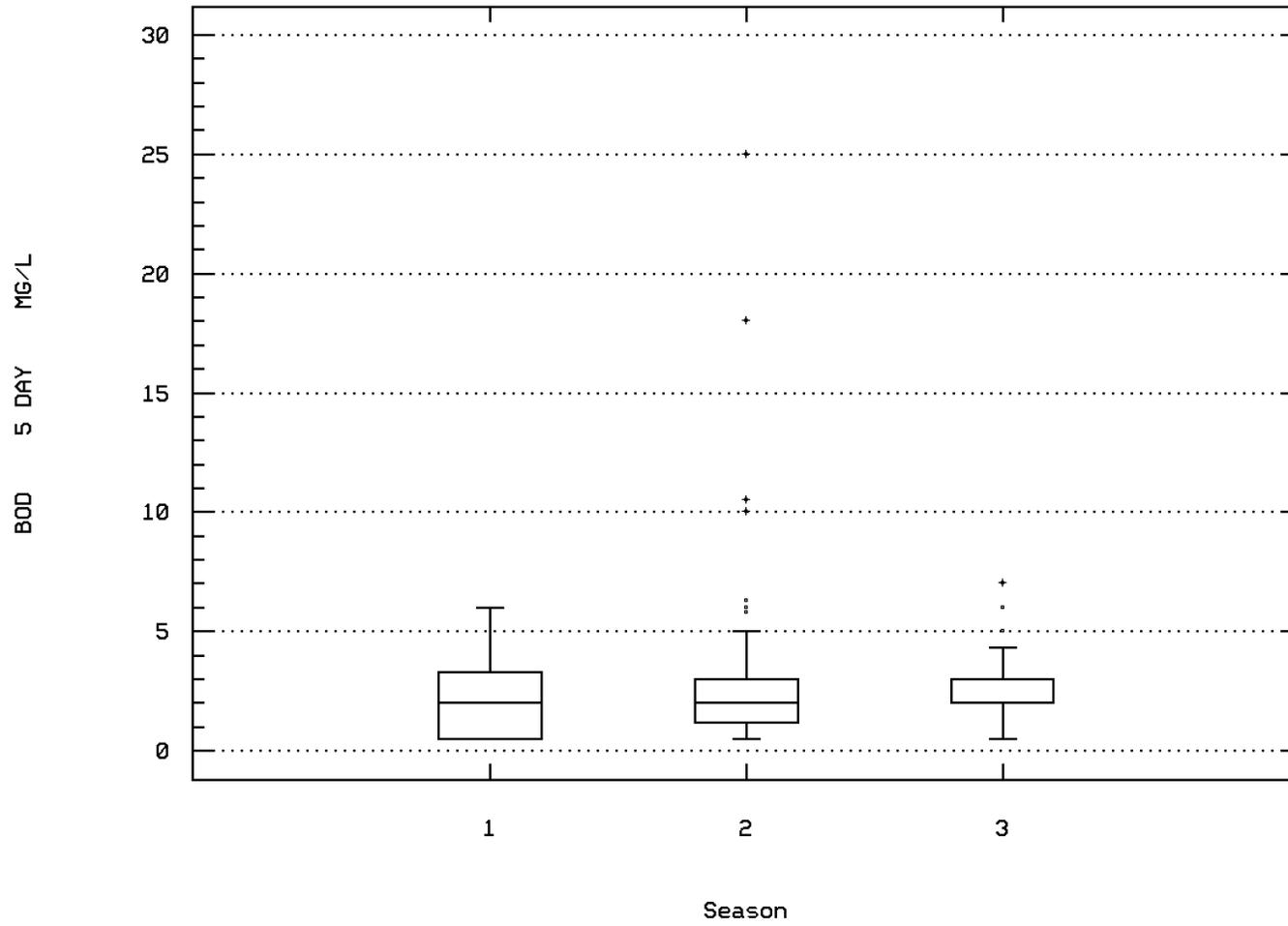
Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0635

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/07/98	80	1.055	1.113	2.5	0.24	0.148	0.385	0.732	0.83	1.308	1.69
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/07/98	78	0.3	0.467	3.699	0.05	0.271	0.521	0.19	0.2	0.5	0.9
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/07/98	57	0.1	0.129	0.6	0.05	0.01	0.1	0.05	0.05	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	40	0.07	0.103	0.5	0.02	0.01	0.101	0.03	0.033	0.138	0.219
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/05/96	64	3.	3.934	17.	0.5	7.352	2.711	1.6	2.	5.	8.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-12/07/98	40	75.5	81.7	126.	40.	580.933	24.103	50.	60.	103.	119.2
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/07/98	27	6.	6.759	13.	2.5	7.776	2.789	2.5	5.	8.	12.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/07/98	27	10.	9.926	13.	7.	2.84	1.685	7.8	9.	11.	12.
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-07/07/82	10	20.	24.5	100.	5.	735.833	27.126	5.5	10.	20.	92.
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-07/07/82	9##	5.	8.889	20.	5.	42.361	6.509	5.	5.	15.	20.
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-07/07/82	8##	5.	4.563	5.	1.5	1.531	1.237	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/15/69-07/07/82	10##	5.	7.	20.	5.	23.333	4.83	5.	5.	6.25	19.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	79	400.	2055.063	80000.	50.	82579525.316	9087.328	50.	100.	1000.	4000.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/17/70-12/07/98	79	2.602	2.57	4.903	1.699	0.471	0.686	1.699	2.	3.	3.602
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			371.276								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	20	0.3	0.529	2.6	0.025	0.357	0.597	0.055	0.2	0.825	1.18
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/07/98	40	0.095	0.271	2.599	0.01	0.215	0.463	0.021	0.04	0.283	0.8
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-07/07/82	6##	0.25	0.325	0.7	0.25	0.034	0.184	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0635 Parameter Code: 00310

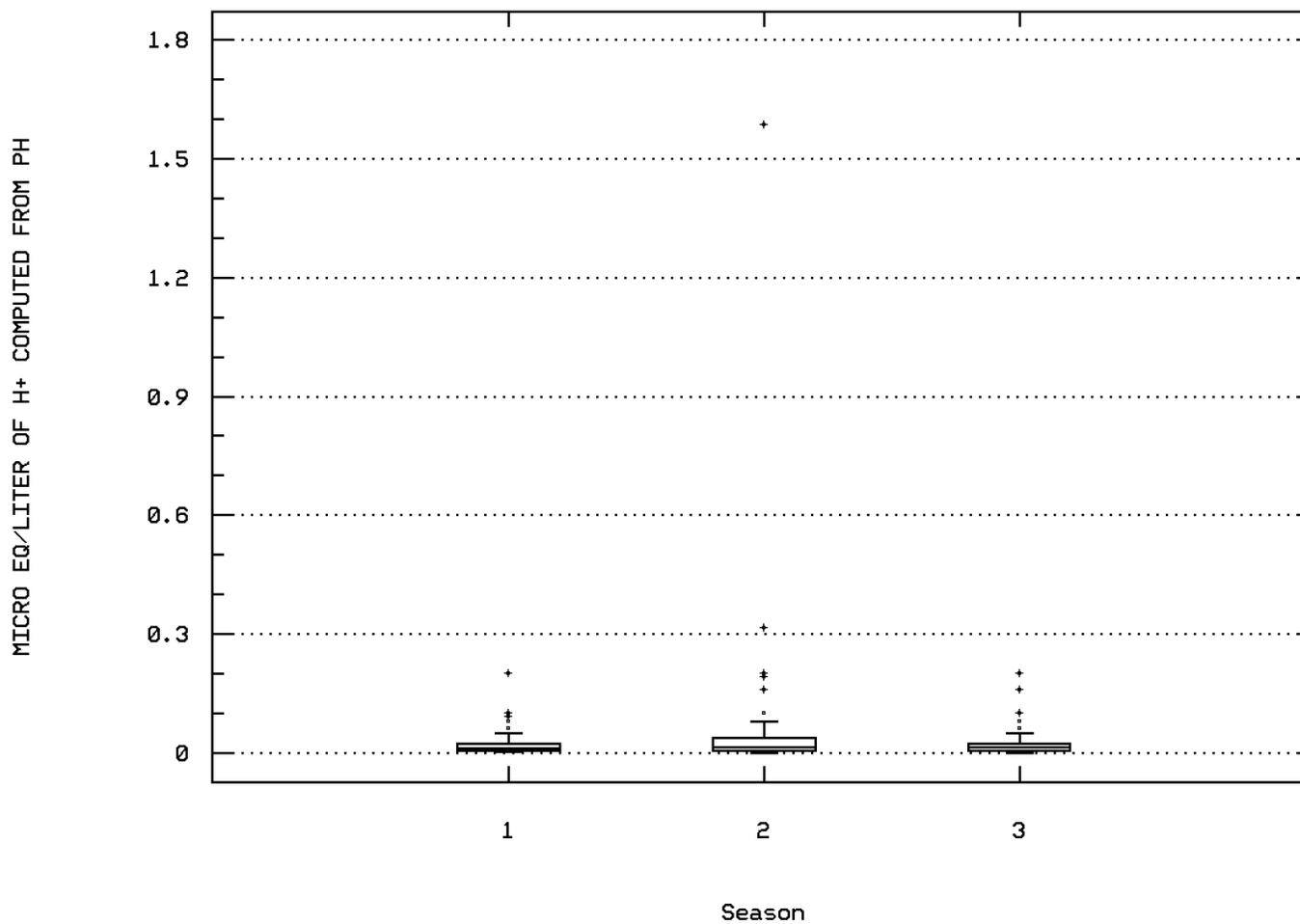
BOD, 5 DAY, 20 DEG C



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00400

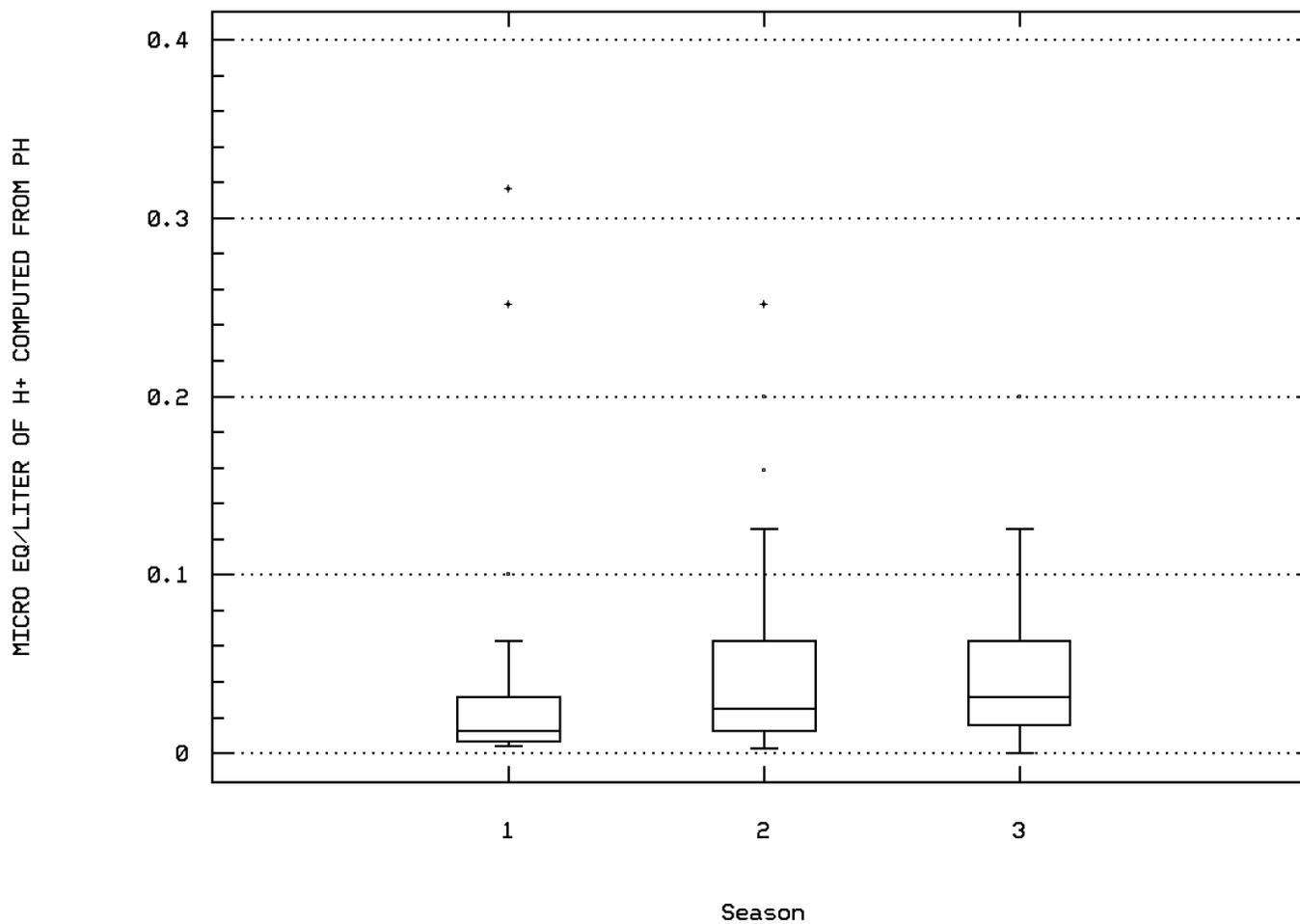
MICRO EQ/LITER OF H+ COMPUTED FROM PH



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00403

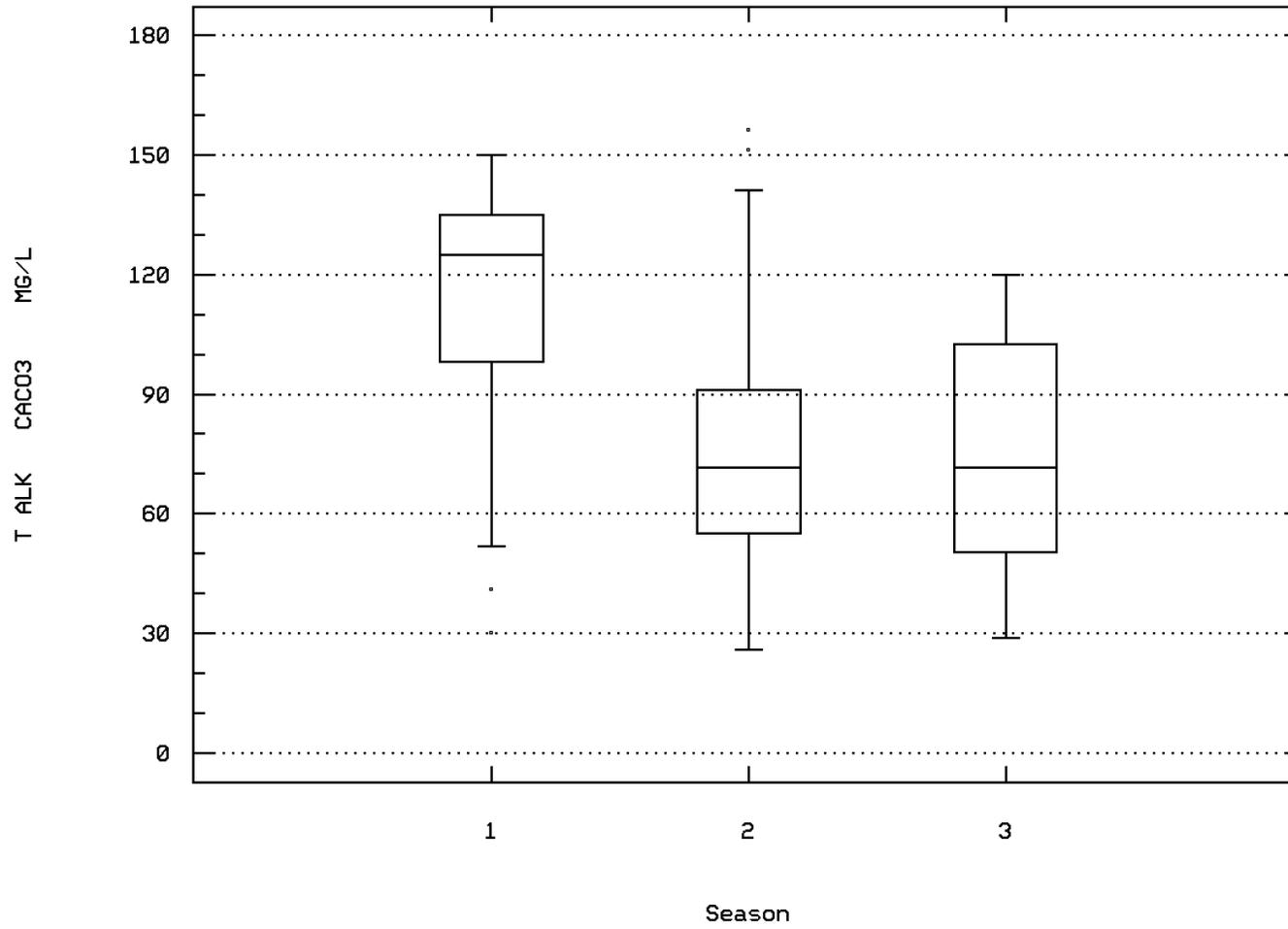
MICRO EQ/LITER OF H+ COMPUTED FROM PH



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00410

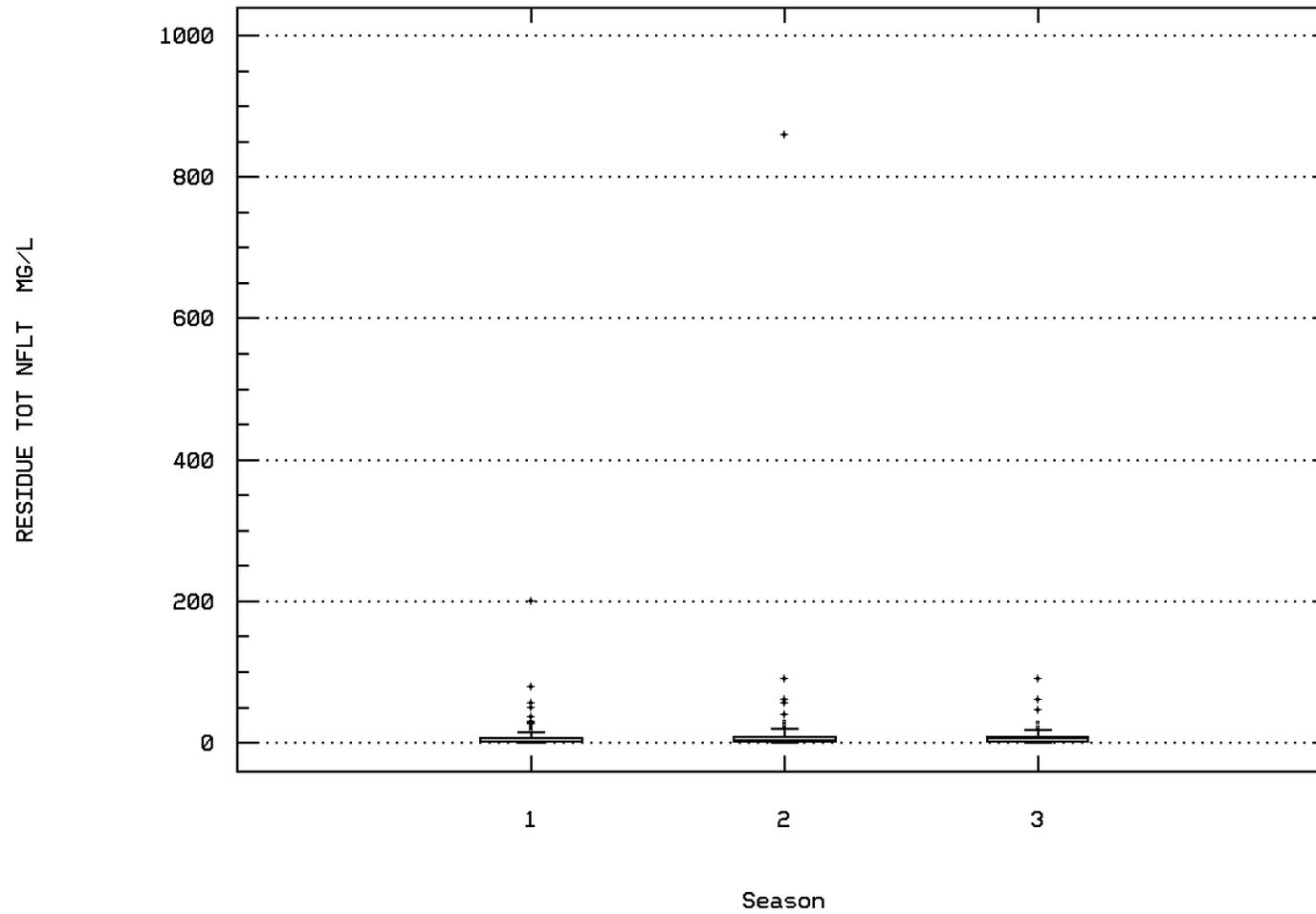
ALKALINITY, TOTAL (MG/L AS CaCO3)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00530

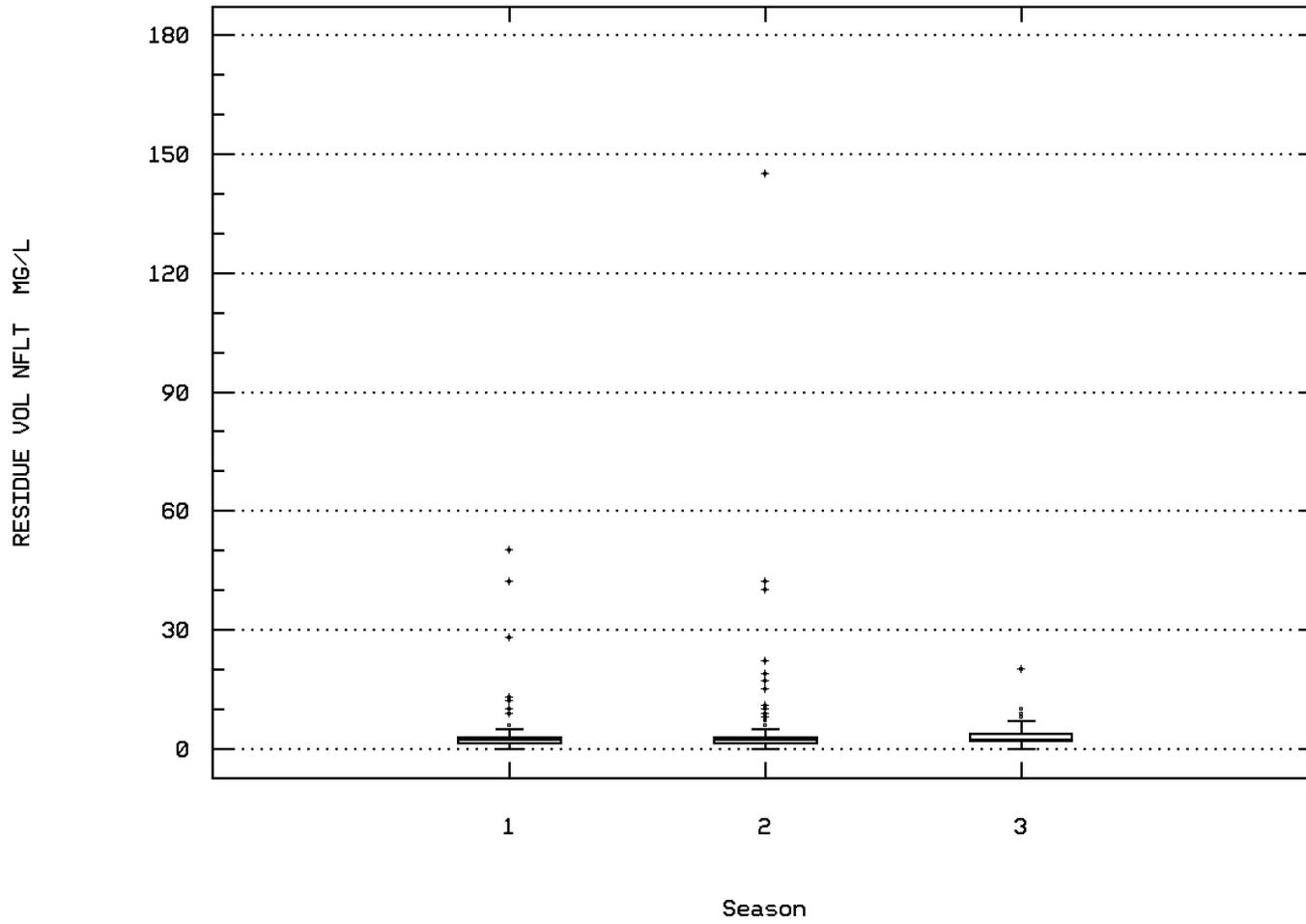
RESIDUE, TOTAL NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00535

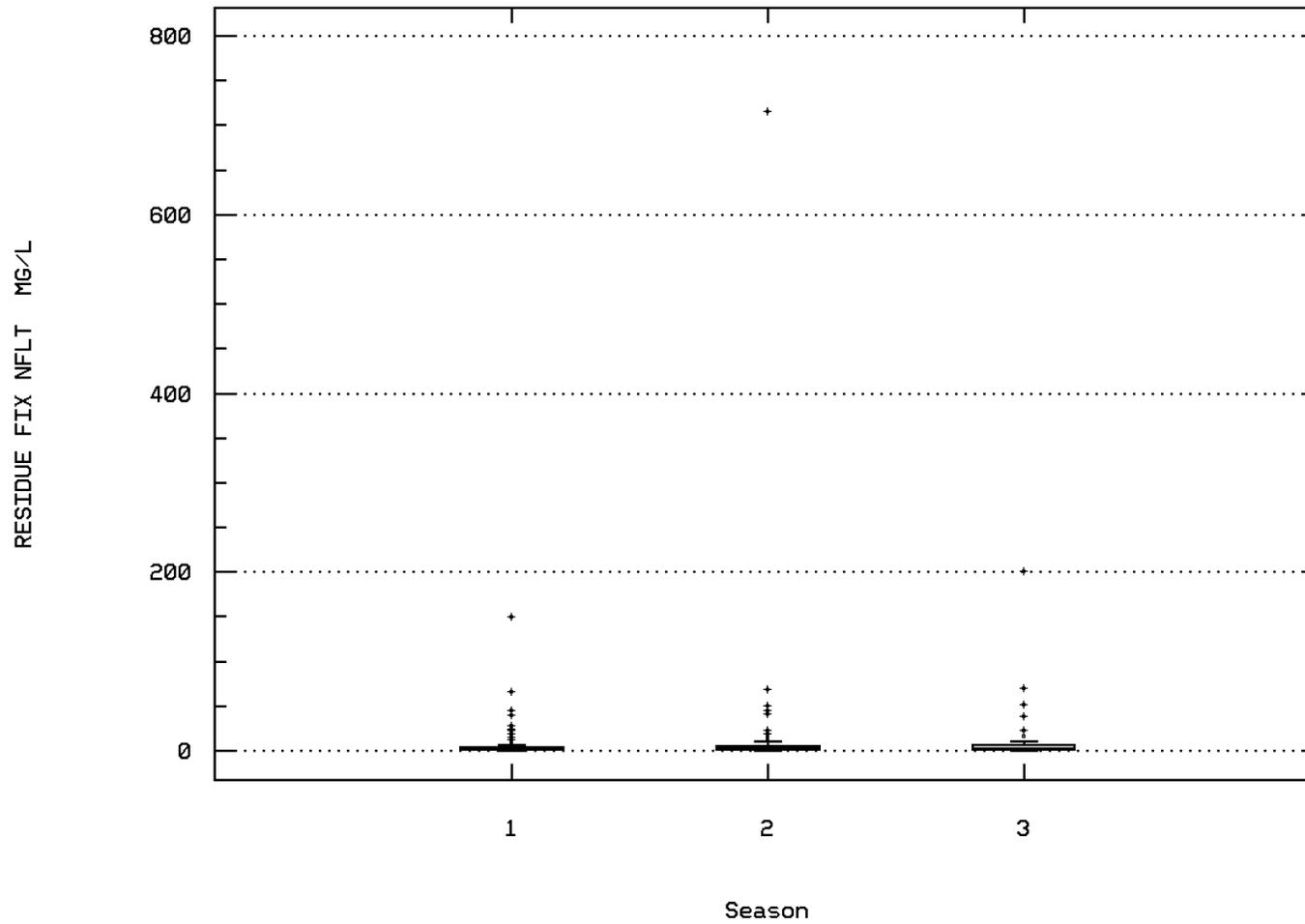
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00540

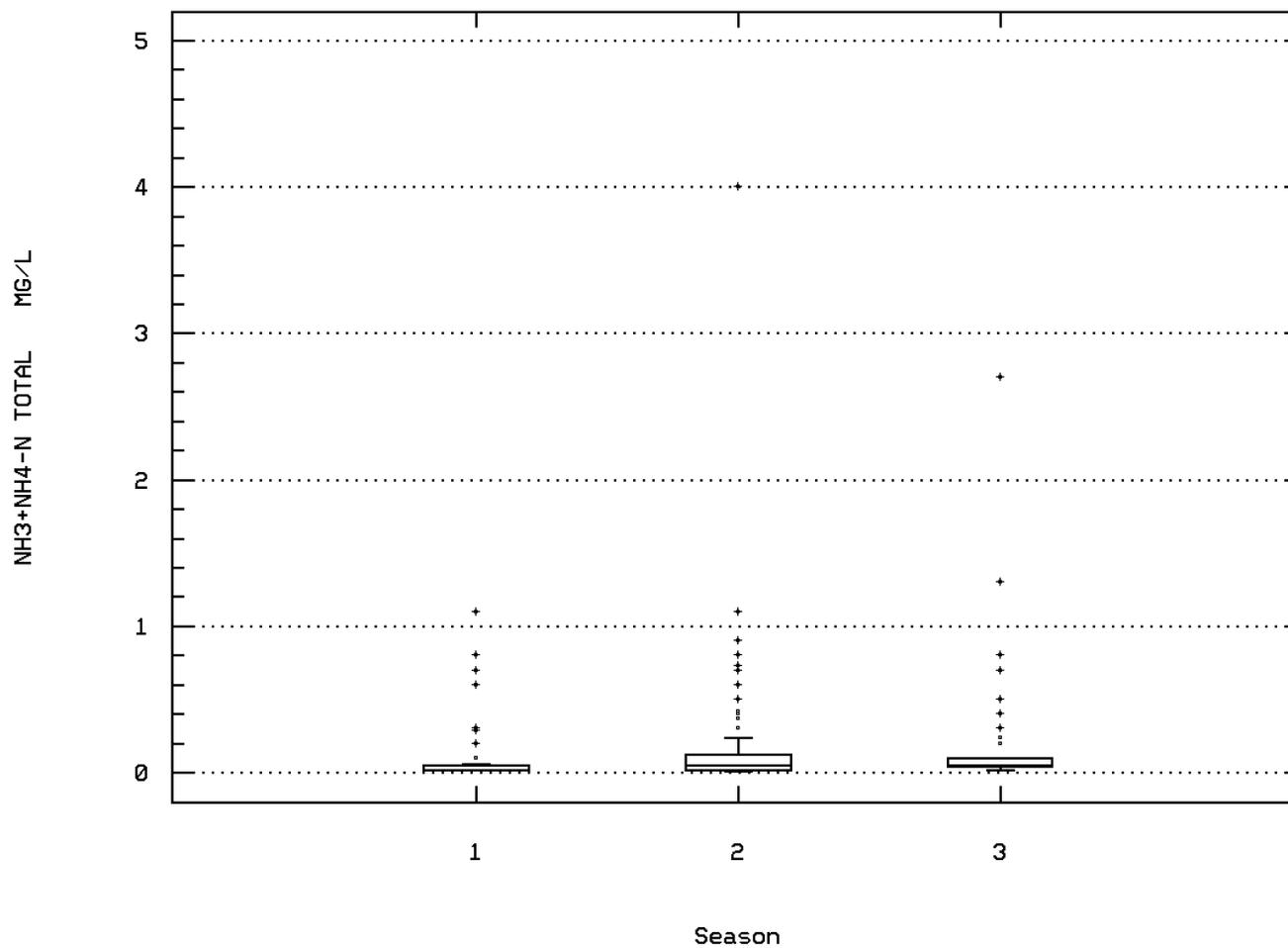
RESIDUE, FIXED NONFILTRABLE (MG/L)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00610

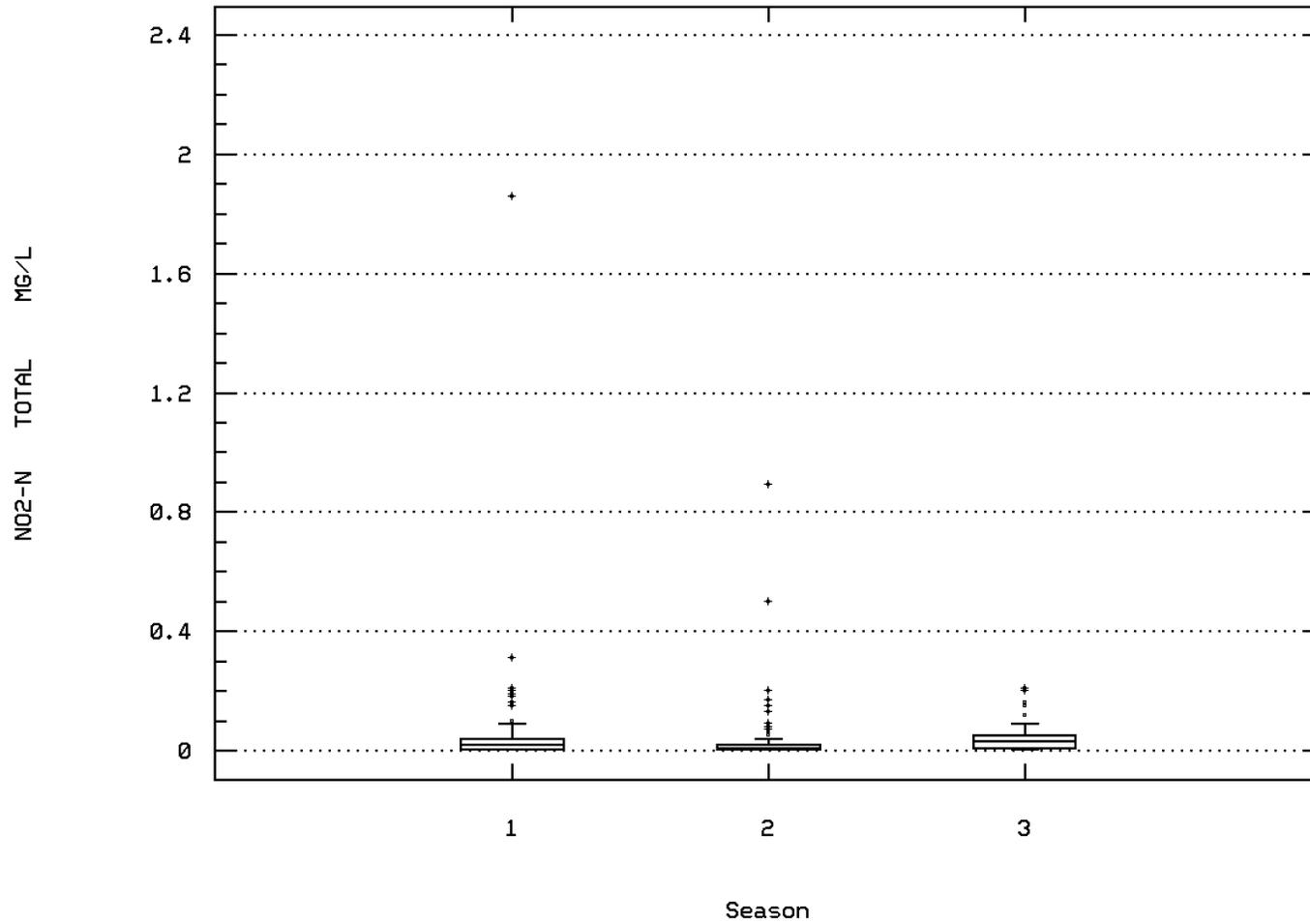
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00615

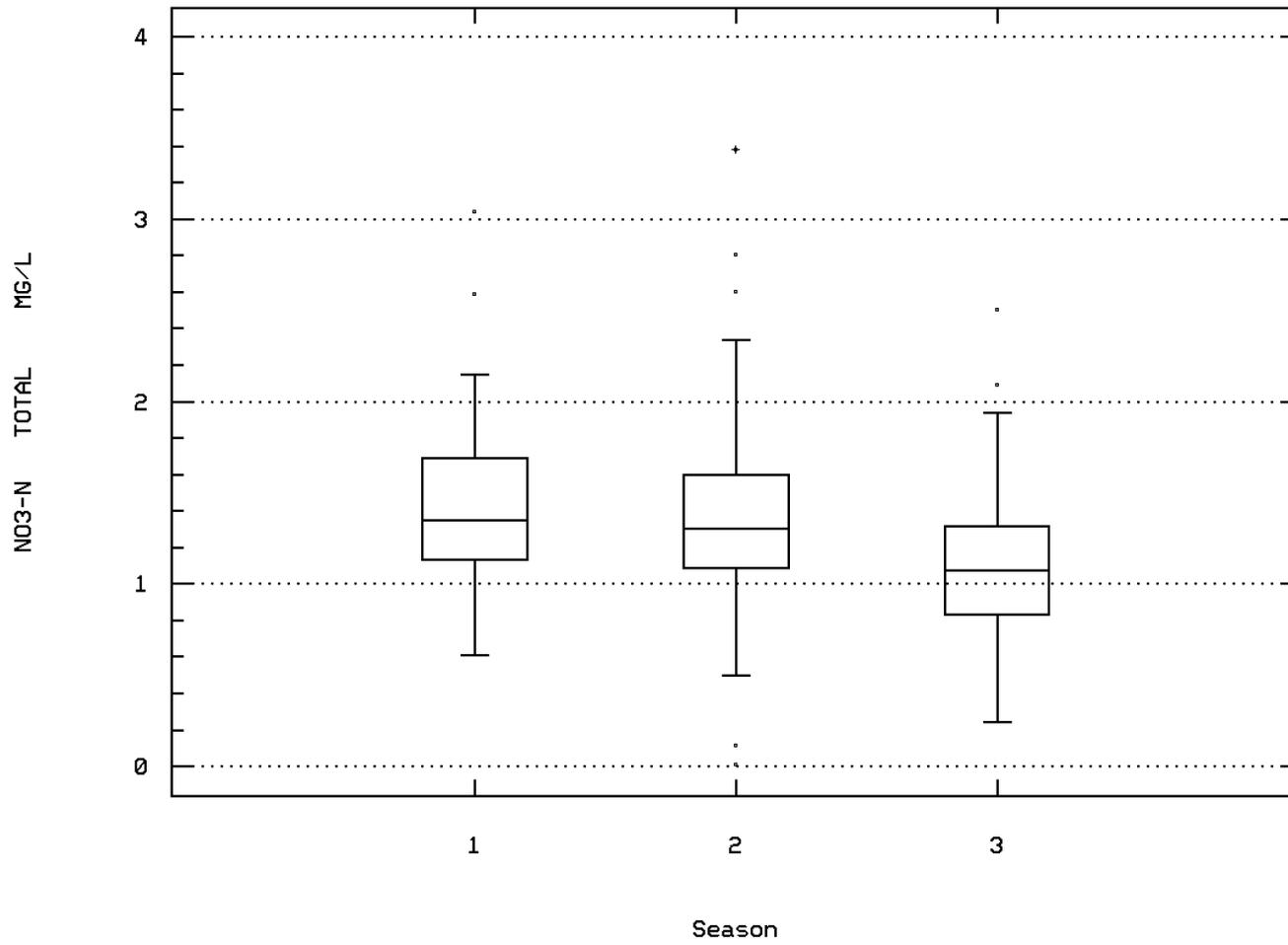
NITRITE NITROGEN, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00620

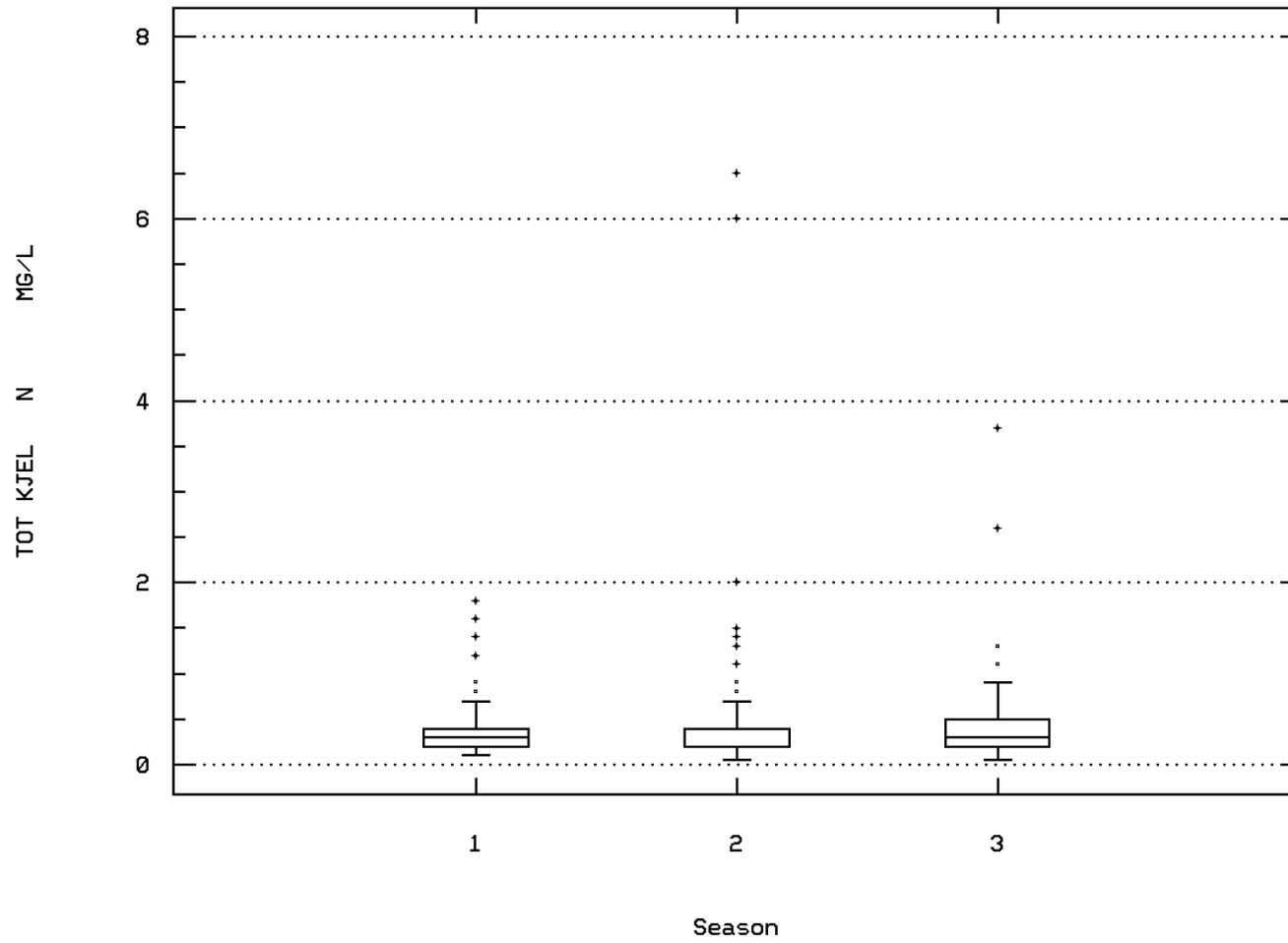
NITRATE NITROGEN, TOTAL (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 00625

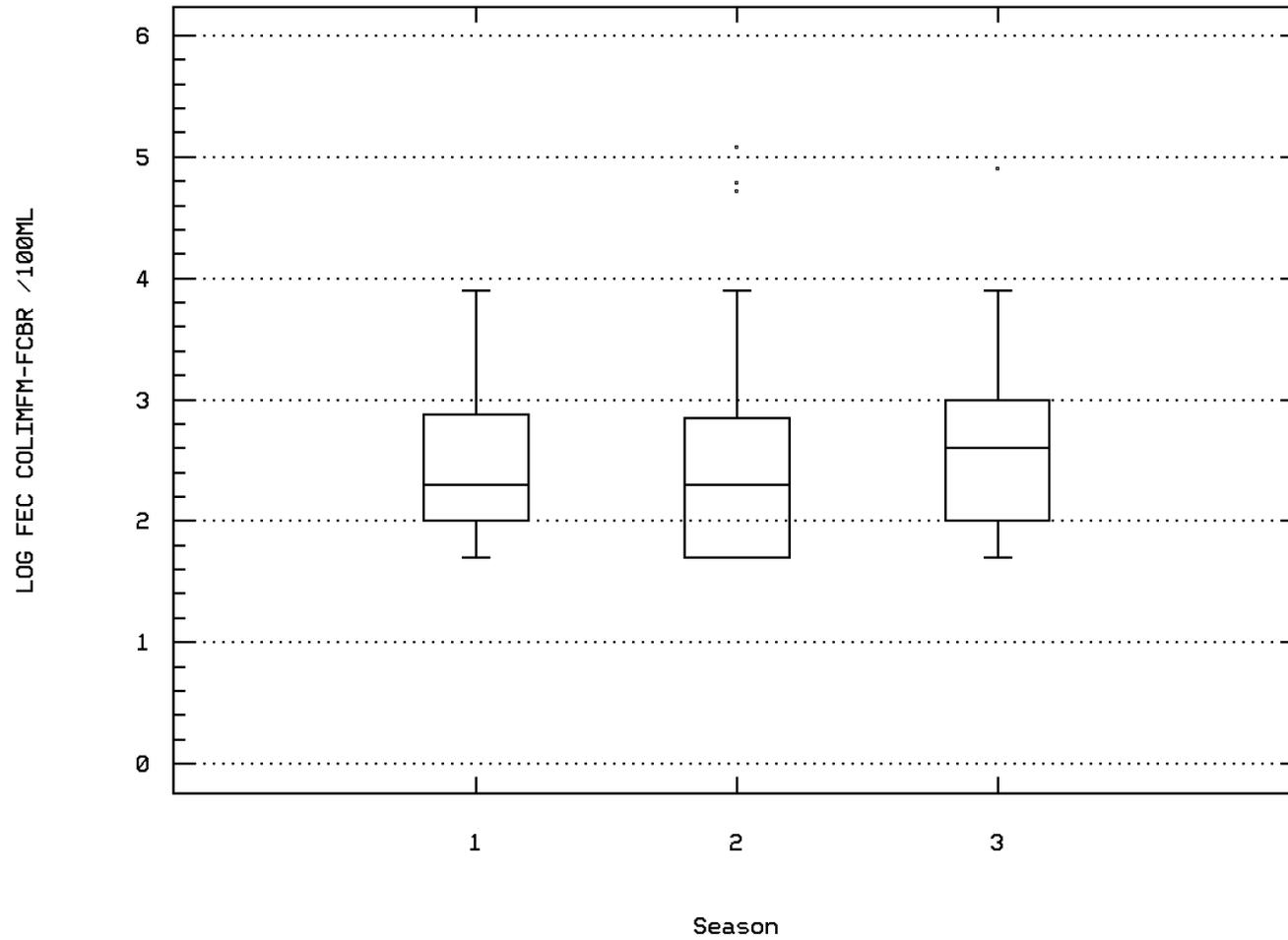
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 31616

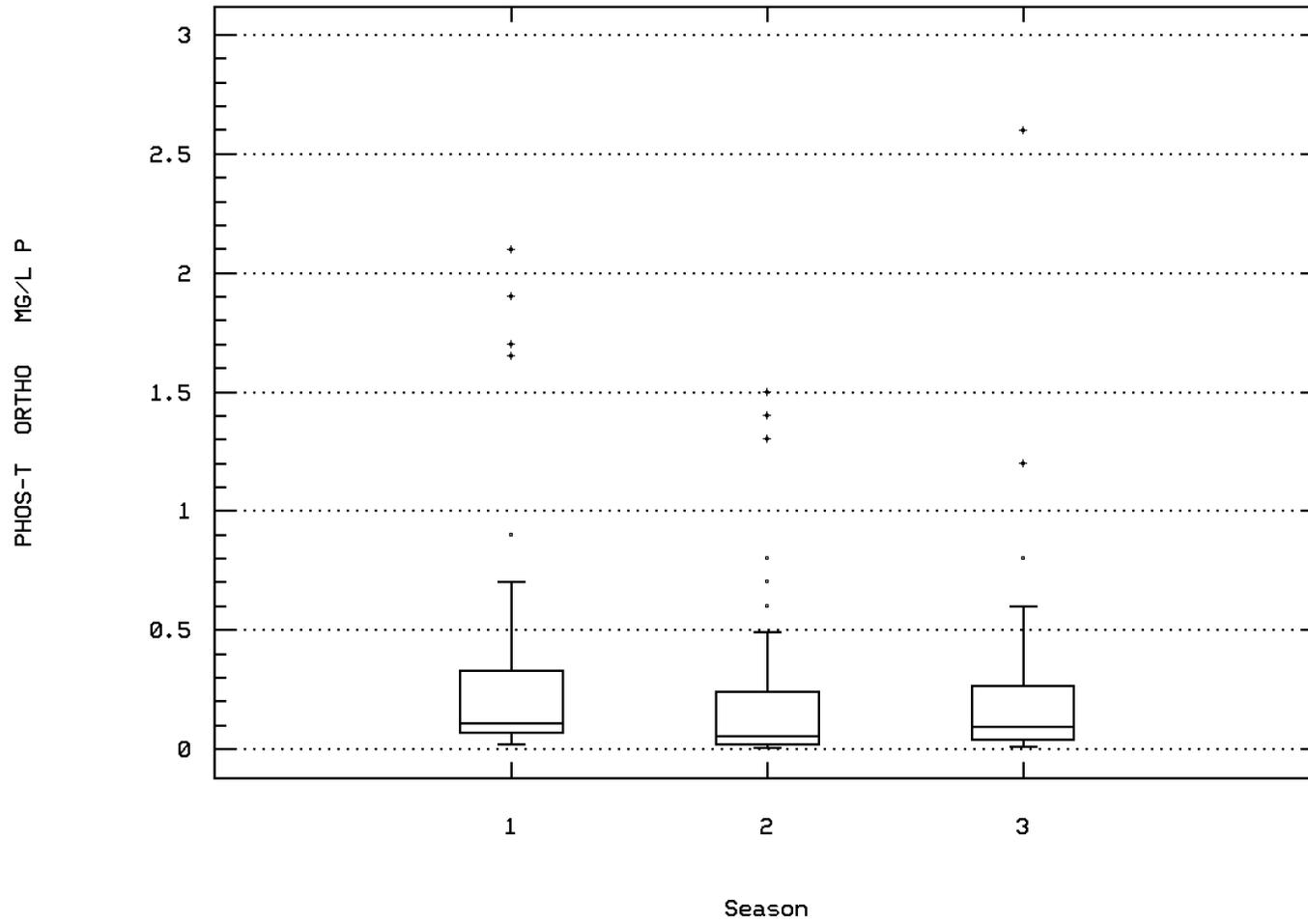
LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



ROUTE 648 BRIDGE BELOW LURAY

Station: SHEN0635 Parameter Code: 70507

PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



ROUTE 648 BRIDGE BELOW LURAY

Station Inventory for Station: SHEN0636

NPS Station ID: SHEN0636
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.708670/ -78.295726

Depth of Water: 0
 Elevation: 1360
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH30
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH30 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.85 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0636

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	52.	52.	52.	52.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.129	0.129	0.129	0.129	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	49.	49.	49.	49.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.91	1.91	1.91	1.91	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	14.5	14.5	14.5	14.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0636

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0637

NPS Station ID: SHEN0637
 Location: North Fork Thornton River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.708698/ -78.300948

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1FVA3
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0637

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/21/97-07/14/98	2	18.55	18.55	18.6	18.5	0.005	0.071	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/21/97-07/14/98	2	50.	50.	50.	50.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	07/21/97-07/14/98	2	7.85	7.85	8.2	7.5	0.245	0.495	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	07/21/97-07/14/98	2	6.97	6.97	7.	6.94	0.002	0.042	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	07/21/97-07/14/98	2	6.969	6.969	7.	6.94	0.002	0.042	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/21/97-07/14/98	2	0.107	0.107	0.115	0.1	0.	0.01	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/14/98-07/14/98	1	32.	32.	32.	32.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	07/21/97-07/14/98	2	6.45	6.45	7.3	5.6	1.445	1.202	**	**	**	**
83509 STREAM, WIDTH METER	07/21/97-07/14/98	2	3.9	3.9	4.1	3.7	0.08	0.283	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	07/21/97-07/14/98	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0637

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0	0.00	2	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	2	0	0	0.00	2	0	0.00									
	Other-Lo Lim.	6.5	2	0	0	0.00	2	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0638

NPS Station ID: SHEN0638
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.708837/ -78.302226

Depth of Water: 0
 Elevation: 1440
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH28
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH28 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.41 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0638

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	44.	44.	44.	44.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.11	7.11	7.11	7.11	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.11	7.11	7.11	7.11	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.078	0.078	0.078	0.078	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	-2.2	-2.2	-2.2	-2.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.03	2.03	2.03	2.03	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	13.2	13.2	13.2	13.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0638

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0639

NPS Station ID: SHEN0639
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.708920/ -78.343476

Depth of Water: 0
 Elevation: 1330
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR14
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR14 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.35 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0639

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.501	0.501	0.501	0.501	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	136.1	136.1	136.1	136.1	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.78	0.78	0.78	0.78	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.83	0.83	0.83	0.83	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.51	0.51	0.51	0.51	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0639

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0640

NPS Station ID: SHEN0640
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.709420/ -78.342142

Depth of Water: 0
 Elevation: 1330
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR13
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR13 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.62 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0640

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.37	6.37	6.37	6.37	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.37	6.37	6.37	6.37	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.427	0.427	0.427	0.427	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	146.1	146.1	146.1	146.1	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.71	0.71	0.71	0.71	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.75	0.75	0.75	0.75	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	4.8	4.8	4.8	4.8	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.43	0.43	0.43	0.43	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0640

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0641

NPS Station ID: SHEN0641
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.709587/ -78.275531

Depth of Water: 0
 Elevation: 1320
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P105
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P105 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.86 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0641

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	6	11.25	11.583	16.	6.	15.442	3.93	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	6	36.5	37.833	43.	35.	11.367	3.371	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	6	6.925	6.907	7.1	6.68	0.021	0.144	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	6	6.925	6.886	7.1	6.68	0.021	0.146	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	6	0.119	0.13	0.209	0.079	0.002	0.045	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	6	35.	36.833	42.	34.	13.767	3.71	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	6	205.55	202.633	344.2	105.7	6937.751	83.293	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	6	2.85	2.967	3.5	2.5	0.167	0.408	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	6	1.5	1.517	1.7	1.3	0.03	0.172	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	6	1.695	1.738	1.95	1.56	0.031	0.177	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	6	0.24	0.235	0.26	0.2	0.001	0.025	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	6	1.	0.967	1.	0.9	0.003	0.052	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	6	2.9	3.1	3.9	2.7	0.216	0.465	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	6	12.25	12.633	15.1	10.5	2.951	1.718	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	6	0.225	1.344	4.1	0.007	3.676	1.917	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	6	0.12	0.13	0.21	0.08	0.002	0.046	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0641

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	6	2	0.33	1	1	1.00	2	1	0.50	3	0	0.00			
	Fresh Acute	860.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0642

NPS Station ID: SHEN0642
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.709698/ -78.301615

Depth of Water: 0
 Elevation: 1400
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH27
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TH27 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.68 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0642

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	46.	46.	46.	46.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.059	0.059	0.059	0.059	0.	0.	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	-3.1	-3.1	-3.1	-3.1	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.09	2.09	2.09	2.09	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	13.1	13.1	13.1	13.1	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0642

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0643

NPS Station ID: SHEN0643
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.710254/ -78.355588

 Depth of Water: 0
 Elevation: 1090

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR18
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

On/Off RF1:
 On/Off RF3:

STATION JR18 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.25 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0643

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.398	0.398	0.398	0.398	0.	0.	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	38.7	38.7	38.7	38.7	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.63	0.63	0.63	0.63	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	1.06	1.06	1.06	1.06	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0643

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0644

NPS Station ID: SHEN0644
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.710615/ -78.276365

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1F005
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0644

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/95-05/22/95	1	12.5	12.5	12.5	12.5	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-05/22/95	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/22/95-05/22/95	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/22/95-05/22/95	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/22/95-05/22/95	1	6.77	6.77	6.77	6.77	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/95-05/22/95	1	0.17	0.17	0.17	0.17	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-05/22/95	1	23.	23.	23.	23.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0644

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00							1	0	0.00						
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00							1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0	0.00							1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0645

NPS Station ID: SHEN0645
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.711309/ -78.354781

Depth of Water: 0
 Elevation: 1090
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR17
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR17 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 15.79 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0645

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.98	6.98	6.98	6.98	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.98	6.98	6.98	6.98	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.105	0.105	0.105	0.105	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	134.5	134.5	134.5	134.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.52	1.52	1.52	1.52	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.3	9.3	9.3	9.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0645

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0646

NPS Station ID: SHEN0646
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.711338/ -78.356615

 Depth of Water: 0
 Elevation: 1100

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR21
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

On/Off RF1:
 On/Off RF3:

STATION JR21 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0646

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.98	6.98	6.98	6.98	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.98	6.98	6.98	6.98	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.105	0.105	0.105	0.105	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	17.5	17.5	17.5	17.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.48	1.48	1.48	1.48	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0646

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0647

NPS Station ID: SHEN0647
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.711476/ -78.368587

Depth of Water: 0
 Elevation: 1080
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR05
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR05 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 20.11 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0647

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.24	7.24	7.24	7.24	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.24	7.24	7.24	7.24	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.058	0.058	0.058	0.058	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	165.4	165.4	165.4	165.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.47	1.47	1.47	1.47	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.53	0.53	0.53	0.53	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0647

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0648

NPS Station ID: SHEN0648
 Location: Jeremys Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.711642/ -78.359227

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_1F008
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0648

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/08/94-08/08/94	4	13.95	14.85	17.6	13.9	3.363	1.834	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/08/94-08/08/94	3	11.	11.	11.	11.	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/08/94-08/08/94	3	7.67	7.63	7.74	7.48	0.018	0.135	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/08/94-08/08/94	3	7.67	7.616	7.74	7.48	0.018	0.136	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/08/94-08/08/94	3	0.021	0.024	0.033	0.018	0.	0.008	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0648

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00					
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0649

NPS Station ID: SHEN0649
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.711726/ -78.358420

Depth of Water: 0
 Elevation: 1140
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR06
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR06 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 18.15 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0649

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.95	6.95	6.95	6.95	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.95	6.95	6.95	6.95	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.112	0.112	0.112	0.112	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	176.9	176.9	176.9	176.9	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.46	1.46	1.46	1.46	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.54	0.54	0.54	0.54	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0649

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0650

NPS Station ID: SHEN0650
 Location: Jeremys Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.712005/ -78.370643

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_1F007
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0650

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/08/94-07/27/98	4	19.2	19.375	20.6	18.5	0.803	0.896	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/06/96-07/27/98	3	41.	43.	48.	40.	19.	4.359	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/06/96-07/27/98	3	8.1	9.367	12.1	7.9	5.613	2.369	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/06/96-07/27/98	3	7.01	7.123	7.47	6.89	0.094	0.306	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/06/96-07/27/98	3	7.01	7.061	7.47	6.89	0.099	0.315	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/06/96-07/27/98	3	0.098	0.087	0.129	0.034	0.002	0.048	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/27/98-07/27/98	1	30.	30.	30.	30.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	08/06/96-07/27/98	3	3.55	2.957	3.82	1.5	1.61	1.269	**	**	**	**
83509 STREAM, WIDTH METER	08/06/96-07/27/98	3	4.5	4.833	5.6	4.4	0.443	0.666	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	08/06/96-07/27/98	3	0.03	0.03	0.05	0.01	0.	0.02	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0650

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00									
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0651

NPS Station ID: SHEN0651
 Location: ROUTES 211/522 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANOCK
 RF1 Index: 02080103
 RF3 Index: 02080103002500.00
 Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: RUSH RIVER

LAT/LON: 38.712504/ -78.151392

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 0.14

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANOCK
 STORET Station ID(s): 3-RUS005.66
 Within Park Boundary: No

Date Created: 08/18/90

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.40
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

AMBIENT MONITORING BASIN: 3 RAPPAHANOCK REGION: 3 NORTHERN VIRGINIA
 SECTION: 04 TOPO MAP #: 0074 TOPO MAP NAME: WASHINGTON, VA

Parameter Inventory for Station: SHEN0651

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/19/90-04/22/98	25	11.7	12.256	25.	2.2	46.958	6.853	4.42	6.05	17.65	22.6
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/19/90-12/14/93	6	0.75	1.017	2.1	0.5	0.426	0.652	**	**	**	**
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	12/20/94-04/22/98	13	2.2	4.062	29.	0.1	57.333	7.572	0.38	1.05	3.1	18.92
00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/01/93	8	8.	8.875	16.	4.	15.554	3.944	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/18/91-04/22/98	22	72.	83.273	160.	58.	647.255	25.441	61.9	70.75	91.	133.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11/19/90-04/22/98	26	71.	75.577	162.	28.	680.094	26.079	54.9	61.	77.	108.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	02/20/92-04/22/98	22	10.95	10.823	13.9	7.8	2.862	1.692	8.66	9.375	12.275	13.3
00300	OXYGEN, DISSOLVED MG/L	11/19/90-06/13/91	3	12.	10.9	12.3	8.4	4.71	2.17	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	11/19/90-04/22/98	25	1.	1.124	3.	0.5	0.46	0.678	0.5	0.5	1.65	2.
00340	COD, .25N K2CR2O7 MG/L	11/19/90-04/22/98	25	5.	4.94	12.	0.5	9.548	3.09	1.4	2.5	6.	9.8
00400	PH (STANDARD UNITS)	11/19/90-04/22/98	24	7.2	7.213	7.8	6.4	0.137	0.37	6.6	6.925	7.5	7.65
00400	CONVERTED PH (STANDARD UNITS)	11/19/90-04/22/98	24	7.2	7.045	7.8	6.4	0.166	0.407	6.6	6.925	7.5	7.65
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/90-04/22/98	24	0.063	0.09	0.398	0.016	0.009	0.095	0.023	0.032	0.119	0.258
00403	PH, LAB, STANDARD UNITS SU	11/19/90-04/22/98	26	6.85	6.769	7.7	2.4	0.949	0.974	6.34	6.6	7.225	7.6
00403	CONVERTED PH, LAB, STANDARD UNITS	11/19/90-04/22/98	26	6.847	3.815	7.7	2.4	10.028	3.167	6.34	6.6	7.225	7.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/90-04/22/98	26	0.142	153.276	3981.072	0.02	609524.16	780.72	0.025	0.06	0.251	0.468
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	26	22.5	24.077	66.	7.	186.634	13.661	14.	15.75	26.	45.4
00500	RESIDUE, TOTAL (MG/L)	11/19/90-04/22/98	25	54.	58.44	110.	27.	363.673	19.07	39.2	45.	69.5	88.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/19/90-04/22/98	24	12.	15.25	38.	6.	66.283	8.141	6.5	11.	19.75	29.5
00510	RESIDUE, TOTAL FIXED (MG/L)	11/19/90-04/22/98	24	39.5	43.167	76.	17.	218.58	14.784	25.	33.	57.	64.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/19/90-04/22/98	26 ##	1.5	2.423	20.	0.5	13.314	3.649	1.5	1.5	1.5	3.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/19/90-04/22/98	26 ##	1.5	1.558	3.	0.5	0.167	0.408	1.5	1.5	1.5	1.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/19/90-04/22/98	26 ##	1.5	2.019	17.	0.5	9.41	3.068	1.2	1.5	1.5	1.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/19/90-04/22/98	26 ##	0.02	0.02	0.02	0.01	0.	0.002	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/19/90-04/22/98	26 ##	0.005	0.007	0.03	0.005	0.	0.006	0.005	0.005	0.005	0.013
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/19/90-04/22/98	26	0.245	0.321	2.1	0.02	0.153	0.391	0.041	0.16	0.418	0.489
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/19/90-04/22/98	26	0.2	0.171	0.5	0.05	0.011	0.105	0.05	0.1	0.2	0.33
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/90-04/22/98	26 ##	0.05	0.058	0.1	0.05	0.	0.018	0.05	0.05	0.05	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11/19/90-12/14/93	6	0.01	0.012	0.03	0.005	0.	0.009	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/19/90-06/17/96	20	1.65	2.12	4.1	0.5	1.404	1.185	0.55	1.225	3.475	3.88
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	25	26.	28.84	68.	10.	151.557	12.311	18.	22.	33.	47.4
00927	MAGNESIUM, TOTAL (MG/L AS MG)	03/01/93-03/01/93	1	1800.	1800.	1800.	1800.	0.	0.	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	11/19/90-04/22/98	25	3.	4.	20.	1.	13.854	3.722	2.3	2.5	4.	7.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0651

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/90-04/22/98	25	6.	5.54	8.	2.	2.623	1.62	2.3	5.	7.
00951	FLUORIDE, TOTAL (MG/L AS F)	11/19/90-03/01/93	9 ##	0.05	0.1	0.25	0.05	0.005	0.071	0.05	0.05	0.15
00955	SILICA, DISSOLVED (MG/L AS SI02)	11/19/90-12/03/92	8	13.75	13.9	16.7	11.7	2.554	1.598	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	03/01/93-03/01/93	1	62.	62.	62.	62.	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01059	THALLIUM, TOTAL (UG/L AS TL)	03/01/93-03/01/93	1 ##	10.	10.	10.	10.	0.	0.	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	03/01/93-03/01/93	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	03/01/93-03/01/93	1 ##	10.	10.	10.	10.	0.	0.	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/13/91-04/22/98	23	120.	287.043	1300.	2.	115970.134	340.544	32.	50.	820.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	06/13/91-04/22/98	23	2.079	2.107	3.114	0.301	0.424	0.651	1.46	1.699	2.911
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			128.083							
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
34671	PCB - 1016 TOTWUG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
38451	DICHLORPROP WATER, SUSPUG/L	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
38745	2,4-DB WATER, TOTUG/L	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39033	ATRAZINE IN WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39340	GAMMA-BHC(LINDANE), WHOLE WATER, UG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER, UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	09/30/93-09/30/93	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
46570	HARDNESS, CA MG CALCULATED (MG/L AS CaCO3)	03/01/93-03/01/93	1	20.	20.	20.	20.	0.	0.	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	06/18/92-04/22/98	20	0.02	0.017	0.03	0.005	0.	0.008	0.005	0.01	0.02
71900	MERCURY, TOTAL (UG/L AS HG)	03/01/93-03/01/93	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
77825	ALACHLOR WHOLE WATER, UG/L	09/30/93-09/30/93	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
82032	CALCIUM - TOTAL UG/L (AS CA)	03/01/93-03/01/93	1	5190.	5190.	5190.	5190.	0.	0.	**	**	**
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS, NTU	06/18/92-06/16/94	7	2.	1.743	3.7	0.2	1.613	1.27	**	**	**

** - Less than 9 observations # - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0651

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	6	0	0.00				5	0	0.00	1	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	13	0	0.00	3	0	0.00	5	0	0.00	5	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	22	0	0.00	5	0	0.00	9	0	0.00	8	0	0.00			
00300	OXYGEN, DISSOLVED	4.	3	0	0.00				2	0	0.00	1	0	0.00			
00400	PH	9.	24	0	0.00	5	0	0.00	11	0	0.00	8	0	0.00			
		6.5	24	2	0.08	5	1	0.20	11	1	0.09	8	0	0.00			
00403	PH, LAB	9.	26	0	0.00	5	0	0.00	12	0	0.00	9	0	0.00			
		6.5	26	5	0.19	5	0	0.00	12	3	0.25	9	2	0.22			
00615	NITRITE NITROGEN, TOTAL AS N	1.	26	0	0.00	5	0	0.00	12	0	0.00	9	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	26	0	0.00	5	0	0.00	12	0	0.00	9	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	25	0	0.00	5	0	0.00	11	0	0.00	9	0	0.00			
		250.	25	0	0.00	5	0	0.00	11	0	0.00	9	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	25	0	0.00	5	0	0.00	11	0	0.00	9	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	9	0	0.00	1	0	0.00	6	0	0.00	2	0	0.00			
01002	ARSENIC, TOTAL	360.	1	0	0.00				1	0	0.00						
		50.	1	0	0.00				1	0	0.00						
01012	BERYLLIUM, TOTAL	130.	1	0	0.00				1	0	0.00						
		4.	0 &	0	0.00												
01027	CADMIUM, TOTAL	3.9	0 &	0	0.00												
		5.	0 &	0	0.00												
01034	CHROMIUM, TOTAL	100.	1	0	0.00				1	0	0.00						
01042	COPPER, TOTAL	18.	1	0	0.00				1	0	0.00						
		1300.	1	0	0.00				1	0	0.00						
01051	LEAD, TOTAL	82.	1	0	0.00				1	0	0.00						
		15.	1	0	0.00				1	0	0.00						
01059	THALLIUM, TOTAL	1400.	1	0	0.00				1	0	0.00						
		2.	0 &	0	0.00												
01067	NICKEL, TOTAL	1400.	1	0	0.00				1	0	0.00						
		100.	1	0	0.00				1	0	0.00						
01092	ZINC, TOTAL	120.	1	0	0.00				1	0	0.00						
		5000.	1	0	0.00				1	0	0.00						
01147	SELENIUM, TOTAL	20.	1	0	0.00				1	0	0.00						
		50.	1	0	0.00				1	0	0.00						
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	23	11	0.48	5	4	0.80	10	1	0.10	8	6	0.75			
34356	ENDOSULFAN, BETA, TOTAL	0.22	1	0	0.00	1	0	0.00									
34361	ENDOSULFAN, ALPHA, TOTAL	0.22	1	0	0.00	1	0	0.00									
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	20.	1	0	0.00	1	0	0.00									
		1.	1	0	0.00	1	0	0.00									
39033	ATRAZINE IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE	1.1	1	0	0.00	1	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	0.6	1	0	0.00	1	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	1050.	1	0	0.00	1	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39340	GAMMA-BHC(LINDANE), WHOLE WATER	2.	1	0	0.00	1	0	0.00									
		0.2	1	0	0.00	1	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	2.4	1	0	0.00	1	0	0.00									
		2.	1	0	0.00	1	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.5	1	0	0.00	1	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	0.18	1	0	0.00	1	0	0.00									
		2.	1	0	0.00	1	0	0.00									
39400	TOXAPHENE IN WHOLE WATER SAMPLE	0.73	1	0	0.00	1	0	0.00									
		3.	1	0	0.00	1	0	0.00									
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	0.52	1	0	0.00	1	0	0.00									
		0.4	1	0	0.00	1	0	0.00									
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	0.52	1	0	0.00	1	0	0.00									
		0.2	1	0	0.00	1	0	0.00									
39730	2,4-D IN WHOLE WATER SAMPLE	70.	1	0	0.00	1	0	0.00									
39760	SILVEX IN WHOLE WATER SAMPLE	50.	1	0	0.00	1	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0651

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
71900	MERCURY, TOTAL																	
	Fresh Acute	2.4	1	0	0.00				1	0	0.00							
	Drinking Water	2.	1	0	0.00				1	0	0.00							
82078	TURBIDITY, FIELD																	
	Other-Hi Lim.	50.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0651

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	5	17.3	18.38	25.	14.8	14.952	3.867	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	5	74.	99.6	162.	50.	2317.3	48.138	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	5 ##	0.5	0.9	2.	0.5	0.425	0.652	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	5	7.3	7.32	7.7	7.	0.107	0.327	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	5	7.3	7.229	7.7	7.	0.117	0.343	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	5	0.05	0.059	0.1	0.02	0.002	0.039	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	5	25.	39.8	66.	18.	558.7	23.637	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	5	59.	73.4	110.	45.	824.3	28.711	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	4	24.	23.	38.	6.	238.667	15.449	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	4	50.5	54.	76.	39.	304.667	17.455	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	5 ##	1.5	1.8	3.	1.5	0.45	0.671	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	5 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	5 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	5 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	5 ##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	5	0.07	0.112	0.21	0.02	0.008	0.091	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	5	0.2	0.17	0.2	0.05	0.005	0.067	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	5 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	5	4.	3.7	6.	2.	2.45	1.565	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	5	5.	4.	6.	2.	3.5	1.871	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0651

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11	5.9	6.291	12.9	2.2	7.719	2.778	2.62	4.5	7.4	11.98
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	12	66.	62.75	73.	28.	147.114	12.129	36.7	60.25	70.	72.7
00310	BOD, 5 DAY, 20 DEG C MG/L	11	1.	1.255	3.	0.5	0.613	0.783	0.5	0.5	2.	2.8
00403	PH, LAB, STANDARD UNITS SU	12	6.7	6.783	7.6	6.2	0.151	0.388	6.29	6.525	6.9	7.54
00403	CONVERTED PH, LAB, STANDARD UNITS	12	6.7	6.658	7.6	6.2	0.168	0.41	6.29	6.525	6.9	7.54
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.2	0.22	0.631	0.025	0.026	0.16	0.03	0.126	0.3	0.537
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	16.	16.917	23.	7.	21.902	4.68	9.1	14.25	21.75	23.
00500	RESIDUE, TOTAL (MG/L)	11	45.	46.273	74.	27.	140.018	11.833	29.2	40.	53.	70.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	11	11.	12.364	20.	6.	18.655	4.319	6.4	10.	16.	19.8
00510	RESIDUE, TOTAL FIXED (MG/L)	11	33.	33.909	68.	17.	168.291	12.973	17.8	29.	37.	62.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12 ##	1.5	1.625	3.	0.5	0.369	0.608	0.8	1.5	1.5	2.85
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12 ##	1.5	1.5	2.5	0.5	0.182	0.426	0.8	1.5	1.5	2.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12 ##	1.5	1.333	1.5	0.5	0.152	0.389	0.5	1.5	1.5	1.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.02	0.019	0.02	0.01	0.	0.003	0.013	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	12 ##	0.005	0.007	0.03	0.005	0.	0.007	0.005	0.005	0.005	0.023
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	0.385	0.323	0.51	0.02	0.028	0.166	0.038	0.183	0.455	0.501
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.1	0.108	0.2	0.05	0.002	0.047	0.05	0.1	0.1	0.2
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12 ##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.085
00940	CHLORIDE, TOTAL IN WATER MG/L	11	3.	2.818	4.	1.	0.514	0.717	1.3	2.5	3.	3.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11	7.	6.364	8.	3.	1.655	1.286	3.6	6.	7.	7.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0651

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	17.7	16.144	23.8	6.4	34.375	5.863	6.4	11.25	21.4	23.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	9	77.	79.333	96.	59.	141.	11.874	59.	73.	91.	96.
00310	BOD, 5 DAY, 20 DEG C MG/L	9	1.	1.089	2.	0.5	0.346	0.588	0.5	0.5	1.65	2.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0651

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403	PH, LAB, STANDARD UNITS SU	11/19/90-04/22/98	9	6.8	6.444	7.4	2.4	2.395	1.548	2.4	6.55	7.2	7.4
00403	CONVERTED PH, LAB, STANDARD UNITS	11/19/90-04/22/98	9	6.8	3.354	7.4	2.4	13.139	3.625	2.4	6.55	7.2	7.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/19/90-04/22/98	9	0.158	442.47	3981.072	0.04	1760864.166	1326.976	0.04	0.063	0.299	3981.072
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/19/90-04/22/98	9	26.	24.889	37.	14.	41.611	6.451	14.	20.5	27.5	37.
00500	RESIDUE, TOTAL (MG/L)	11/19/90-04/22/98	9	66.	65.	82.	48.	112.	10.583	48.	56.	71.5	82.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/19/90-04/22/98	9	14.	15.333	25.	7.	36.25	6.021	7.	11.	21.5	25.
00510	RESIDUE, TOTAL FIXED (MG/L)	11/19/90-04/22/98	9	50.	49.667	60.	36.	79.75	8.93	36.	40.5	58.5	60.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/19/90-04/22/98	9##	1.5	3.833	20.	1.5	37.438	6.119	1.5	1.5	2.75	20.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/19/90-04/22/98	9##	1.5	1.667	3.	1.5	0.25	0.5	1.5	1.5	1.5	3.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/19/90-04/22/98	9##	1.5	3.222	17.	1.5	26.694	5.167	1.5	1.5	1.5	17.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/19/90-04/22/98	9##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/19/90-04/22/98	9##	0.005	0.007	0.02	0.005	0.	0.005	0.005	0.005	0.008	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/19/90-04/22/98	9	0.25	0.436	2.1	0.1	0.394	0.628	0.1	0.18	0.295	2.1
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/19/90-04/22/98	9	0.2	0.256	0.5	0.1	0.015	0.124	0.1	0.2	0.35	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11/19/90-04/22/98	9##	0.05	0.067	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00940	CHLORIDE, TOTAL IN WATER MG/L	11/19/90-04/22/98	9	3.	5.611	20.	2.5	34.799	5.899	2.5	2.5	7.	20.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/19/90-04/22/98	9	6.	5.389	7.	2.5	1.611	1.269	2.5	5.	6.	7.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0652

NPS Station ID: SHEN0652
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.712781/ -78.376726

Depth of Water: 0
 Elevation: 940
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR04
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION JR04 IS LOCATED ON THE LURAY VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 20.87 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0652

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.059	0.059	0.059	0.059	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	226.7	226.7	226.7	226.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.44	1.44	1.44	1.44	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.58	0.58	0.58	0.58	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0652

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	0	0.00							1	0	0.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0653

NPS Station ID: SHEN0653
 Location: VAPA502R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.712893/ -78.474810

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_NURE_28 /4091106
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE LURAY VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0653

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/12/77-04/12/77	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/12/77-04/12/77	1	275.	275.	275.	275.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/12/77-04/12/77	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/12/77-04/12/77	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/12/77-04/12/77	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/12/77-04/12/77	1	130.	130.	130.	130.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/12/77-04/12/77	1	3.34	3.34	3.34	3.34	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/12/77-04/12/77	1	117.	117.	117.	117.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/12/77-04/12/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/12/77-04/12/77	1	30.	30.	30.	30.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/12/77-04/12/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/12/77-04/12/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/12/77-04/12/77	1	3500.	3500.	3500.	3500.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/12/77-04/12/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0653

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED	Drinking Water	20.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0654

NPS Station ID: SHEN0654
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.712948/ -78.350003

Depth of Water: 0
 Elevation: 1100

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR16
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR16 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 14.62 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0654

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.1	7.1	7.1	7.1	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.079	0.079	0.079	0.079	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	134.5	134.5	134.5	134.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.6	2.6	2.6	2.6	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.56	1.56	1.56	1.56	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.41	0.41	0.41	0.41	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.1	6.1	6.1	6.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.4	9.4	9.4	9.4	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0654

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0655

NPS Station ID: SHEN0655
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.713309/ -78.344170

Depth of Water: 0
 Elevation: 1190
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR12
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR12 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.21 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0655

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.53	6.53	6.53	6.53	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.53	6.53	6.53	6.53	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.295	0.295	0.295	0.295	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	146.7	146.7	146.7	146.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.84	0.84	0.84	0.84	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.69	0.69	0.69	0.69	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0655

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0656

NPS Station ID: SHEN0656
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.713309/ -78.376726

Depth of Water: 0
 Elevation: 980
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR02
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR02 IS LOCATED ON THE LURAY VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.83 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0656

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.16	6.16	6.16	6.16	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.16	6.16	6.16	6.16	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.692	0.692	0.692	0.692	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	113.7	113.7	113.7	113.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.82	0.82	0.82	0.82	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	1.61	1.61	1.61	1.61	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	8.3	8.3	8.3	8.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.7	0.7	0.7	0.7	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0656

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0657

NPS Station ID: SHEN0657
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.713726/ -78.319420

Depth of Water: 0
 Elevation: 1840
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH26
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION TH26 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.35 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0657

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.89	6.89	6.89	6.89	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.129	0.129	0.129	0.129	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	-3.9	-3.9	-3.9	-3.9	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.79	1.79	1.79	1.79	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.46	0.46	0.46	0.46	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0657

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Fresh Acute	860.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	44.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	44.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0658

NPS Station ID: SHEN0658
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.713726/ -78.351171

Depth of Water: 0
 Elevation: 1090

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR15
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR15 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.71 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0658

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.62	6.62	6.62	6.62	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	138.7	138.7	138.7	138.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.46	1.46	1.46	1.46	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.72	0.72	0.72	0.72	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0658

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0659

NPS Station ID: SHEN0659
 Location: RUSH RIVER AT WASHINGTON, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103001900.00
 Description:

LAT/LON: 38.713892/ -78.171392

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.37

Agency: 112WRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 01662500
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.40
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0659

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060	FLOW, STREAM, MEAN DAILY CFS	01/20/56-01/20/56	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	01/20/56-01/20/56	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	01/20/56-01/20/56	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	01/20/56-01/20/56	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	01/20/56-01/20/56	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	01/20/56-01/20/56	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	01/20/56-01/20/56	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	01/20/56-01/20/56	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	01/20/56-01/20/56	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	01/20/56-01/20/56	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	01/20/56-01/20/56	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	01/20/56-01/20/56	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	01/20/56-01/20/56	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	01/20/56-01/20/56	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	01/20/56-01/20/56	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	01/20/56-01/20/56	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	01/20/56-01/20/56	1	9.	9.	9.	9.	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	01/20/56-01/20/56	1	33.	33.	33.	33.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	01/20/56-01/20/56	1	1.	1.	1.	1.	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	01/20/56-01/20/56	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0659

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0660

NPS Station ID: SHEN0660
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.714559/ -78.344003

Depth of Water: 0
 Elevation: 1180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR11
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR11 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 12.95 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0660

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.01	7.01	7.01	7.01	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.01	7.01	7.01	7.01	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.098	0.098	0.098	0.098	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	131.2	131.2	131.2	131.2	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.58	1.58	1.58	1.58	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.6	9.6	9.6	9.6	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0660

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0661

NPS Station ID: SHEN0661
 Location: Jeremys Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.714753/ -78.343087

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_1F116
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0661

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/09/94-08/09/94	2	19.25	19.25	21.5	17.	10.125	3.182	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/09/94-08/09/94	3	11.	10.667	11.	10.	0.333	0.577	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/09/94-08/09/94	1	9.75	9.75	9.75	9.75	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/09/94-08/09/94	1	9.75	9.75	9.75	9.75	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/09/94-08/09/94	1	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0661

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	1	1	1.00	1	1	1.00					
	Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0662

NPS Station ID: SHEN0662
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.715309/ -78.381699

Depth of Water: 0
 Elevation: 930
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_VTSS_PG01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION PG01 IS LOCATED ON THE LURAY VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 22.07 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0662

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	7.18	7.18	7.18	7.18	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	7.18	7.18	7.18	7.18	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.066	0.066	0.066	0.066	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	2.3	2.3	2.3	2.3	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.33	1.33	1.33	1.33	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.67	0.67	0.67	0.67	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	6.4	6.4	6.4	6.4	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0662

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0662

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0663

NPS Station ID: SHEN0663
 Location: Jeremys Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.715365/ -78.381198

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_1F006
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Luray VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0663

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/13/94-05/17/95	6	17.4	17.367	21.1	13.5	5.783	2.405	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/17/95-05/17/95	1	37.	37.	37.	37.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/13/94-05/17/95	5	10.	9.4	10.	8.	0.8	0.894	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	06/13/94-05/17/95	5	8.28	7.968	8.5	7.	0.415	0.644	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	06/13/94-05/17/95	5	8.28	7.565	8.5	7.	0.618	0.786	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/13/94-05/17/95	5	0.005	0.027	0.1	0.003	0.002	0.042	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/17/95-05/17/95	1	24.	24.	24.	24.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0663

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED																
	Other-Lo Lim.	4.	5	0	0.00	3	0	0.00				2	0	0.00			
00406	PH, FIELD																
	Fresh Chronic	9.	5	0	0.00	3	0	0.00				2	0	0.00			
	Other-Lo Lim.	6.5	5	0	0.00	3	0	0.00				2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0664

NPS Station ID: SHEN0664
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.715476/ -78.381699

Depth of Water: 0
 Elevation: 880
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR01
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR01 IS LOCATED ON THE LURAY VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 21.98 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0664

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	2	1.5	1.5	3.	0.	4.5	2.121	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	2	37.	37.	37.	37.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	2	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	2	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	2	0.059	0.059	0.059	0.059	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	2	35.	35.	35.	35.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	2	10.75	10.75	12.8	8.7	8.405	2.899	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	2	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	2	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	2	1.435	1.435	1.44	1.43	0.	0.007	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	2	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	2	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	2	8.8	8.8	8.8	8.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	2	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	2	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0664

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	2	0	0.00							2	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00							2	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00							2	2	1.00			
	Fresh Acute	860.	2	0	0.00							2	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	2	0	0.00							2	0	0.00			
	Drinking Water	250.	2	0	0.00							2	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00							2	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00							2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0665

NPS Station ID: SHEN0665
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.715476/ -78.381699

Depth of Water: 0
 Elevation: 930
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_VT51
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION VT51 IS LOCATED ON THE LURAY VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 21.97 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0665

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/30/90-07/30/97	29	11.	11.807	21.	2.	38.968	6.242	3.	6.9	19.	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/16/87-07/30/97	41	40.	42.195	72.	31.	70.461	8.394	35.	36.5	44.	53.8
00400	PH (STANDARD UNITS)	08/16/87-07/30/97	41	7.04	7.018	7.34	6.55	0.047	0.217	6.704	6.82	7.2	7.288
00400	CONVERTED PH (STANDARD UNITS)	08/16/87-07/30/97	41	7.04	6.964	7.34	6.55	0.05	0.224	6.704	6.82	7.2	7.288
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/16/87-07/30/97	41	0.091	0.109	0.282	0.046	0.003	0.057	0.052	0.063	0.152	0.198
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	08/16/87-07/30/97	41	39.	41.098	72.	30.	68.54	8.279	34.	36.	43.	52.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	08/16/87-07/30/97	41	122.9	139.8	542.5	7.	17345.142	131.701	9.32	14.95	235.15	351.32
00915	CALCIUM, DISSOLVED (MG/L AS CA)	08/16/87-07/30/97	41	2.9	3.061	5.8	2.2	0.518	0.72	2.42	2.55	3.25	4.1
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/16/87-07/30/97	41	1.7	1.761	3.2	1.4	0.144	0.38	1.4	1.5	1.85	2.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/16/87-07/30/97	41	1.58	1.736	3.16	1.32	0.169	0.411	1.348	1.435	1.9	2.386
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/16/87-07/30/97	41	0.74	0.761	1.15	0.49	0.025	0.157	0.584	0.645	0.87	1.002
00941	CHLORIDE, DISSOLVED IN WATER MG/L	08/16/87-07/30/97	41	1.	0.998	1.	0.9	0.	0.016	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	08/16/87-07/30/97	41	5.8	5.715	7.4	4.1	0.72	0.848	4.42	5.05	6.4	6.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	08/16/87-07/30/97	41	9.8	10.422	14.1	8.1	2.056	1.434	8.82	9.35	11.8	12.38
04168	ALUMINUM, ORGANIC MONOMERIC, DISSOLVED UG/L	01/31/94-04/26/95	6	9.405	9.047	13.786	3.007	21.479	4.635	**	**	**	**
04170	ALUMINUM, TOTAL MONOMERIC, DISSOLVED UG/L	01/31/94-07/30/97	15	8.885	9.299	13.536	4.608	8.364	2.892	4.908	7.423	12.18	13.095
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/16/87-07/30/97	41	0.09	0.687	4.8	0.	1.011	1.006	0.	0.001	1.3	1.88
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/16/87-07/30/97	41	0.09	0.11	0.28	0.05	0.003	0.057	0.05	0.06	0.155	0.198

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0665

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	PH		41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
	Fresh Chronic	9.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
	Other-Lo Lim.	6.5	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	41	30	0.73	11	4	0.36	20	16	0.80	10	10	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	860.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
	Fresh Acute	860.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
	Drinking Water	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	250.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			
	Drinking Water	44.	41	0	0.00	11	0	0.00	20	0	0.00	10	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0665

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	43.	47.	60.	39.	43.8	6.618	39.6	42.	53.	58.8
00400	PH (STANDARD UNITS)	11	6.88	6.968	7.34	6.7	0.059	0.242	6.7	6.75	7.27	7.332
00400	CONVERTED PH (STANDARD UNITS)	11	6.88	6.913	7.34	6.7	0.062	0.249	6.7	6.75	7.27	7.332
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.132	0.122	0.2	0.046	0.003	0.058	0.047	0.054	0.178	0.2
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	11	42.	45.818	58.	40.	35.764	5.98	40.2	41.	51.	56.8
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	11	247.2	194.736	390.4	7.2	23474.055	153.212	7.76	12.7	342.2	383.04
00915	CALCIUM, DISSOLVED (MG/L AS CA)	11	3.3	3.473	4.2	3.	0.2	0.447	3.	3.1	3.9	4.18
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	11	1.9	1.955	2.3	1.7	0.049	0.221	1.7	1.8	2.1	2.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	11	1.87	2.013	2.39	1.73	0.068	0.261	1.736	1.8	2.3	2.39
00935	POTASSIUM, DISSOLVED (MG/L AS K)	11	0.88	0.861	1.06	0.7	0.017	0.129	0.7	0.74	0.97	1.05
00941	CHLORIDE, DISSOLVED IN WATER MG/L	11	1.	0.991	1.	0.9	0.001	0.03	0.92	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	11	4.7	4.755	6.	4.1	0.317	0.563	4.12	4.3	5.1	5.86
00955	SILICA, DISSOLVED (MG/L AS SI02)	11	11.9	11.636	12.9	9.9	0.729	0.854	10.	11.4	12.2	12.78
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	11	0.008	0.138	1.1	0.	0.11	0.331	0.	0.	0.09	0.94
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	11	0.13	0.123	0.2	0.05	0.003	0.059	0.05	0.05	0.18	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0665

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	20	38.5	42.	72.	33.	95.789	9.787	34.1	36.	44.	59.3
00400	PH (STANDARD UNITS)	20	6.995	6.975	7.29	6.55	0.043	0.208	6.693	6.795	7.153	7.245
00400	CONVERTED PH (STANDARD UNITS)	20	6.994	6.927	7.29	6.55	0.046	0.214	6.693	6.795	7.152	7.245
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	20	0.101	0.118	0.282	0.051	0.004	0.06	0.057	0.07	0.161	0.203
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	20	37.	40.95	72.	32.	96.366	9.817	33.1	35.	43.	57.4
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	20	108.55	130.98	542.5	7.8	18569.964	136.272	10.07	23.325	185.6	347.13
00915	CALCIUM, DISSOLVED (MG/L AS CA)	20	2.8	3.045	5.8	2.2	0.784	0.885	2.31	2.5	3.15	4.55
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	20	1.55	1.76	3.2	1.4	0.228	0.477	1.4	1.5	1.8	2.66
00930	SODIUM, DISSOLVED (MG/L AS NA)	20	1.465	1.68	3.16	1.32	0.249	0.499	1.32	1.388	1.853	2.595
00935	POTASSIUM, DISSOLVED (MG/L AS K)	20	0.65	0.724	1.15	0.49	0.034	0.184	0.543	0.603	0.845	1.102
00941	CHLORIDE, DISSOLVED IN WATER MG/L	20	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	20	6.	5.98	7.4	4.7	0.528	0.727	5.01	5.425	6.55	7.06
00955	SILICA, DISSOLVED (MG/L AS SI02)	20	9.5	10.165	14.1	8.1	2.632	1.622	8.42	9.025	11.4	12.49
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	20	0.205	0.901	4.8	0.	1.545	1.243	0.	0.001	1.375	2.4
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	20	0.105	0.12	0.28	0.05	0.004	0.06	0.06	0.073	0.165	0.208

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0665

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10	37.5	37.3	40.	31.	7.344	2.71	31.5	36.	40.	40.
00400	PH (STANDARD UNITS)	10	7.19	7.157	7.32	6.77	0.025	0.157	6.797	7.115	7.258	7.316
00400	CONVERTED PH (STANDARD UNITS)	10	7.19	7.127	7.32	6.77	0.026	0.16	6.797	7.115	7.257	7.316
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.065	0.075	0.17	0.048	0.001	0.036	0.048	0.055	0.077	0.162
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR.UMHOS/CM	10	36.5	36.2	39.	30.	7.511	2.741	30.4	34.75	38.25	39.
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	10	136.85	97.01	181.2	7.	5908.01	76.864	7.23	10.05	163.325	180.86
00915	CALCIUM, DISSOLVED (MG/L AS CA)	10	2.65	2.64	2.8	2.4	0.02	0.143	2.41	2.5	2.8	2.8
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	10	1.55	1.55	1.7	1.4	0.012	0.108	1.4	1.475	1.625	1.7
00930	SODIUM, DISSOLVED (MG/L AS NA)	10	1.555	1.542	1.66	1.41	0.007	0.083	1.412	1.475	1.608	1.657
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10	0.73	0.726	0.83	0.65	0.003	0.051	0.651	0.698	0.75	0.822
00941	CHLORIDE, DISSOLVED IN WATER MG/L	10	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00946	SULFATE, DISSOLVED (MG/L AS SO4)	10	6.2	6.24	6.7	5.5	0.143	0.378	5.54	6.05	6.625	6.7
00955	SILICA, DISSOLVED (MG/L AS SI02)	10	9.65	9.6	9.8	8.9	0.071	0.267	8.96	9.575	9.8	9.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0665

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	08/16/87-07/30/97	10	0.8	0.861	1.9	0.	0.608	0.78	0.001	0.077	1.65	1.89
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	08/16/87-07/30/97	10	0.065	0.075	0.17	0.05	0.001	0.035	0.05	0.058	0.075	0.162

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0666

NPS Station ID: SHEN0666
 Location: Jeremys Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.715476/ -78.381699

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_PARK_VTS51
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Luray VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0666

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/26/95-10/29/97	6	13.4	12.017	19.4	3.6	31.47	5.61	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/26/95-10/29/97	6	37.5	37.333	45.	28.	33.067	5.75	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	04/26/95-10/29/97	5	10.2	10.38	11.1	9.8	0.267	0.517	**	**	**	**
00301 OXYGEN, DISSOLVED, PERCENT OF SATURATION %	10/30/96-10/30/96	1	97.3	97.3	97.3	97.3	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	04/26/95-10/29/97	6	7.3	7.35	8.38	6.79	0.336	0.58	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	04/26/95-10/29/97	6	7.289	7.129	8.38	6.79	0.395	0.628	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/95-10/29/97	6	0.051	0.074	0.162	0.004	0.004	0.064	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	04/26/95-10/29/97	6	24.	23.833	29.	18.	13.767	3.71	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0666

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00	3	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0667

NPS Station ID: SHEN0667
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.715559/ -78.280226

Depth of Water: 0
 Elevation: 1420
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P106
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P106 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.68 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0667

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	11.5	12.286	18.	5.	21.655	4.653	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	34.	37.	48.	33.	29.333	5.416	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.92	6.943	7.14	6.74	0.016	0.125	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.92	6.927	7.14	6.74	0.016	0.126	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.12	0.118	0.182	0.072	0.001	0.034	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	33.	35.714	46.	32.	26.905	5.187	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	169.4	175.729	277.9	92.2	4105.686	64.076	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	2.8	2.886	3.8	2.4	0.228	0.478	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	1.4	1.471	2.	1.3	0.062	0.25	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.61	1.689	2.07	1.51	0.044	0.209	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.24	0.244	0.29	0.2	0.001	0.029	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.957	1.	0.8	0.006	0.079	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.7	2.9	3.8	2.6	0.193	0.44	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	11.2	11.871	14.5	10.	2.792	1.671	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	1.4	1.887	4.9	0.009	3.622	1.903	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.12	0.119	0.18	0.07	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0667

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	4	0.57	2	0	0.00	2	2	1.00	3	2	0.67				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0668

NPS Station ID: SHEN0668
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.715948/ -78.309198

Depth of Water: 0
 Elevation: 1620
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH24
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH24 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.39 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0668

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	44.	44.	44.	44.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.19	7.19	7.19	7.19	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.19	7.19	7.19	7.19	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.065	0.065	0.065	0.065	0.	0.	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	11.9	11.9	11.9	11.9	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.03	2.03	2.03	2.03	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	12.8	12.8	12.8	12.8	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	4.8	4.8	4.8	4.8	0.	0.	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0668

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00				1	1	1.00							
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00				1	0	0.00							
	Fresh Acute								1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00				1	0	0.00							
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00				1	0	0.00							
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0669

NPS Station ID: SHEN0669
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.716031/ -78.311088

Depth of Water: 0
 Elevation: 1640
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH25
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH25 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.81 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0669

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.05	7.05	7.05	7.05	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.05	7.05	7.05	7.05	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.089	0.089	0.089	0.089	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.12	2.12	2.12	2.12	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	12.9	12.9	12.9	12.9	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0669

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0670

NPS Station ID: SHEN0670
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.716948/ -78.310142

Depth of Water: 0
 Elevation: 1650
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH23
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH23 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.50 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0670

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.056	0.056	0.056	0.056	0.	0.	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.94	1.94	1.94	1.94	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	12.7	12.7	12.7	12.7	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0670

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0671

NPS Station ID: SHEN0671
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.717670/ -78.339199

Depth of Water: 0
 Elevation: 1320
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR87
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR87 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 11.85 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0671

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.056	0.056	0.056	0.056	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	52.	52.	52.	52.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.62	1.62	1.62	1.62	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.7	9.7	9.7	9.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0671

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0672

NPS Station ID: SHEN0672
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.719503/ -78.281059

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1F137
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0672

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/95-08/20/96	3	16.1	15.767	18.6	12.6	9.083	3.014	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-08/20/96	3	33.	33.333	34.	33.	0.333	0.577	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/22/95-08/20/96	3	9.3	9.2	9.8	8.5	0.43	0.656	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/22/95-08/20/96	3	6.84	6.923	7.22	6.71	0.07	0.265	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/22/95-08/20/96	3	6.84	6.875	7.22	6.71	0.074	0.271	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/95-08/20/96	3	0.145	0.133	0.195	0.06	0.005	0.068	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-08/28/95	2	20.5	20.5	21.	20.	0.5	0.707	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	08/20/96-08/20/96	1	4.	4.	4.	4.	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	08/20/96-08/20/96	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	08/20/96-08/20/96	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0672

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	2	0	0.00	1	0	0.00	1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	2	0	0.00	1	0	0.00						
	Other-Lo Lim.	6.5	3	0	0.00	2	0	0.00	1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0673

NPS Station ID: SHEN0673
 Location: Piney Branch/Piney Ridge
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.719726/ -78.280366

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_LTEM_1L113
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0673

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/28/97-05/28/97	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/28/97-05/28/97	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/28/97-05/28/97	1	10.5	10.5	10.5	10.5	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/28/97-05/28/97	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/28/97-05/28/97	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/28/97-05/28/97	1	0.141	0.141	0.141	0.141	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/28/97-05/28/97	1	29.	29.	29.	29.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0673

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00							1	0	0.00					
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00							1	0	0.00					
	Other-Lo Lim.	6.5	1	0	0	0.00							1	0	0.00					

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0674

NPS Station ID: SHEN0674
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.720253/ -78.372392

Depth of Water: 0
 Elevation: 1200
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR03
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR03 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.28 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0674

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	5.96	5.96	5.96	5.96	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	5.96	5.96	5.96	5.96	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	1.096	1.096	1.096	1.096	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	28.	28.	28.	28.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	220.4	220.4	220.4	220.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.1	1.1	1.1	1.1	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.81	0.81	0.81	0.81	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	1.72	1.72	1.72	1.72	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	6.2	6.2	6.2	6.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	1.11	1.11	1.11	1.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0674

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	0	0.00							1	0	0.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0675

NPS Station ID: SHEN0675
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.721309/ -78.281393

Depth of Water: 0
 Elevation: 1540
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P107
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P107 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.44 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0675

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	11.	12.214	19.	6.	23.321	4.829	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	33.	35.429	48.	32.	32.286	5.682	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.9	6.916	7.22	6.59	0.042	0.204	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.9	6.875	7.22	6.59	0.044	0.209	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.126	0.133	0.257	0.06	0.004	0.064	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	32.	34.286	46.	31.	29.238	5.407	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	111.2	125.5	219.4	46.8	4423.603	66.51	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	2.7	2.7	3.6	2.3	0.193	0.44	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	1.3	1.357	1.8	1.2	0.046	0.215	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.58	1.75	2.75	1.48	0.205	0.452	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.24	0.261	0.43	0.2	0.006	0.076	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.943	1.	0.8	0.006	0.079	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.4	2.6	3.6	2.2	0.23	0.48	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	11.	12.129	18.2	10.	8.289	2.879	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	1.3	2.044	5.	0.008	3.797	1.949	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.13	0.136	0.26	0.06	0.004	0.066	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0675

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	6	0.86	2	1	0.50	2	2	1.00	3	3	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0676

NPS Station ID: SHEN0676
 Location: JEREMYS RUN NEAR OAK HILL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005020000.00
 Description:

LAT/LON: 38.721670/ -78.387505

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.17

Agency: 112WRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 01630585
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0676

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/81-06/23/82	6	17.25	13.417	19.	0.5	54.542	7.385	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/12/81-06/23/82	6	2.5	8.78	40.	0.08	239.967	15.491	**	**	**	**
00400	PH (STANDARD UNITS)	08/12/81-06/23/82	5	6.7	6.74	7.1	6.4	0.073	0.27	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/12/81-06/23/82	5	6.7	6.676	7.1	6.4	0.078	0.279	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/81-06/23/82	5	0.2	0.211	0.398	0.079	0.015	0.124	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/12/81-06/23/82	6	6.9	6.817	7.1	6.5	0.066	0.256	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/12/81-06/23/82	6	6.9	6.751	7.1	6.5	0.071	0.266	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/81-06/23/82	6	0.126	0.177	0.316	0.079	0.012	0.109	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/12/81-06/23/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/12/81-06/23/82	6	0.055	0.074	0.2	0.005	0.005	0.069	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/12/81-06/23/82	6	13.5	13.833	17.	12.	3.767	1.941	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/12/81-06/23/82	6	2.85	2.8	3.4	2.3	0.164	0.405	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/81-06/23/82	6	1.6	1.667	2.1	1.4	0.083	0.288	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/81-06/23/82	6	1.65	1.683	2.1	1.4	0.078	0.279	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/12/81-06/23/82	6	0.2	0.2	0.2	0.	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/12/81-06/23/82	6	20.	20.	21.	19.	0.4	0.632	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/81-06/23/82	6	0.7	0.683	0.8	0.5	0.014	0.117	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/12/81-06/23/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/12/81-06/23/82	6	6.	6.	7.	5.	0.8	0.894	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/12/81-06/23/82	6	9.9	9.883	11.7	7.9	2.542	1.594	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0676

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	1	0.20	2	1	0.50	1	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	2	0.33	2	2	1.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0676

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0677

NPS Station ID: SHEN0677
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.722142/ -78.336031

Depth of Water: 0
 Elevation: 1390
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR86
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR86 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.56 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0677

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.64	6.64	6.64	6.64	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	6.64	6.64	6.64	6.64	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.229	0.229	0.229	0.229	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	22.	22.	22.	22.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	57.5	57.5	57.5	57.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	0.88	0.88	0.88	0.88	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.61	0.61	0.61	0.61	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.23	0.23	0.23	0.23	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0677

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0678

NPS Station ID: SHEN0678
 Location: ROUTE 211 (RAPPAHANNOCK COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANNOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.722503/ -78.118338

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Description:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANNOCK REGION: 3 NORTHERN
 RIVER: BATTLE RUN SECTION: 04 TOPO MAP #: 0015 TOPO MAP NAME: MASSIES CORNER, VA

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-BTL008.06
 Within Park Boundary: No

Date Created: 05/01/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0678

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	03/24/75-03/24/75	1	10.6	10.6	10.6	0.0	0.0	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/24/75-03/24/75	1	1.	1.	1.	0.0	0.0	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	03/24/75-03/24/75	1##	2.	2.	2.	0.0	0.0	**	**	**	**
00400	PH (STANDARD UNITS)	03/24/75-03/24/75	1	7.2	7.2	7.2	0.0	0.0	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/24/75-03/24/75	1	7.2	7.2	7.2	0.0	0.0	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/24/75-03/24/75	1	0.063	0.063	0.063	0.0	0.0	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	03/24/75-03/24/75	1	88.	88.	88.	0.0	0.0	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/24/75-03/24/75	1	31.	31.	31.	0.0	0.0	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	03/24/75-03/24/75	1	57.	57.	57.	0.0	0.0	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/24/75-03/24/75	1	18.	18.	18.	0.0	0.0	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/24/75-03/24/75	1	2.	2.	2.	0.0	0.0	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/24/75-03/24/75	1	16.	16.	16.	0.0	0.0	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/24/75-03/24/75	1##	0.05	0.05	0.05	0.0	0.0	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/24/75-03/24/75	1##	0.005	0.005	0.005	0.0	0.0	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/24/75-03/24/75	1	2.3	2.3	2.3	0.0	0.0	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/24/75-03/24/75	1	0.2	0.2	0.2	0.0	0.0	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/24/75-03/24/75	1##	0.05	0.05	0.05	0.0	0.0	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/24/75-03/24/75	1##	0.05	0.05	0.05	0.0	0.0	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	03/24/75-03/24/75	1	5.	5.	5.	0.0	0.0	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	03/24/75-03/24/75	1	3.	3.	3.	0.0	0.0	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	03/24/75-03/24/75	1	200.	200.	200.	0.0	0.0	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	03/24/75-03/24/75	1	2.301	2.301	2.301	0.0	0.0	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			200.							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0678

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00							1	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	1	1.00							1	1	1.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0679

NPS Station ID: SHEN0679
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.722754/ -78.337198

Depth of Water: 0
 Elevation: 1390
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR85
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR85 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.30 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0679

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.22	7.22	7.22	7.22	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.22	7.22	7.22	7.22	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	58.	58.	58.	58.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.65	1.65	1.65	1.65	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.36	0.36	0.36	0.36	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.9	5.9	5.9	5.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.9	9.9	9.9	9.9	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0679

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0680

NPS Station ID: SHEN0680
 Location: Jeremys Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.724060/ -78.337420

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_1FVA1
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0680

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/06/96-07/27/98	3	18.6	18.2	18.6	17.4	0.48	0.693	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/06/96-07/27/98	3	46.	45.667	46.	45.	0.333	0.577	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/06/96-07/27/98	3	8.3	8.967	10.8	7.8	2.583	1.607	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/06/96-07/27/98	3	6.98	7.02	7.28	6.8	0.059	0.242	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/06/96-07/27/98	3	6.98	6.978	7.28	6.8	0.061	0.248	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/06/96-07/27/98	3	0.105	0.105	0.158	0.052	0.003	0.053	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/27/98-07/27/98	1	28.	28.	28.	28.	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	08/06/96-07/27/98	3	3.57	3.857	5.	3.	1.062	1.03	**	**	**
83509	STREAM, WIDTH METER	08/06/96-07/27/98	3	3.9	4.033	4.6	3.6	0.263	0.513	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	08/06/96-07/27/98	3	0.02	0.02	0.03	0.01	0.	0.01	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0680

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Obs			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00406	PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00									
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0681

NPS Station ID: SHEN0681
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.724281/ -78.312477

Depth of Water: 0
 Elevation: 1880
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH22
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH22 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.76 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0681

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.88	6.88	6.88	6.88	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.88	6.88	6.88	6.88	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.132	0.132	0.132	0.132	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	-4.7	-4.7	-4.7	-4.7	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.37	1.37	1.37	1.37	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.54	0.54	0.54	0.54	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	4.9	4.9	4.9	4.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0681

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00							
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00							
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00							
	Fresh Acute	860.	1	0	0.00				1	0	0.00							
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00							
	Drinking Water	250.	1	0	0.00				1	0	0.00							
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00							
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0682

NPS Station ID: SHEN0682
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.726531/ -78.287282

 Depth of Water: 0
 Elevation: 1620
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P108
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

On/Off RF1:
 On/Off RF3:

STATION P108 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.46 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0682

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	10.5	10.857	19.	0.	39.893	6.316	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	34.	34.571	44.	31.	20.286	4.504	**	**	**	**
00400 PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.9	6.91	7.19	6.6	0.037	0.192	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.9	6.873	7.19	6.6	0.038	0.196	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.126	0.134	0.251	0.065	0.004	0.061	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	33.	33.429	42.	30.	19.286	4.392	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	45.	45.086	49.4	41.1	7.921	2.815	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	2.8	2.686	3.3	2.3	0.121	0.348	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	1.3	1.329	1.6	1.2	0.022	0.15	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.6	1.659	2.18	1.46	0.062	0.25	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.24	0.254	0.37	0.2	0.003	0.054	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.943	1.	0.8	0.006	0.079	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.4	2.529	3.4	2.2	0.162	0.403	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	11.1	11.486	13.8	9.9	1.965	1.402	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	1.4	2.157	4.9	0.2	3.176	1.782	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.13	0.134	0.25	0.07	0.004	0.06	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0682

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	2	2	1.00	2	2	1.00	3	3	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0683

NPS Station ID: SHEN0683
 Location: NF THORNTON RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.727337/ -78.313088

Depth of Water: 0
 Elevation: 1970
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH20
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH20 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.89 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0683

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00400 PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.65	6.65	6.65	6.65	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.65	6.65	6.65	6.65	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.224	0.224	0.224	0.224	0.	0.	**	**	**	**
00402 SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	31.	31.	31.	31.	0.	0.	**	**	**	**
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	-6.8	-6.8	-6.8	-6.8	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	1.24	1.24	1.24	1.24	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.63	0.63	0.63	0.63	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	4.7	4.7	4.7	4.7	0.	0.	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	7.9	7.9	7.9	7.9	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
82042 HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.23	0.23	0.23	0.23	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0683

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0684

NPS Station ID: SHEN0684
 Location: NF THORNTON RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.727420/ -78.312281

Depth of Water: 0
 Elevation: 1960
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_TH21
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION TH21 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE NF THORNTON RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.39 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO COMPILES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0684

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/16/92-03/16/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/16/92-03/16/92	1	44.	44.	44.	44.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.76	6.76	6.76	6.76	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/16/92-03/16/92	1	6.76	6.76	6.76	6.76	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/16/92-03/16/92	1	0.174	0.174	0.174	0.174	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/16/92-03/16/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/16/92-03/16/92	1	-16.4	-16.4	-16.4	-16.4	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/16/92-03/16/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/16/92-03/16/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/16/92-03/16/92	1	2.04	2.04	2.04	2.04	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/16/92-03/16/92	1	0.45	0.45	0.45	0.45	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/16/92-03/16/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/16/92-03/16/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/16/92-03/16/92	1	12.8	12.8	12.8	12.8	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/16/92-03/16/92	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/16/92-03/16/92	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0684

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00				1	0	0.00						
	Other-Lo Lim.	6.5	1	0	0.00				1	0	0.00						
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00				1	1	1.00						
	Fresh Acute	860.	1	0	0.00				1	0	0.00						
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00				1	0	0.00						
	Drinking Water	250.	1	0	0.00				1	0	0.00						
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00				1	0	0.00						
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0685

NPS Station ID: SHEN0685
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.727865/ -78.336031

Depth of Water: 0
 Elevation: 1450
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR84
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR84 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 9.41 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0685

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.059	0.059	0.059	0.059	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	60.5	60.5	60.5	60.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.64	1.64	1.64	1.64	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.34	0.34	0.34	0.34	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.9	9.9	9.9	9.9	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0685

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0686

NPS Station ID: SHEN0686
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.728309/ -78.292087

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1F138
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0686

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/22/95-07/29/98	4	16.15	15.725	17.9	12.7	5.229	2.287	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/22/95-07/29/98	4	34.5	33.75	36.	30.	6.917	2.63	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/22/95-07/29/98	4	8.95	9.6	12.5	8.	4.313	2.077	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/22/95-07/29/98	4	6.855	6.928	7.25	6.75	0.049	0.222	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/22/95-07/29/98	4	6.854	6.891	7.25	6.75	0.051	0.226	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/22/95-07/29/98	4	0.14	0.129	0.178	0.056	0.003	0.052	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/22/95-07/29/98	2	20.5	20.5	22.	19.	4.5	2.121	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	08/08/96-07/29/98	3	8.3	7.867	9.	6.3	1.963	1.401	**	**	**	**
83509 STREAM, WIDTH METER	08/08/96-07/29/98	3	4.8	5.067	6.1	4.3	0.863	0.929	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	08/08/96-07/29/98	3	0.01	0.013	0.02	0.01	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0686

Parameter	Std. Type	Std. Value	Total		Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed			Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	3	0	0.00				1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	4	0	0.00	3	0	0.00				1	0	0.00				
	Other-Lo Lim.	6.5	4	0	0.00	3	0	0.00				1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0687

NPS Station ID: SHEN0687
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.733198/ -78.333949

Depth of Water: 0
 Elevation: 1570
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR83
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR83 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 8.11 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0687

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.22	7.22	7.22	7.22	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.22	7.22	7.22	7.22	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	59.	59.	59.	59.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.68	1.68	1.68	1.68	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.4	5.4	5.4	5.4	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0687

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0688

NPS Station ID: SHEN0688
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.738281/ -78.331309

Depth of Water: 0
 Elevation: 1670
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR82
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR82 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 7.12 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0688

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	5.5	5.5	5.5	5.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.17	7.17	7.17	7.17	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.17	7.17	7.17	7.17	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.068	0.068	0.068	0.068	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	37.	37.	37.	37.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	-19.	-19.	-19.	-19.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.3	5.3	5.3	5.3	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	10.1	10.1	10.1	10.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0688

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0689

NPS Station ID: SHEN0689
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.738392/ -78.289198

Depth of Water: 0
 Elevation: 2180
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P109
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P109 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.62 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0689

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	11.	11.929	20.	5.	28.036	5.295	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	29.	30.286	36.	27.	8.571	2.928	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.94	6.993	7.32	6.82	0.026	0.16	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.94	6.971	7.32	6.82	0.026	0.162	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.115	0.107	0.151	0.048	0.001	0.032	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	28.	29.286	35.	26.	11.571	3.402	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	48.7	46.5	76.2	22.5	375.557	19.379	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	2.3	2.314	2.8	2.	0.078	0.279	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	1.1	1.129	1.3	1.	0.012	0.111	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.44	1.477	1.71	1.29	0.027	0.165	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.24	0.237	0.3	0.19	0.001	0.036	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.957	1.	0.8	0.006	0.079	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.3	2.443	3.3	2.1	0.156	0.395	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	10.7	10.429	12.5	9.	1.839	1.356	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	1.2	1.829	4.1	0.4	2.372	1.54	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.12	0.109	0.15	0.05	0.001	0.032	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0689

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	2	2	1.00	2	2	1.00	3	3	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0690

NPS Station ID: SHEN0690
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.739087/ -78.288616

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_NPI02
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0690

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	1	11.1	11.1	11.1	11.1	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	1	10.2	10.2	10.2	10.2	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	1	6.68	6.68	6.68	6.68	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/23/95-05/23/95	1	6.68	6.68	6.68	6.68	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/95-05/23/95	1	0.209	0.209	0.209	0.209	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	1	16.	16.	16.	16.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0690

Parameter	Std. Type	Std. Value	Total			Prop.			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.		
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00								1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00								1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0	0.00								1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0691

NPS Station ID: SHEN0691
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.740004/ -78.287698

Depth of Water: 0
 Elevation: 2520
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P128
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P128 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.99 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0691

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	11.	11.857	19.	6.	22.143	4.706	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	25.	26.	31.	24.	6.	2.449	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.91	6.873	7.16	6.48	0.041	0.203	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.91	6.828	7.16	6.48	0.044	0.209	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.123	0.149	0.331	0.069	0.007	0.084	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	25.	25.429	30.	23.	6.952	2.637	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	220.4	225.914	248.5	196.9	376.745	19.41	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	2.	1.986	2.4	1.8	0.048	0.219	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	0.9	0.957	1.1	0.9	0.006	0.079	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.34	1.337	1.57	1.18	0.019	0.139	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.22	0.227	0.29	0.19	0.001	0.033	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	0.9	0.9	1.	0.7	0.01	0.1	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.4	2.486	3.5	2.1	0.231	0.481	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	9.9	9.714	11.8	8.4	1.695	1.302	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	1.	1.386	3.	0.4	1.161	1.078	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.12	0.15	0.33	0.07	0.007	0.083	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0691

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	1	0.14	2	1	0.50	2	0	0.00	3	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	1	0.14	2	0	0.00	2	0	0.00	3	1	0.33				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0692

NPS Station ID: SHEN0692
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.740004/ -78.288754

Depth of Water: 0
 Elevation: 2280
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P129
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P129 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.40 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA, WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0692

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	6	11.25	10.833	15.5	4.5	18.367	4.286	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	6	40.	41.	46.	36.	12.4	3.521	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	6	7.015	7.002	7.09	6.88	0.005	0.072	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	6	7.015	6.997	7.09	6.88	0.005	0.072	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	6	0.097	0.101	0.132	0.081	0.	0.018	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	6	38.5	39.5	45.	34.	17.9	4.231	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	6	175.75	170.45	194.5	143.7	394.915	19.872	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	6	3.4	3.483	4.1	3.	0.206	0.454	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	6	1.65	1.667	1.9	1.4	0.043	0.207	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	6	1.48	1.568	1.77	1.46	0.022	0.149	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	6	0.235	0.235	0.26	0.2	0.001	0.025	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	6	1.	1.333	2.	1.	0.267	0.516	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	6	2.05	2.233	3.	1.9	0.199	0.446	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	6	10.45	10.817	12.7	9.5	1.87	1.367	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	6	1.8	3.483	7.4	1.5	7.698	2.774	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	6	0.095	0.1	0.13	0.08	0.	0.018	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0692

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	6	6	1.00	1	1	1.00	2	2	1.00	3	3	1.00			
	Fresh Acute	860.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0693

NPS Station ID: SHEN0693
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.740004/ -78.288754

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_PI29
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0693

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	1	12.1	12.1	12.1	12.1	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	1	9.8	9.8	9.8	9.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	1	6.94	6.94	6.94	6.94	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/23/95-05/23/95	1	6.94	6.94	6.94	6.94	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/95-05/23/95	1	0.115	0.115	0.115	0.115	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	1	25.	25.	25.	25.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0693

Parameter	Std. Type	Std. Value	Total			Prop.			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.		
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0	0.00								1	0	0.00				
00406 PH, FIELD	Fresh Chronic	9.	1	0	0	0.00								1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0	0.00								1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0694

NPS Station ID: SHEN0694
 Location: RUSH RIVER AT RT 622 NEAR WASHINGTON, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin:
 Minor Basin:
 RF1 Index: 02080103
 RF3 Index: 02080103002207.43
 Description:

LAT/LON: 38.741392/ -78.218893
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 10.41

Agency: 112WRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 01662480
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.40
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0694

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/81-06/21/82	6	15.75	13.	19.5	1.	51.5	7.176	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/18/81-06/21/82	6	2.	3.767	14.	0.2	27.015	5.198	**	**	**	**
00400	PH (STANDARD UNITS)	08/18/81-06/21/82	5	7.2	7.18	7.4	6.9	0.037	0.192	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/81-06/21/82	5	7.2	7.145	7.4	6.9	0.039	0.196	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/21/82	5	0.063	0.072	0.126	0.04	0.001	0.034	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/18/81-06/21/82	6	7.25	7.217	7.4	7.	0.034	0.183	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/18/81-06/21/82	6	7.247	7.184	7.4	7.	0.035	0.187	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/81-06/21/82	6	0.057	0.065	0.1	0.04	0.001	0.028	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/18/81-06/21/82	6##	0.005	0.01	0.03	0.005	0.	0.01	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/18/81-06/21/82	6	0.15	0.227	0.6	0.01	0.053	0.23	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/18/81-06/21/82	6	17.	17.333	21.	15.	5.467	2.338	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/18/81-06/21/82	6	4.25	4.15	4.8	3.5	0.227	0.476	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/18/81-06/21/82	6	1.65	1.7	2.1	1.4	0.068	0.261	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/18/81-06/21/82	6	2.25	2.3	2.9	1.9	0.156	0.395	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/18/81-06/21/82	6	0.2	0.233	0.3	0.2	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/18/81-06/21/82	6	22.	22.	23.	21.	0.8	0.894	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/18/81-06/21/82	6	0.4	0.433	0.7	0.3	0.023	0.151	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/18/81-06/21/82	6	1.5	1.5	2.	1.	0.3	0.548	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/18/81-06/21/82	6	6.	5.833	7.	5.	0.567	0.753	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/18/81-06/21/82	6	13.15	12.85	15.8	10.4	3.591	1.895	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/21/82	2	0.025	0.025	0.04	0.01	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0694

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0694

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0695

NPS Station ID: SHEN0695
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.744115/ -78.328199

 Depth of Water: 0
 Elevation: 1730

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR81
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION JR81 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 6.01 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0695

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	5.5	5.5	5.5	-5.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.14	7.14	7.14	7.14	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.14	7.14	7.14	7.14	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.072	0.072	0.072	0.072	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	-19.	-19.	-19.	-19.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.73	1.73	1.73	1.73	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.26	0.26	0.26	0.26	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	5.1	5.1	5.1	5.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	10.3	10.3	10.3	10.3	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	4.1	4.1	4.1	4.1	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.07	0.07	0.07	0.07	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0695

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0696

NPS Station ID: SHEN0696
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.744838/ -78.282531

Depth of Water: 0
 Elevation: 2520
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P127
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P127 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.16 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0696

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	11.	12.214	20.	7.	23.321	4.829	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	22.	22.	24.	20.	2.	1.414	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.77	6.773	7.02	6.64	0.017	0.129	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.77	6.758	7.02	6.64	0.017	0.13	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.17	0.175	0.229	0.095	0.002	0.046	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	21.	21.429	24.	19.	3.952	1.988	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	198.7	211.543	286.9	154.4	2912.706	53.969	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	1.6	1.586	1.7	1.4	0.018	0.135	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	0.7	0.743	0.8	0.7	0.003	0.053	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.27	1.273	1.51	1.12	0.021	0.146	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.23	0.237	0.29	0.2	0.001	0.028	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	0.9	0.914	1.	0.7	0.011	0.107	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.3	2.414	3.6	1.9	0.315	0.561	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	9.2	8.757	10.5	7.4	1.543	1.242	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	0.5	0.746	2.1	0.005	0.855	0.924	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.17	0.176	0.23	0.1	0.002	0.045	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0696

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	4	0.57	2	1	0.50	2	2	1.00	3	1	0.33				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0697

NPS Station ID: SHEN0697
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.744838/ -78.282531

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_PI27
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0697

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	4	11.5	11.5	12.	11.	0.227	0.476	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	4	29.5	27.25	30.	20.	23.583	4.856	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	4	9.5	9.325	9.8	8.5	0.323	0.568	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	4	6.14	6.21	6.58	5.98	0.073	0.271	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/23/95-05/23/95	4	6.129	6.155	6.58	5.98	0.077	0.278	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/95-05/23/95	4	0.744	0.699	1.047	0.263	0.124	0.352	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	4	19.	17.5	19.	13.	9.	3.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0697

Parameter	Std. Type	Std. Value	Total		Prop.		-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
			Obs	Exceed Standard	Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00						4	0	0.00	
00406 PH, FIELD	Fresh Chronic	9.	4	0	0.00						4	0	0.00	
	Other-Lo Lim.	6.5	4	3	0.75						4	3	0.75	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0698

NPS Station ID: SHEN0698
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.745170/ -78.281698

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_LTEM_1L308
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. the park's ongoing Long-Term Ecological Monitoring Program. Only the collected using a variety of probes; meters; and kits including: information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA STORET by the National Park Service Water Resources Division; 1201 Oak

Parameter Inventory for Station: SHEN0698

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/25/89-05/20/97	35	14.	13.614	20.5	7.2	10.531	3.245	9.5	11.1	15.9	18.1
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/14/95-05/20/97	4	23.5	23.5	27.	20.	8.333	2.887	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/25/89-05/20/97	30	9.6	9.663	15.	6.3	2.391	1.546	8.	9.	10.	11.9
00406 PH, FIELD, STANDARD UNITS SU	09/10/91-05/20/97	10	6.885	6.925	7.69	6.31	0.281	0.53	6.317	6.41	7.538	7.686
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/10/91-05/20/97	10	6.884	6.696	7.69	6.31	0.339	0.582	6.317	6.41	7.538	7.686
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/10/91-05/20/97	10	0.131	0.201	0.49	0.02	0.031	0.177	0.021	0.029	0.389	0.482
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/14/95-05/20/97	4	14.5	15.5	20.	13.	9.667	3.109	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0698

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	30	0	0.00	15	0	0.00	15	0	0.00	15	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	10	0	0.00	6	0	0.00	4	0	0.00	4	0	0.00			
	Other-Lo Lim.	6.5	10	3	0.30	6	2	0.33	4	1	0.25						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0698

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/25/89-05/20/97	18	14.85	15.539	20.5	10.	7.594	2.756	12.07	14.	16.425	20.5
00300 OXYGEN, DISSOLVED MG/L	05/25/89-05/20/97	15	9.2	9.54	15.	6.3	4.218	2.054	7.2	8.	10.	13.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0698

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/25/89-05/20/97	17	11.1	11.576	16.5	7.2	5.731	2.394	8.72	9.5	13.4	15.3
00300 OXYGEN, DISSOLVED MG/L	05/25/89-05/20/97	15	9.8	9.787	12.	8.9	0.701	0.837	8.96	9.1	10.	11.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0699

NPS Station ID: SHEN0699
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.745392/ -78.280948

Depth of Water: 0
 Elevation: 2780
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P125
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P125 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.44 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0699

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	6	10.5	10.5	15.	5.	16.7	4.087	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	6	22.	22.333	25.	21.	2.267	1.506	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	6	6.8	6.773	6.94	6.59	0.017	0.129	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	6	6.799	6.757	6.94	6.59	0.017	0.13	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	6	0.159	0.175	0.257	0.115	0.003	0.053	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	6	21.	21.667	24.	20.	3.467	1.862	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	6	113.65	108.683	138.7	71.2	764.358	27.647	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	6	1.65	1.7	2.	1.5	0.032	0.179	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	6	0.8	0.8	0.9	0.7	0.004	0.063	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	6	1.2	1.235	1.37	1.17	0.006	0.079	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	6	0.21	0.21	0.24	0.19	0.	0.02	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	6	0.9	0.9	1.	0.7	0.012	0.11	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	6	2.1	2.067	2.3	1.7	0.059	0.242	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	6	9.2	9.583	11.1	8.6	1.058	1.028	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	6	0.4	0.779	2.3	0.005	0.86	0.928	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	6	0.16	0.177	0.26	0.12	0.003	0.053	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0699

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	6	6	1.00	1	1	1.00	2	2	1.00	3	3	1.00			
	Fresh Acute	860.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	6	0	0.00	1	0	0.00	2	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0700

NPS Station ID: SHEN0700
 Location: Piney River
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.745392/ -78.280948

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_PI25
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0700

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	1	12.3	12.3	12.3	12.3	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	1	9.3	9.3	9.3	9.3	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	1	6.48	6.48	6.48	6.48	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/23/95-05/23/95	1	6.48	6.48	6.48	6.48	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/95-05/23/95	1	0.331	0.331	0.331	0.331	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	1	13.	13.	13.	13.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0700

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00															
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00															
	Other-Lo Lim.	6.5	1	1	1.00									1	1	1.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0701

NPS Station ID: SHEN0701
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.746476/ -78.281282

Depth of Water: 0
 Elevation: 2550
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P126
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P126 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.41 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA, WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0701

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	9.5	11.571	20.	7.	25.036	5.004	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	22.	21.714	23.	20.	1.238	1.113	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.76	6.7	6.85	6.39	0.025	0.158	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.76	6.672	6.85	6.39	0.026	0.16	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.174	0.213	0.407	0.141	0.009	0.093	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	21.	21.	23.	19.	2.	1.414	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEq/L	03/17/92-06/07/95	7	141.2	157.7	318.6	91.8	5934.633	77.037	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	1.5	1.543	1.7	1.4	0.01	0.098	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	0.7	0.7	0.8	0.6	0.003	0.058	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.32	1.279	1.52	1.1	0.021	0.146	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.23	0.24	0.3	0.2	0.001	0.035	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.929	1.	0.7	0.012	0.111	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	2.4	2.471	4.1	1.8	0.586	0.765	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	8.9	8.514	10.6	7.2	1.608	1.268	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	0.6	1.039	2.8	0.07	1.026	1.013	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.18	0.214	0.41	0.14	0.009	0.093	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0701

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	1	0.14	2	1	0.50	2	0	0.00	3	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	6	0.86	2	2	1.00	2	2	1.00	3	2	0.67				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute																	
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0702

NPS Station ID: SHEN0702
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.746476/ -78.281282

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_PARK_PI26
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0702

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/23/95-05/23/95	1	11.7	11.7	11.7	11.7	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/23/95-05/23/95	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/23/95-05/23/95	1	9.8	9.8	9.8	9.8	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/23/95-05/23/95	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/23/95-05/23/95	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/23/95-05/23/95	1	0.251	0.251	0.251	0.251	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/23/95-05/23/95	1	13.	13.	13.	13.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0702

Parameter	Std. Type	Std. Value	Total			Prop. Exceeding			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00															
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00															
	Other-Lo Lim.	6.5	1	0	0.00															

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0703

NPS Station ID: SHEN0703
 Location: JEREMYS RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.747504/ -78.318059

Depth of Water: 0
 Elevation: 1900
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR79
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR79 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.43 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0703

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.03	7.03	7.03	7.03	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.03	7.03	7.03	7.03	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.093	0.093	0.093	0.093	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	27.5	27.5	27.5	27.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.97	1.97	1.97	1.97	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.32	0.32	0.32	0.32	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	4.6	4.6	4.6	4.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	11.1	11.1	11.1	11.1	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	6.	6.	6.	6.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0703

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0704

NPS Station ID: SHEN0704
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.748337/ -78.318477

Depth of Water: 0
 Elevation: 1880
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR77
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR77 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.26 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0704

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.24	7.24	7.24	7.24	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.24	7.24	7.24	7.24	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.058	0.058	0.058	0.058	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	16.5	16.5	16.5	16.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	3.4	3.4	3.4	3.4	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.51	1.51	1.51	1.51	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.7	9.7	9.7	9.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0704

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0705

NPS Station ID: SHEN0705
 Location: Jeremys Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.748448/ -78.324615

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_1F118
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0705

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/09/94-07/22/98	4	17.7	18.	19.6	17.	1.307	1.143	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/05/96-07/22/98	3	53.	54.	58.	51.	13.	3.606	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/05/96-07/22/98	3	8.4	8.967	11.2	7.3	4.043	2.011	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/05/96-07/22/98	3	6.91	7.04	7.35	6.86	0.073	0.27	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/05/96-07/22/98	3	6.91	6.992	7.35	6.86	0.076	0.276	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/05/96-07/22/98	3	0.123	0.102	0.138	0.045	0.003	0.05	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/22/98-07/22/98	1	37.	37.	37.	37.	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	08/05/96-07/22/98	3	4.3	4.287	4.36	4.2	0.007	0.081	**	**	**	**
83509 STREAM, WIDTH METER	08/05/96-07/22/98	3	2.9	2.867	3.1	2.6	0.063	0.252	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	08/05/96-07/22/98	3	0.01	0.013	0.02	0.01	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0705

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	3	0	0.00									
00406 PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00									
	Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0706

NPS Station ID: SHEN0706
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.748477/ -78.274560

Depth of Water: 0
 Elevation: 2800
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P124
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P124 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.42 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0706

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-10/28/94	5	8.	10.	19.	5.	30.	5.477	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-10/28/94	5	13.	14.2	16.	13.	2.7	1.643	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-10/28/94	5	6.3	6.466	6.79	6.27	0.06	0.245	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-10/28/94	5	6.3	6.417	6.79	6.27	0.063	0.251	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-10/28/94	5	0.501	0.383	0.537	0.162	0.032	0.18	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-10/28/94	5	12.	13.6	16.	12.	4.8	2.191	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-10/28/94	5	95.	87.08	111.2	58.7	583.607	24.158	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-10/28/94	5	0.8	0.88	1.1	0.7	0.042	0.205	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-10/28/94	5	0.3	0.36	0.5	0.3	0.008	0.089	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-10/28/94	5	1.06	1.082	1.22	0.99	0.01	0.098	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-10/28/94	5	0.3	0.314	0.38	0.25	0.003	0.051	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-10/28/94	5	1.	0.94	1.	0.8	0.008	0.089	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-10/28/94	5	1.5	1.4	1.9	0.5	0.29	0.539	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-10/28/94	5	5.7	6.72	8.8	5.6	2.317	1.522	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-10/28/94	5	0.3	0.283	0.6	0.006	0.075	0.273	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-10/28/94	5	0.51	0.388	0.54	0.16	0.033	0.182	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0706

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	3	0.60	1	0	0.00	2	1	0.50	2	2	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
	Fresh Acute	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0707

NPS Station ID: SHEN0707
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.748726/ -78.324281

Depth of Water: 0
 Elevation: 1820
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR80
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR80 IS LOCATED ON THE THORNTON GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 5.56 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0707

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	42.	42.	42.	42.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.23	7.23	7.23	7.23	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.059	0.059	0.059	0.059	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	40.	40.	40.	40.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	3.3	3.3	3.3	3.3	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.24	0.24	0.24	0.24	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	10.2	10.2	10.2	10.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0707

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0708

NPS Station ID: SHEN0708
 Location: Jeremys Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.748865/ -78.324115

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_LTEM_1L313
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Thornton Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Geological Survey (topographic) quadrangle in Shenandoah National Park. the park's ongoing Long-Term Ecological Monitoring Program. Only the collected using a variety of probes; meters; and kits including: information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA STORET by the National Park Service Water Resources Division; 1201 Oak

Parameter Inventory for Station: SHEN0708

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/89-09/20/95	32	14.15	13.719	21.	7.5	11.348	3.369	9.22	10.65	15.15	18.49
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	09/20/95-09/20/95	1	48.	48.	48.	48.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/19/89-09/20/95	27	10.	9.737	12.	6.8	1.378	1.174	8.08	9.	10.	11.2
00406 PH, FIELD, STANDARD UNITS SU	09/12/91-09/20/95	8	7.035	7.324	8.4	6.37	0.642	0.801	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/12/91-09/20/95	8	7.03	6.881	8.4	6.37	0.866	0.93	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/12/91-09/20/95	8	0.093	0.132	0.427	0.004	0.023	0.153	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	09/20/95-09/20/95	1	31.	31.	31.	31.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0708

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	27	0	0.00	14	0	0.00	13	0	0.00	13	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	8	0	0.00	6	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	8	1	0.13	6	0	0.00	2	1	0.50	2	1	0.50			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0708

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/89-09/20/95	18	15.	15.694	21.	12.	6.338	2.518	12.9	14.	17.075	21.
00300 OXYGEN, DISSOLVED MG/L	06/19/89-09/20/95	14	9.15	9.414	12.	6.8	2.092	1.446	7.4	8.4	11.	11.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0708

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/89-09/20/95	14	10.1	11.179	15.2	7.5	6.419	2.534	8.25	9.4	13.5	15.1
00300 OXYGEN, DISSOLVED MG/L	06/19/89-09/20/95	13	10.	10.085	12.	9.1	0.466	0.683	9.3	9.8	10.	11.52

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0709

NPS Station ID: SHEN0709
 Location: RUSH RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.748892/ -78.230004

 Depth of Water: 0
 Elevation: 1280
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_VTSSS_RA09
 Within Park Boundary: No

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

 On/Off RF1:
 On/Off RF3:

STATION RA09 IS LOCATED ON THE WASHINGTON VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE RUSH RIVER OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.14 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0709

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	7.17	7.17	7.17	7.17	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	7.17	7.17	7.17	7.17	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.068	0.068	0.068	0.068	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	1.4	1.4	1.4	1.4	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.59	1.59	1.59	1.59	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.27	0.27	0.27	0.27	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0709

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0709

Parameter	Std. Type	Std. Value	Total			-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00						1	0	0.00				
	Drinking Water	250.	1	0	0.00						1	0	0.00				
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00						1	0	0.00				
	Drinking Water	44.	1	0	0.00						1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0710

NPS Station ID: SHEN0710
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.750253/ -78.311559

Depth of Water: 0
 Elevation: 2040
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR78
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR78 IS LOCATED ON THE BENTONVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 2.69 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0710

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	4.5	4.5	4.5	4.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.25	7.25	7.25	7.25	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.056	0.056	0.056	0.056	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	39.	39.	39.	39.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	20.	20.	20.	20.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	3.5	3.5	3.5	3.5	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.6	1.6	1.6	1.6	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.48	1.48	1.48	1.48	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	3.6	3.6	3.6	3.6	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.6	9.6	9.6	9.6	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.06	0.06	0.06	0.06	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0710

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	1	1	1.00							1	1	1.00			
	Fresh Acute	860.	1	0	0.00							1	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0711

NPS Station ID: SHEN0711
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.753865/ -78.279420

 Depth of Water: 0
 Elevation: 2800
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P122
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P122 IS LOCATED ON THE BENTONVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.67 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0711

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	10.	10.714	16.	6.	16.655	4.081	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	16.	16.286	18.	15.	1.238	1.113	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.43	6.411	6.6	6.15	0.027	0.163	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.43	6.384	6.6	6.15	0.027	0.166	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.372	0.413	0.708	0.251	0.026	0.163	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	16.	16.143	17.	15.	0.81	0.9	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	99.3	103.414	143.7	63.7	761.175	27.589	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	1.1	1.043	1.1	0.9	0.006	0.079	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	0.4	0.386	0.4	0.3	0.001	0.038	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.25	1.251	1.39	1.09	0.011	0.106	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.31	0.31	0.33	0.29	0.	0.015	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	1.	0.957	1.	0.8	0.006	0.079	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	1.6	1.614	1.9	1.2	0.061	0.248	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	7.4	7.143	8.8	6.	1.09	1.044	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	0.7	1.129	3.2	0.2	1.126	1.061	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.38	0.416	0.71	0.25	0.027	0.164	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0711

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	7	4	0.57	2	0	0.00	2	1	0.50	3	3	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	7	7	1.00	2	2	1.00	2	2	1.00	3	3	1.00			
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0712

NPS Station ID: SHEN0712
 Location: WHITIG TRACT POND
 Station Type: /RESERV/TYPA/AMBNT
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005000207.91

LAT/LON: 38.753893/ -78.421949

Depth of Water: 8
 Elevation: 0
 RF1 Mile Point: 35.780
 RF3 Mile Point: 8.85

Agency: 1118ATL8
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): 080403 /0207000502
 Within Park Boundary: No

Date Created: 09/27/80

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.30
 Distance from RF3: 0.01

On/Off RF1: ON
 On/Off RF3:

Description:
 WHITIG POND. ORIGINAL DATA AVAILABLE AT SUPERVISOR@S OFFICE,GEORGE WASHINGTON NATIONAL FOREST,210 FED BLDG,HARRISONBURG,VA 22801,703-433-2491. STATION MONITOR@S WATER QUALITY OF POND FOR FISHERIES. SAMPLE COL- LECTED OVER DEEPEST POINT IN POND. TEMP,SECCHI DISK TRANSPARENCY,PH, D.O.,ALK,HARD MEASURED IN FIELD. D.O.,PH MEASURED WITH METER,ALK,HARD TITRATED WITH HACH KIT. KJEL-N,NO2&NO3,T-PO4 MEASURED AT R-9 WATER QUALITY LAB,WINTON,MN. SURFACE AREA IS 0.6 ACRES,MEAN DEPTH IS 3.0 FT.

Parameter Inventory for Station: SHEN0712

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/27/80-08/27/80	1	25.	25.	25.	25.	0.	0.	**	**	**	**
00077	TRANSPARENCY, SECCHI DISC (INCHES)	08/27/80-08/27/80	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/27/80-08/27/80	1	140.	140.	140.	140.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/27/80-08/27/80	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	08/27/80-08/27/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/27/80-08/27/80	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/27/80-08/27/80	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	08/27/80-08/27/80	1	17.	17.	17.	17.	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	08/27/80-08/27/80	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	08/27/80-08/27/80	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	08/27/80-08/27/80	1	0.38	0.38	0.38	0.38	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/27/80-08/27/80	1	26.	26.	26.	26.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0712

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00								
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0713

NPS Station ID: SHEN0713
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.754142/ -78.272949

Depth of Water: 0
 Elevation: 3000
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P123
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P123 IS LOCATED ON THE BENTONVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.23 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0713

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-10/28/94	5	8.	8.5	15.	2.	23.75	4.873	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-10/28/94	5	14.	14.	16.	13.	1.5	1.225	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-10/28/94	5	6.42	6.404	6.53	6.25	0.011	0.104	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-10/28/94	5	6.42	6.394	6.53	6.25	0.011	0.104	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-10/28/94	5	0.38	0.404	0.562	0.295	0.01	0.101	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-10/28/94	5	13.	13.2	15.	12.	1.7	1.304	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-10/28/94	5	66.2	81.36	122.	58.7	825.503	28.732	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-10/28/94	5	0.9	0.88	1.1	0.7	0.022	0.148	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-10/28/94	5	0.3	0.32	0.4	0.3	0.002	0.045	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-10/28/94	5	1.03	1.048	1.13	0.98	0.004	0.061	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-10/28/94	5	0.27	0.278	0.35	0.24	0.002	0.042	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-10/28/94	5	0.9	0.9	1.	0.7	0.015	0.122	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-10/28/94	5	1.7	1.66	2.1	1.3	0.088	0.297	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-10/28/94	5	5.6	6.46	8.1	5.5	1.543	1.242	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-10/28/94	5	0.01	0.246	0.6	0.01	0.104	0.323	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-10/28/94	5	0.38	0.408	0.57	0.3	0.01	0.102	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0713

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	4	0.80	1	1	1.00	2	1	0.50	2	2	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	5	5	1.00	1	1	1.00	2	2	1.00	2	2	1.00			
	Fresh Acute	860.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	5	0	0.00	1	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0714

NPS Station ID: SHEN0714
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.756559/ -78.308198

 Depth of Water: 0
 Elevation: 2310

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR76
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION JR76 IS LOCATED ON THE BENTONVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.96 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0714

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	45.	45.	45.	45.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.34	7.34	7.34	7.34	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.34	7.34	7.34	7.34	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.046	0.046	0.046	0.046	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	14.5	14.5	14.5	14.5	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.47	1.47	1.47	1.47	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.18	0.18	0.18	0.18	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	2.9	2.9	2.9	2.9	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	10.2	10.2	10.2	10.2	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0714

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0715

NPS Station ID: SHEN0715
 Location: PINEY RIVER
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.757948/ -78.281031

Depth of Water: 0
 Elevation: 3140
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P121
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P121 IS LOCATED ON THE BENTONVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.08 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0715

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	4	8.75	8.875	9.5	8.5	0.229	0.479	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	4	20.	20.75	23.	20.	2.25	1.5	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	4	6.03	6.045	6.15	5.97	0.007	0.086	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	4	6.027	6.039	6.15	5.97	0.007	0.086	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	4	0.939	0.915	1.072	0.708	0.031	0.175	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	4	19.5	20.	22.	19.	2.	1.414	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	4	34.85	48.525	100.	24.4	1202.036	34.67	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	4	1.35	1.4	1.6	1.3	0.02	0.141	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	4	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	4	1.225	1.24	1.31	1.2	0.002	0.05	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	4	0.4	0.408	0.43	0.4	0.	0.015	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	4	1.5	1.5	2.	1.	0.333	0.577	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	4	0.85	0.825	0.9	0.7	0.009	0.096	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	4	6.05	6.1	6.4	5.9	0.06	0.245	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	4	3.45	3.45	4.3	2.6	0.523	0.723	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	4	0.95	0.923	1.08	0.71	0.032	0.179	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0715

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	4	0	0.00				1	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	4	4	1.00				1	1	1.00	3	3	1.00			
00409 ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	4	4	1.00				1	1	1.00	3	3	1.00			
	Fresh Acute	860.	4	0	0.00				1	0	0.00	3	0	0.00			
00941 CHLORIDE, DISSOLVED IN WATER	Drinking Water	250.	4	0	0.00				1	0	0.00	3	0	0.00			
	Drinking Water	250.	4	0	0.00				1	0	0.00	3	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	4	0	0.00				1	0	0.00	3	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	4	0	0.00				1	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0716

NPS Station ID: SHEN0716
 Location: PINEY RIVER TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.758642/ -78.272892

Depth of Water: 0
 Elevation: 3230
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_SWAS_P120
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION P120 IS LOCATED ON THE BENTONVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT THE PINEY RIVER INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 0.08 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0716

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/17/92-06/07/95	7	9.	9.571	14.	8.	4.119	2.03	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/17/92-06/07/95	7	12.	12.571	14.	12.	0.619	0.787	**	**	**	**
00400	PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.04	6.06	6.23	5.99	0.006	0.079	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/17/92-06/07/95	7	6.04	6.054	6.23	5.99	0.006	0.079	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/17/92-06/07/95	7	0.912	0.882	1.023	0.589	0.02	0.141	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/17/92-06/07/95	7	12.	12.286	14.	12.	0.571	0.756	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/17/92-06/07/95	7	46.2	47.4	69.3	22.	267.433	16.353	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/17/92-06/07/95	7	0.7	0.671	0.8	0.6	0.006	0.076	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/17/92-06/07/95	7	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/17/92-06/07/95	7	1.01	1.026	1.06	1.	0.001	0.024	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/17/92-06/07/95	7	0.28	0.28	0.29	0.27	0.	0.008	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/17/92-06/07/95	7	0.8	0.757	0.8	0.7	0.003	0.053	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/17/92-06/07/95	7	0.7	0.686	0.8	0.6	0.008	0.09	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/17/92-06/07/95	7	6.7	6.643	6.7	6.5	0.006	0.079	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/17/92-06/07/95	7	0.9	0.857	1.6	0.2	0.22	0.469	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/17/92-06/07/95	7	0.92	0.889	1.03	0.59	0.02	0.142	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0716

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Other-Lo Lim.	6.5	7	7	1.00	2	2	1.00	2	2	1.00	3	3	1.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	7	7	1.00	2	2	1.00	2	2	1.00	3	3	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Fresh Acute	860.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
	Drinking Water	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0717

NPS Station ID: SHEN0717
 Location: JEREMYS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.758754/ -78.301253

Depth of Water: 0
 Elevation: 2540
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_SWAS_JR75
 Within Park Boundary: Yes

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 STATION JR75 IS LOCATED ON THE BENTONVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT JEREMYS RUN INSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 1.03 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE SHENANDOAH WATERSHED STUDY (SWAS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE NATIONAL PARK SERVICE (NPS). THE SWAS PROGRAM'S OBJECTIVE IS TO IMPROVE UNDERSTANDING OF THE HYDRO-BIOGEOCHEMICAL PROCESSES AND FACTORS GOVERNING ECOSYSTEM CONDITIONS IN THE FORESTED MOUNTAIN WATERSHEDS OF SHEN AND THE WESTERN VIRGINIA REGION. DATA ARE FROM THE SWAS DATABASE AT UVA; WHICH ALSO INCLUDES DATA FROM THE VTSSS (VIRGINIA TROUT STREAM SENSITIVITY STUDY) AND FISH (FISH IN SENSITIVE HABITATS) PROGRAMS. FOR INFORMATION ON SWAS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0717

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/20/92-03/20/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/20/92-03/20/92	1	43.	43.	43.	43.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.29	7.29	7.29	7.29	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/20/92-03/20/92	1	7.29	7.29	7.29	7.29	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/20/92-03/20/92	1	0.051	0.051	0.051	0.051	0.	0.	**	**	**	**
00402	SPECIFIC CONDUCTANCE, NON-TEMPERATURE CORR. UMHOS/CM	03/20/92-03/20/92	1	41.	41.	41.	41.	0.	0.	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/20/92-03/20/92	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/20/92-03/20/92	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/20/92-03/20/92	1	1.7	1.7	1.7	1.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/20/92-03/20/92	1	1.38	1.38	1.38	1.38	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/20/92-03/20/92	1	0.16	0.16	0.16	0.16	0.	0.	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/20/92-03/20/92	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/20/92-03/20/92	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/20/92-03/20/92	1	9.7	9.7	9.7	9.7	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/20/92-03/20/92	1	3.7	3.7	3.7	3.7	0.	0.	**	**	**	**
82042	HYDROGEN, DISSOLVED IN WATER (UG/L AS H)	03/20/92-03/20/92	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0717

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	PH																	
	Fresh Chronic	9.	1	0	0.00							1	0	0.00				
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00				
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	200.	1	1	1.00							1	1	1.00				
00941	CHLORIDE, DISSOLVED IN WATER	860.	1	0	0.00							1	0	0.00				
	Fresh Acute											1	0	0.00				
	Drinking Water	250.	1	0	0.00							1	0	0.00				
00946	SULFATE, DISSOLVED (AS SO4)	250.	1	0	0.00							1	0	0.00				
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	1	0	0.00							1	0	0.00				
	Drinking Water																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0718

NPS Station ID: SHEN0718
 Location: VAPA505R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.764309/ -78.350115

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_NURE_29 /4091109
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE BENTONVILLE VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0718

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/12/77-04/12/77	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/12/77-04/12/77	1	87.	87.	87.	87.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/12/77-04/12/77	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/12/77-04/12/77	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/12/77-04/12/77	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/12/77-04/12/77	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/12/77-04/12/77	1	2.51	2.51	2.51	2.51	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/12/77-04/12/77	1	25.	25.	25.	25.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/12/77-04/12/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/12/77-04/12/77	1	62.	62.	62.	62.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/12/77-04/12/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/12/77-04/12/77	1	5300.	5300.	5300.	5300.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/12/77-04/12/77	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0718

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0719

NPS Station ID: SHEN0719
 Location: ROUTE 522 (RAPPAHANNOCK COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANNOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.771115/ -78.103615

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-WIS000.78
 Within Park Boundary: No

Date Created: 05/01/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANNOCK REGION: 3 NORTHERN
 RIVER: WILSON BRANCH SECTION: 04 TOPO MAP #: 0019 TOPO MAP NAME: FLINT HILL, VA

Parameter Inventory for Station: SHEN0719

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00300	OXYGEN, DISSOLVED MG/L	04/07/75-04/07/75	1	11.6	11.6	11.6	11.6	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/07/75-04/07/75	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/07/75-04/07/75	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/07/75-04/07/75	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/07/75-04/07/75	1	7.3	7.3	7.3	7.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/75-04/07/75	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/07/75-04/07/75	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/07/75-04/07/75	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/75-04/07/75	1	0.251	0.251	0.251	0.251	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/07/75-04/07/75	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	04/07/75-04/07/75	1	57.	57.	57.	57.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/07/75-04/07/75	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	04/07/75-04/07/75	1	49.	49.	49.	49.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/07/75-04/07/75	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/07/75-04/07/75	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	04/07/75-04/07/75	1	7.	7.	7.	7.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/07/75-04/07/75	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/07/75-04/07/75	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			50.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0719

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00							1	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0720

NPS Station ID: SHEN0720
 Location: ROUTE 522 (RAPPAHANNOCK COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANNOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.776115/ -78.103892

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANNOCK
 RIVER: JORDAN RIVER SECTION: 04 TOPO MAP #: 0019 TOPO MAP NAME: FLINT HILL, VA

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-JOR007.56
 Within Park Boundary: No

Date Created: 05/01/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0720

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00300	OXYGEN, DISSOLVED MG/L	04/07/75-04/07/75	1	11.6	11.6	11.6	11.6	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/07/75-04/07/75	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/07/75-04/07/75	1##	2.	2.	2.	2.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/07/75-04/07/75	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/07/75-04/07/75	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/75-04/07/75	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/07/75-04/07/75	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/07/75-04/07/75	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/75-04/07/75	1	0.251	0.251	0.251	0.251	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/07/75-04/07/75	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	04/07/75-04/07/75	1	29.	29.	29.	29.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/07/75-04/07/75	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	04/07/75-04/07/75	1	18.	18.	18.	18.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/07/75-04/07/75	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/07/75-04/07/75	1	2.	2.	2.	2.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/07/75-04/07/75	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/07/75-04/07/75	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/07/75-04/07/75	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
	GEOMETRIC MEAN =			50.									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0720

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	1	0	0.00							1	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0721

NPS Station ID: SHEN0721
 Location: GREASY RUN NEAR BROWNTOWN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005019600.00
 Description:

LAT/LON: 38.788060/ -78.267503

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.79

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01630670
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 14.90
 Distance from RF3: 0.44

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0721

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/81-06/23/82	6	18.25	14.	21.	67.5	8.216	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/12/81-06/23/82	6	0.7	2.033	8.	8.919	2.986	**	**	**	**
00400	PH (STANDARD UNITS)	08/12/81-06/23/82	6	7.15	7.017	7.4	0.142	0.376	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/12/81-06/23/82	6	7.147	6.875	7.4	0.166	0.407	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/81-06/23/82	6	0.071	0.133	0.316	0.04	0.119	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/12/81-06/23/82	6	7.2	7.167	7.5	0.055	0.234	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/12/81-06/23/82	6	7.2	7.116	7.5	0.058	0.24	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/81-06/23/82	6	0.063	0.077	0.126	0.032	0.002	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/12/81-06/23/82	6##	0.008	0.009	0.02	0.005	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/12/81-06/23/82	6	0.15	0.235	0.5	0.01	0.046	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/12/81-06/23/82	6	14.5	12.833	16.	28.967	5.382	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/12/81-06/23/82	6	3.6	3.567	3.8	0.047	0.216	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/81-06/23/82	6	1.35	1.4	1.6	0.028	0.167	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/81-06/23/82	6	2.1	2.15	2.7	0.111	0.333	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/12/81-06/23/82	6	0.2	0.233	0.3	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/12/81-06/23/82	6	23.	23.333	26.	2.267	1.506	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/81-06/23/82	6	0.4	0.4	0.5	0.008	0.089	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/12/81-06/23/82	6	1.	1.333	2.	0.267	0.516	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/12/81-06/23/82	6	5.	5.333	7.	1.067	1.033	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/12/81-06/23/82	6	12.65	13.117	15.9	5.742	2.396	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/27/82-06/23/82	3	0.01	0.017	0.03	0.	0.012	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0721

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	1	0.50	2	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0721

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0722

NPS Station ID: SHEN0722
 Location: Overall Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.789420/ -78.318892

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_FISH_1F132
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Bentonville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0722

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/13/94-07/15/98	4	19.2	19.15	21.	17.2	3.217	1.794	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	07/23/96-07/15/98	3	85.	84.	90.	77.	43.	6.557	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/13/94-07/15/98	6	9.5	9.717	11.	8.5	1.242	1.114	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	07/23/96-07/15/98	3	7.63	7.81	8.17	7.63	0.097	0.312	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	07/23/96-07/15/98	3	7.63	7.748	8.17	7.63	0.103	0.321	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/23/96-07/15/98	3	0.023	0.018	0.023	0.007	0.	0.01	**	**	**
70304	SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	07/15/98-07/15/98	1	54.	54.	54.	54.	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	07/23/96-07/15/98	3	5.1	5.567	7.5	4.1	3.053	1.747	**	**	**
83509	STREAM, WIDTH METER	07/23/96-07/15/98	3	4.8	6.567	10.2	4.7	9.903	3.147	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	07/23/96-07/15/98	3	0.03	0.023	0.04	0.	0.	0.021	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0722

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	6	0	0.00	6	0	0.00								
00406	PH, FIELD	Fresh Chronic	9.	3	0	0.00	3	0	0.00								
		Other-Lo Lim.	6.5	3	0	0.00	3	0	0.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0723

NPS Station ID: SHEN0723
 Location: ROUTE 522 (RAPPAHANNOCK COUNTY)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 3-RAPPAHANNOCK
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86

LAT/LON: 38.790282/ -78.105281

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Description:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 3- RAPPAHANNOCK REGION: 3 NORTHERN
 RIVER: HITTLES MILL STREAM SECTION: 04 TOPO MAP #: 0019 TOPO MAP NAME: FLINT HILL, VA

Agency: 21VASWCB
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): 3-HIT001.37
 Within Park Boundary: No

Date Created: 05/01/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0723

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00300	OXYGEN, DISSOLVED MG/L	04/07/75-04/07/75	1	11.6	11.6	11.6	11.6	0.	0.	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	04/07/75-04/07/75	1	1.	1.	1.	1.	0.	0.	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/07/75-04/07/75	1##	2.	2.	2.	2.	0.	0.	**	**	**
00400	PH (STANDARD UNITS)	04/07/75-04/07/75	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/07/75-04/07/75	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/75-04/07/75	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**
00403	PH, LAB, STANDARD UNITS SU	04/07/75-04/07/75	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	04/07/75-04/07/75	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/07/75-04/07/75	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/07/75-04/07/75	1	9.	9.	9.	9.	0.	0.	**	**	**
00500	RESIDUE, TOTAL (MG/L)	04/07/75-04/07/75	1	44.	44.	44.	44.	0.	0.	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	04/07/75-04/07/75	1	35.	35.	35.	35.	0.	0.	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	04/07/75-04/07/75	1	9.	9.	9.	9.	0.	0.	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	6.	6.	6.	6.	0.	0.	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	2.	2.	2.	2.	0.	0.	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	04/07/75-04/07/75	1	4.	4.	4.	4.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	04/07/75-04/07/75	1	0.21	0.21	0.21	0.21	0.	0.	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	04/07/75-04/07/75	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/07/75-04/07/75	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	04/07/75-04/07/75	1	3.	3.	3.	3.	0.	0.	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	04/07/75-04/07/75	1	1.	1.	1.	1.	0.	0.	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/07/75-04/07/75	1##	50.	50.	50.	50.	0.	0.	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/07/75-04/07/75	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	04/07/75-04/07/75	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**
	GEOMETRIC MEAN =			50.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0723

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	1	0	0.00							1	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0724

NPS Station ID: SHEN0724 LAT/LON: 38.792504/ -78.240559
 Location: PHILS ARM RUN TRIB NEAR BROWNTOWN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005019405.49 RF3 Mile Point: 6.91
 Description:

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01630650
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.23

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0724

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/81-06/23/82	6	17.75	14.667	22.	0.5	66.867	8.177	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/12/81-06/23/82	6	0.25	0.502	2.	0.03	0.557	0.747	**	**	**	**
00400	PH (STANDARD UNITS)	08/12/81-06/23/82	6	6.7	6.733	7.2	6.3	0.147	0.383	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/12/81-06/23/82	6	6.655	6.607	7.2	6.3	0.166	0.407	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/81-06/23/82	6	0.221	0.247	0.501	0.063	0.034	0.184	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/12/81-06/23/82	6	6.95	6.933	7.2	6.7	0.043	0.207	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/12/81-06/23/82	6	6.947	6.893	7.2	6.7	0.045	0.211	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/81-06/23/82	6	0.113	0.128	0.2	0.063	0.004	0.059	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/12/81-06/23/82	6##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/12/81-06/23/82	6	0.055	0.06	0.09	0.03	0.	0.022	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/12/81-06/23/82	6	8.5	9.5	13.	7.	7.9	2.811	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/12/81-06/23/82	6	2.05	2.25	3.	1.6	0.367	0.606	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/81-06/23/82	6	0.8	0.933	1.3	0.7	0.083	0.288	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/81-06/23/82	6	2.55	2.8	3.7	2.2	0.364	0.603	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/12/81-06/23/82	6	0.4	0.348	0.4	0.09	0.016	0.127	**	**	**	**
00932	SODIUM, PERCENT	08/12/81-06/23/82	6	38.5	37.833	40.	34.	4.567	2.137	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/81-06/23/82	6	0.5	0.617	1.1	0.4	0.078	0.279	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/12/81-06/23/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/12/81-06/23/82	6	4.	4.167	5.	3.	0.567	0.753	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/12/81-06/23/82	6	17.	17.85	23.6	12.	19.399	4.404	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	03/18/82-05/19/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0724

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	3	0.50	2	1	0.50	2	1	0.50	2	1	0.50
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0724

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0725

NPS Station ID: SHEN0725
 Location: PHILS ARM RUN NEAR BROWNTOWN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070007000338.60
 Description:

LAT/LON: 38.792781/ -78.241392

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 39.49

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01630649
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.07

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0725

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/81-06/23/82	6	16.5	13.25	20.	52.275	7.23	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/12/81-06/23/82	6	0.65	1.283	5.	3.35	1.83	**	**	**	**
00400	PH (STANDARD UNITS)	08/12/81-06/23/82	6	6.65	6.65	7.	0.107	0.327	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/12/81-06/23/82	6	6.625	6.554	7.	0.118	0.344	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/81-06/23/82	6	0.237	0.28	0.501	0.036	0.189	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/12/81-06/23/82	6	6.9	6.817	7.	0.03	0.172	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/12/81-06/23/82	6	6.9	6.787	7.	0.031	0.175	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/81-06/23/82	6	0.126	0.163	0.251	0.005	0.069	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/12/81-06/23/82	6##	0.005	0.008	0.02	0.005	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/12/81-06/23/82	6	0.065	0.18	0.5	0.01	0.045	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/12/81-06/23/82	6	9.	8.667	9.	0.267	0.516	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/12/81-06/23/82	6	2.1	2.117	2.3	0.014	0.117	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/12/81-06/23/82	6	0.85	0.867	1.	0.007	0.082	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/12/81-06/23/82	6	2.05	2.033	2.2	0.019	0.137	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/12/81-06/23/82	6	0.3	0.3	0.3	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	08/12/81-06/23/82	6	32.	32.167	34.	1.367	1.169	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/12/81-06/23/82	6	0.35	0.35	0.4	0.003	0.055	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/12/81-06/23/82	6	1.	0.983	1.	0.002	0.041	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/12/81-06/23/82	6	5.	5.333	6.	0.267	0.516	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/12/81-06/23/82	6	13.15	13.1	16.2	4.616	2.148	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/27/82-05/19/82	2	0.02	0.02	0.03	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0725

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	3	0.50	2	1	0.50	2	1	0.50	2	1	0.50	2	1	0.50
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0725

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0726

NPS Station ID: SHEN0726
 Location: Overall Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.797365/ -78.336448

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_PARK_OVR1
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Bentonville VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location by park staff engaged in resource management activities. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or resource management in general; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0726

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/18/95-05/18/95	1	13.5	13.5	13.5	13.5	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/18/95-05/18/95	1	55.	55.	55.	55.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/18/95-05/18/95	1	9.9	9.9	9.9	9.9	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	05/18/95-05/18/95	1	7.04	7.04	7.04	7.04	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	05/18/95-05/18/95	1	7.04	7.04	7.04	7.04	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/18/95-05/18/95	1	0.091	0.091	0.091	0.091	0.	0.	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/18/95-05/18/95	1	35.	35.	35.	35.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0726

Parameter	Std. Type	Std. Value	Total		Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
			Obs	Exceed Standard		Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0727

NPS Station ID: SHEN0727
 Location: OVERALL RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.798115/ -78.336393

Depth of Water: 0
 Elevation: 690
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51139 VIRGINIA/PAGE
 STORET Station ID(s): SHEN_VTSSS_WR01
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR01 IS LOCATED ON THE BENTONVILLE VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT OVERALL RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 10.41 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0727

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.24	7.24	7.24	7.24	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.24	7.24	7.24	7.24	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.058	0.058	0.058	0.058	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	11.	11.	11.	11.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	3.8	3.8	3.8	3.8	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.61	1.61	1.61	1.61	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.47	0.47	0.47	0.47	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	8.7	8.7	8.7	8.7	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0727

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0727

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0728

NPS Station ID: SHEN0728
 Location: BOLTON BRANCH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS - VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.805005/ -78.151699

 Depth of Water: 0
 Elevation: 1090
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_VTSSS_RA02
 Within Park Boundary: No

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 04/17/99

 On/Off RF1:
 On/Off RF3:

STATION RA02 IS LOCATED ON THE CHESTER GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT BOLTON BRANCH OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 4.36 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0728

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/25/87-04/25/87	1	6.85	6.85	6.85	6.85	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/25/87-04/25/87	1	0.141	0.141	0.141	0.141	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/25/87-04/25/87	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/25/87-04/25/87	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/25/87-04/25/87	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/25/87-04/25/87	1	1.75	1.75	1.75	1.75	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/25/87-04/25/87	1	0.39	0.39	0.39	0.39	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/25/87-04/25/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/25/87-04/25/87	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/25/87-04/25/87	1	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0728

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00					1	0	0.00	
	Other-Lo Lim.	6.5	1	0	0.00					1	0	0.00	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0728

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0729

NPS Station ID: SHEN0729
 Location: Bolton Branch
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.806309/ -78.155142

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1F056
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Chester Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0729

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/94-08/12/97	5	13.8	15.66	19.1	13.7	7.113	2.667	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/12/97-08/12/97	1	39.	39.	39.	39.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/94-08/12/97	4	10.	9.525	10.	8.1	0.903	0.95	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/15/94-08/12/97	4	7.685	7.455	7.78	6.67	0.278	0.527	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/15/94-08/12/97	4	7.682	7.167	7.78	6.67	0.388	0.623	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/94-08/12/97	4	0.021	0.068	0.214	0.017	0.009	0.097	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	08/12/97-08/12/97	1	9.1	9.1	9.1	9.1	0.	0.	**	**	**
83509	STREAM, WIDTH METER	08/12/97-08/12/97	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	08/12/97-08/12/97	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0729

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4	0	0.00	4	0	0.00									
00406	PH, FIELD	Fresh Chronic	9.	4	0.00	4	0	0.00									
		Other-Lo Lim.	6.5	4	0.00	4	0	0.00									

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0730

NPS Station ID: SHEN0730
 Location: SMITH CREEK NEAR BROWNTOWN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005019405.49
 Description:

LAT/LON: 38.806392/ -78.198616

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 6.91

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01630660
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.27

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0730

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/23/82	6	14.75	11.833	16.5	1.	37.667	6.137	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/23/82	6	0.55	1.215	5.	0.09	3.578	1.892	**	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-06/23/82	5	6.7	6.68	6.9	6.2	0.082	0.286	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-06/23/82	5	6.7	6.591	6.9	6.2	0.092	0.303	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/23/82	5	0.2	0.256	0.631	0.126	0.045	0.213	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/23/82	6	6.8	6.733	6.9	6.5	0.023	0.151	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-06/23/82	6	6.8	6.71	6.9	6.5	0.023	0.153	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/23/82	6	0.158	0.195	0.316	0.126	0.005	0.073	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/20/81-06/23/82	6 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/23/82	6	0.3	0.303	0.6	0.02	0.038	0.194	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/20/81-06/23/82	6	7.5	7.5	8.	7.	0.3	0.548	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/20/81-06/23/82	6	1.95	1.933	2.1	1.7	0.035	0.186	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/23/82	6	0.7	0.683	0.7	0.6	0.002	0.041	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/23/82	6	2.1	2.133	2.3	2.	0.011	0.103	**	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-06/23/82	6	0.3	0.333	0.4	0.3	0.003	0.052	**	**	**	**
00932	SODIUM, PERCENT	08/20/81-06/23/82	6	36.5	36.667	40.	34.	5.467	2.338	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/23/82	6	0.3	0.317	0.4	0.3	0.002	0.041	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/20/81-06/23/82	6	1.	1.	1.	1.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/23/82	6	5.	5.	7.	4.	1.2	1.095	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/20/81-06/23/82	6	12.25	12.617	14.7	10.1	2.902	1.703	**	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/19/82-05/19/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0730

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	5	1	0.20	2	1	0.50	1	0	0.00	2	0	0.00			
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	6	1	0.17	2	0	0.00	2	1	0.50	2	0	0.00			
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0730

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0731

NPS Station ID: SHEN0731
 Location: Bolton Branch
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02080103
 Major Basin: NORTH ATLANTIC
 Minor Basin: RAPPAHANNOCK AND YORK RIVERS VA COAST
 RF1 Index: 02080103
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.806754/ -78.162310

 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51157 VIRGINIA/RAPPAHANNOCK
 STORET Station ID(s): SHEN_FISH_1F058
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Chester Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0731

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/12/97-08/12/97	1	17.6	17.6	17.6	17.6	0.	0.	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	08/12/97-08/12/97	1	36.	36.	36.	36.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/12/97-08/12/97	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**
00406	PH, FIELD, STANDARD UNITS SU	08/12/97-08/12/97	1	6.48	6.48	6.48	6.48	0.	0.	**	**	**
00406	CONVERTED PH, FIELD, STANDARD UNITS	08/12/97-08/12/97	1	6.48	6.48	6.48	6.48	0.	0.	**	**	**
00406	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/12/97-08/12/97	1	0.331	0.331	0.331	0.331	0.	0.	**	**	**
72052	SLOPE OF TRANSECT, (F+/F+)	08/12/97-08/12/97	1	11.	11.	11.	11.	0.	0.	**	**	**
83509	STREAM, WIDTH METER	08/12/97-08/12/97	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**
83549	FLOW, CURRENT CUBIC METERS/SEC	08/12/97-08/12/97	1##	0.	0.	0.	0.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0731

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00								
00406	PH, FIELD	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	1	1.00	1	1	1.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0732

NPS Station ID: SHEN0732
 Location: VAWA505R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.817810/ -78.279392

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): SHEN_NURE_30 /4092379
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE BENTONVILLE VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0732

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/06/77-04/06/77	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/06/77-04/06/77	1	70.	70.	70.	70.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/06/77-04/06/77	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/06/77-04/06/77	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/06/77-04/06/77	1	0.501	0.501	0.501	0.501	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/06/77-04/06/77	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/06/77-04/06/77	1	2.69	2.69	2.69	2.69	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/06/77-04/06/77	1	37.	37.	37.	37.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/06/77-04/06/77	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/06/77-04/06/77	1	37.	37.	37.	37.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/06/77-04/06/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/06/77-04/06/77	1	29.	29.	29.	29.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/06/77-04/06/77	1	3600.	3600.	3600.	3600.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/06/77-04/06/77	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0732

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	1	1.00							1	1	1.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0733

NPS Station ID: SHEN0733
 Location: LANDS RUN NEAR BROWNTOWN, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005019500.00
 Description:

LAT/LON: 38.822226/ -78.206116

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.97

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01630680
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0733

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/20/81-06/23/82	6	16.5	12.833	18.	0.5	48.367	6.955	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/20/81-06/23/82	6	0.65	1.767	8.	0.1	9.443	3.073	**	**	**
00400	PH (STANDARD UNITS)	08/20/81-06/23/82	5	7.1	6.9	7.2	6.5	0.105	0.324	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/20/81-06/23/82	5	7.1	6.802	7.2	6.5	0.117	0.342	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/23/82	5	0.079	0.158	0.316	0.063	0.014	0.117	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/20/81-06/23/82	6	7.	6.983	7.1	6.8	0.018	0.133	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/20/81-06/23/82	6	6.989	6.966	7.1	6.8	0.018	0.134	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/20/81-06/23/82	6	0.103	0.108	0.158	0.079	0.001	0.034	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/20/81-06/23/82	6##	0.008	0.009	0.02	0.005	0.	0.006	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/20/81-06/23/82	6	0.15	0.23	0.5	0.01	0.048	0.218	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/20/81-06/23/82	6	11.	10.833	12.	10.	0.567	0.753	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/20/81-06/23/82	6	2.7	2.633	2.9	2.3	0.043	0.207	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/20/81-06/23/82	6	1.	1.05	1.2	1.	0.007	0.084	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/20/81-06/23/82	6	2.55	2.533	2.7	2.4	0.015	0.121	**	**	**
00931	SODIUM ADSORPTION RATIO	08/20/81-06/23/82	6	0.3	0.333	0.4	0.3	0.003	0.052	**	**	**
00932	SODIUM, PERCENT	08/20/81-06/23/82	6	32.	32.333	35.	29.	5.467	2.338	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/20/81-06/23/82	6	0.4	0.417	0.5	0.3	0.006	0.075	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/20/81-06/23/82	6	1.	1.	1.	1.	0.	0.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/20/81-06/23/82	6	6.	6.	8.	5.	1.2	1.095	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/20/81-06/23/82	6	13.7	13.683	15.2	12.	1.354	1.163	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	01/27/82-06/23/82	3	0.01	0.017	0.03	0.01	0.	0.012	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0733

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400	Fresh Chronic	9.	5	0	0.00	2	0	0.00	1	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	5	1	0.20	2	1	0.50	1	0	0.00	2	0	0.00
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00631	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00
00940	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0733

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Standard	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0734

NPS Station ID: SHEN0734
 Location: Lands Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.824366/ -78.203116

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): SHEN_FISH_1F001
 Within Park Boundary: Yes

 Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

Date Created: 10/13/99

 On/Off RF1:
 On/Off RF3:

The station is located on the Chester Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0734

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/03/94-08/16/95	6	16.55	17.4	21.	13.8	7.132	2.671	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/18/95-08/16/95	2	43.	43.	43.	43.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	08/03/94-08/16/95	5	11.	10.4	12.	8.4	1.98	1.407	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	08/03/94-08/16/95	5	7.69	7.458	7.91	6.85	0.254	0.504	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	08/03/94-08/16/95	5	7.69	7.233	7.91	6.85	0.318	0.564	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/03/94-08/16/95	5	0.02	0.058	0.141	0.012	0.004	0.06	**	**	**	**
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/18/95-08/16/95	2	28.5	28.5	30.	27.	4.5	2.121	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0734

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	5	0	0.00	4	0	0.00				1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	5	0	0.00	4	0	0.00				1	0	0.00			
	Other-Lo Lim.	6.5	5	0	0.00	4	0	0.00				1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0735

NPS Station ID: SHEN0735
 Location: LANDS RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.825004/ -78.203615

Depth of Water: 0
 Elevation: 1120

RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): SHEN_VTSSS_WR02
 Within Park Boundary: No

Date Created: 04/17/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

STATION WR02 IS LOCATED ON THE CHESTER GAP VA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE AT LANDS RUN OUTSIDE OF SHENANDOAH NATIONAL PARK (SHEN). THE SITE HAS AN UPSTREAM DRAINAGE AREA OF 3.55 SQUARE KILOMETERS. THE STREAM WAS SAMPLED AS PART OF THE VIRGINIA TROUT STREAM SENSITIVITY STUDY (VTSSS) CONDUCTED BY THE DEPARTMENT OF ENVIRONMENTAL SCIENCES (DES) AT THE UNIVERSITY OF VIRGINIA (UVA) IN COOPERATION WITH THE U.S. FISH AND WILDLIFE SERVICE (USFW). THE VTSSS PROGRAM'S OBJECTIVE IS TO PROVIDE INFORMATION CONCERNING THE EFFECTS OF ACIDIC DEPOSITION ON STREAMS IN THE WESTERN MOUNTAINOUS REGION OF VIRGINIA THAT SUPPORT REPRODUCING POPULATIONS OF THE NATIVE BROOK TROUT. DATA ARE FROM THE SHENANDOAH WATERSHED STUDY (SWAS) DATABASE AT UVA. FOR MORE INFORMATION ON VTSSS CONTACT RICK WEBB AT UVA-DES (804-924-7817) OR VISIT THEIR INTERNET WEB SITE. DATA WERE UPLOADED TO STORET BY RYAN SHY; NPS-WRD; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (970-225-3516).

Parameter Inventory for Station: SHEN0735

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400 PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.07	7.07	7.07	7.07	0.	0.	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	04/26/87-04/26/87	1	7.07	7.07	7.07	7.07	0.	0.	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/26/87-04/26/87	1	0.085	0.085	0.085	0.085	0.	0.	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	04/26/87-04/26/87	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	04/26/87-04/26/87	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS Mg)	04/26/87-04/26/87	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	04/26/87-04/26/87	1	1.86	1.86	1.86	1.86	0.	0.	**	**	**	**
00935 POTASSIUM, DISSOLVED (MG/L AS K)	04/26/87-04/26/87	1	0.43	0.43	0.43	0.43	0.	0.	**	**	**	**
00941 CHLORIDE, DISSOLVED IN WATER MG/L	04/26/87-04/26/87	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00946 SULFATE, DISSOLVED (MG/L AS SO4)	04/26/87-04/26/87	1	8.4	8.4	8.4	8.4	0.	0.	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	04/26/87-04/26/87	1##	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0735

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0735

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00941 CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	1	0	0.00							1	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00946 SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
	Drinking Water	44.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0736

NPS Station ID: SHEN0736
 Location: Lands Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:

LAT/LON: 38.826226/ -78.195253

 Depth of Water: 0
 Elevation: 0

 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): SHEN_FISH_1F133
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

The station is located on the Chester Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Fish Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; Hach; and mercury thermometers. For additional information on the data; the park; or the Fish Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0736

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/20/96-06/20/96	1	15.9	15.9	15.9	15.9	0.	0.	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	06/20/96-06/20/96	1	36.	36.	36.	36.	0.	0.	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/20/96-06/20/96	1	9.6	9.6	9.6	9.6	0.	0.	**	**	**	**
00406 PH, FIELD, STANDARD UNITS SU	06/20/96-06/20/96	1	6.54	6.54	6.54	6.54	0.	0.	**	**	**	**
00406 CONVERTED PH, FIELD, STANDARD UNITS	06/20/96-06/20/96	1	6.54	6.54	6.54	6.54	0.	0.	**	**	**	**
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	06/20/96-06/20/96	1	0.288	0.288	0.288	0.288	0.	0.	**	**	**	**
72052 SLOPE OF TRANSECT, (F+/F+)	06/20/96-06/20/96	1	6.3	6.3	6.3	6.3	0.	0.	**	**	**	**
83509 STREAM, WIDTH METER	06/20/96-06/20/96	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
83549 FLOW, CURRENT CUBIC METERS/SEC	06/20/96-06/20/96	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0736

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00							1	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0737

NPS Station ID: SHEN0737
 Location: Lands Run
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86

LAT/LON: 38.827670/ -78.188726

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): SHEN_LTEM_1L307
 Within Park Boundary: Yes

Date Created: 10/13/99

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:

The station is located on the Chester Gap VA 7.5 minute U.S. Geological Survey (topographic) quadrangle in Shenandoah National Park. Water quality data were collected at this location in conjunction with the park's ongoing Long-Term Ecological Monitoring Program. Only the water quality data have been uploaded to STORET. The data were collected using a variety of probes; meters; and kits including: Hydrolab; Orion; YSI; and mercury thermometers. For additional information on the data; the park; or the Long-Term Ecological Monitoring Program; contact the Shenandoah National Park Chief of Resources; Center for Resources; 3655 US Highway 211 East; Luray VA 22835-9051 (tel. 540-999-3491). Data were processed and uploaded to STORET by the National Park Service Water Resources Division; 1201 Oak Ridge Drive Suite 250; Fort Collins CO 80525 (tel. 970-225-3516).

Parameter Inventory for Station: SHEN0737

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/89-05/20/97	35	14.	14.851	21.	10.5	6.38	2.526	12.18	13.	16.1	18.8
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/18/95-05/20/97	3	35.	36.	38.	35.	3.	1.732	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	06/19/89-05/20/97	27	10.	9.711	13.	8.	1.143	1.069	8.28	9.	10.	11.
00406 PH, FIELD, STANDARD UNITS SU	09/12/91-05/20/97	11	6.78	6.89	7.17	6.63	0.039	0.197	6.642	6.74	7.1	7.162
00406 CONVERTED PH, FIELD, STANDARD UNITS	09/12/91-05/20/97	11	6.78	6.851	7.17	6.63	0.041	0.202	6.642	6.74	7.1	7.162
00406 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/12/91-05/20/97	11	0.166	0.141	0.234	0.068	0.003	0.059	0.069	0.079	0.182	0.228
70304 SOLIDS, TOTAL DISSOLVED-COND. METER (MG/L)	05/18/95-05/20/97	3	23.	23.	24.	22.	1.	1.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0737

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	27	0	0.00	12	0	0.00	15	0	0.00	15	0	0.00			
00406 PH, FIELD	Fresh Chronic	9.	11	0	0.00	6	0	0.00	5	0	0.00	5	0	0.00			
	Other-Lo Lim.	6.5	11	0	0.00	6	0	0.00	5	0	0.00	5	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0737

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/89-05/20/97	18	16.	16.206	21.	13.6	6.157	2.481	13.6	14.	17.7	21.
00300 OXYGEN, DISSOLVED MG/L	06/19/89-05/20/97	12	8.85	9.208	11.	8.	0.904	0.951	8.06	8.375	10.	10.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0737

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/19/89-05/20/97	17	13.	13.418	17.	10.5	2.768	1.664	10.9	12.4	14.45	16.2
00300 OXYGEN, DISSOLVED MG/L	06/19/89-05/20/97	15	10.	10.113	13.	9.	1.023	1.011	9.12	9.3	10.7	11.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0738

NPS Station ID: SHEN0738
 Location: GOONEY RUN NEAR GLEN ECHO, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005000102.72
 Description:

LAT/LON: 38.835004/ -78.232226

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 4.23

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01630700
 Within Park Boundary: No

Date Created: 08/18/79

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0738

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/26/68-10/01/68	5	17.	14.4	20.	8.	30.3	5.505	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	03/26/68-10/01/68	6	16.5	19.333	54.	2.	362.267	19.033	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/26/68-10/01/68	6	5.5	7.333	15.	3.	19.467	4.412	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/26/68-10/01/68	6	46.	50.333	67.	37.	169.067	13.003	**	**	**
00400	PH (STANDARD UNITS)	03/26/68-10/01/68	6	7.15	7.117	7.6	6.6	0.162	0.402	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/26/68-10/01/68	6	7.082	6.972	7.6	6.6	0.187	0.432	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/26/68-10/01/68	6	0.083	0.107	0.251	0.025	0.008	0.089	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	03/26/68-10/01/68	6	2.6	3.233	8.	1.3	6.291	2.508	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/26/68-10/01/68	6	16.5	18.667	28.	10.	47.867	6.919	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/26/68-10/01/68	6	20.5	22.833	34.	12.	72.167	8.495	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	03/26/68-10/01/68	6	0.	0.	0.	0.	0.	0.	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	03/26/68-10/01/68	6	0.14	0.16	0.32	0.02	0.011	0.103	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	03/26/68-10/01/68	6	0.005	0.022	0.09	0.	0.001	0.035	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	03/26/68-10/01/68	6	17.	18.167	24.	13.	23.367	4.834	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	03/26/68-10/01/68	6	0.	0.667	3.	0.	1.467	1.211	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	03/26/68-10/01/68	6	4.2	4.667	6.6	3.4	1.755	1.325	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	03/26/68-10/01/68	6	1.65	1.6	2.2	1.	0.172	0.415	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	03/26/68-10/01/68	6	2.55	2.683	3.7	1.8	0.566	0.752	**	**	**
00931	SODIUM ADSORPTION RATIO	03/26/68-10/01/68	6	0.25	0.25	0.3	0.2	0.003	0.055	**	**	**
00932	SODIUM, PERCENT	03/26/68-10/01/68	6	23.	23.5	29.	21.	8.7	2.95	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/26/68-10/01/68	6	0.6	0.733	1.6	0.4	0.219	0.468	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	03/26/68-10/01/68	6	2.	1.667	2.	1.	0.267	0.516	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	03/26/68-10/01/68	6	4.	3.667	5.	2.	1.067	1.033	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/26/68-10/01/68	6	0.1	0.083	0.2	0.	0.006	0.075	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	03/26/68-10/01/68	6	12.5	12.517	16.	9.1	5.762	2.4	**	**	**
01046	IRON, DISSOLVED (UG/L AS Fe)	03/26/68-10/01/68	6	55.	56.667	140.	10.	2106.667	45.898	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	03/26/68-10/01/68	6	41.5	42.167	54.	28.	96.167	9.806	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	03/26/68-10/01/68	6	37.5	39.833	53.	29.	80.567	8.976	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	03/26/68-10/01/68	6	1.735	1.82	4.11	0.33	2.051	1.432	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	03/26/68-10/01/68	6	0.055	0.057	0.07	0.04	0.	0.012	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/26/68-10/01/68	6	0.6	0.7	1.4	0.1	0.2	0.447	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0738

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00400 PH	Fresh Chronic	9.	6	0	0.00	2	0	0.00				4	0	0.00			
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00				4	0	0.00			
00618 NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	6	0	0.00	2	0	0.00				4	0	0.00			
	Fresh Acute	860.	6	0	0.00	2	0	0.00				4	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Drinking Water	250.	6	0	0.00	2	0	0.00				4	0	0.00			
	Drinking Water	250.	6	0	0.00	2	0	0.00				4	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	4.	6	0	0.00	2	0	0.00				4	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	44.	6	0	0.00	2	0	0.00				4	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water		6	0	0.00	2	0	0.00				4	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0739

NPS Station ID: SHEN0739
 Location: HAPPY CREEK TRIB NEAR GLEN ECHO, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005019600.00
 Description:

LAT/LON: 38.854726/ -78.180281

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.26

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01636202
 Within Park Boundary: No

Date Created: 04/24/82

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 25.90
 Distance from RF3: 0.98

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0739

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/19/81-06/22/82	6	16.	11.917	16.5	0.	47.442	6.888	**	**	**
00031	LIGHT, INCIDENT, PERCENT REMAING AT CERTAIN DEPTH	01/27/82-01/27/82	1	0.7	0.7	0.7	0.	0.	0.	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	08/19/81-06/22/82	6	0.85	1.75	6.	0.4	4.687	2.165	**	**	**
00400	PH (STANDARD UNITS)	08/19/81-06/22/82	6	7.15	7.117	7.3	6.9	0.034	0.183	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/19/81-06/22/82	6	7.147	7.084	7.3	6.9	0.035	0.187	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-06/22/82	6	0.071	0.082	0.126	0.05	0.001	0.035	**	**	**
00403	PH, LAB, STANDARD UNITS SU	08/19/81-06/22/82	6	7.15	7.133	7.3	6.9	0.027	0.163	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	08/19/81-06/22/82	6	7.147	7.107	7.3	6.9	0.027	0.166	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/19/81-06/22/82	6	0.071	0.078	0.126	0.05	0.001	0.03	**	**	**
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	05/18/82-05/18/82	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	08/19/81-06/22/82	6##	0.005	0.007	0.01	0.005	0.	0.003	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	08/19/81-06/22/82	6	0.3	0.352	0.7	0.01	0.066	0.256	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	08/19/81-06/22/82	6	11.5	10.167	13.	2.	16.567	4.07	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	08/19/81-06/22/82	6	2.9	2.867	3.2	2.5	0.063	0.25	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	08/19/81-06/22/82	6	1.15	1.15	1.3	1.	0.011	0.105	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	08/19/81-06/22/82	6	2.25	2.25	2.4	2.1	0.011	0.105	**	**	**
00931	SODIUM ADSORPTION RATIO	08/19/81-06/22/82	6	0.3	0.3	0.3	0.	0.	0.	**	**	**
00932	SODIUM, PERCENT	08/19/81-06/22/82	6	28.5	28.333	30.	25.	3.467	1.862	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	08/19/81-06/22/82	6	0.4	0.417	0.5	0.3	0.006	0.075	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	08/19/81-06/22/82	6	1.	1.	1.	0.	0.	0.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	08/19/81-06/22/82	6	3.5	3.833	6.	3.	1.367	1.169	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	08/19/81-06/22/82	6	15.15	15.217	17.	12.4	2.626	1.62	**	**	**
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	05/18/82-06/22/82	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0739

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00400	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
00403	Fresh Chronic	9.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
	Other-Lo Lim.	6.5	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00				
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0739

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00940 CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	6	0	0.00	2	0	0.00	2	0	0.00	2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0740

NPS Station ID: SHEN0740
 Location: NO NAME
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005000112.12

LAT/LON: 38.858059/ -78.279448

Depth of Water: 0
 Elevation: 177
 RF1 Mile Point: 0.000
 RF3 Mile Point: 12.12

Agency: I2NSS
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 2B047019U /2BN2B047019U
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.80
 Distance from RF3: 0.05

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND
 AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS,
 AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS
 IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL.I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS.
 EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988)
 WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO
 SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN;
 (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0740

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
72020 ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/27/86-03/27/86	1	580.	580.	580.	580.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0741

NPS Station ID: SHEN0741
 Location: NO NAME
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070005000100.87

LAT/LON: 38.866115/ -78.270281

Depth of Water: 0
 Elevation: 152
 RF1 Mile Point: 0.000
 RF3 Mile Point: 1.76

Agency: I2NSS
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 2B047019L /2BN2B047019L
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND
 AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS,
 AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS
 IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL.I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS.
 EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988)
 WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO
 SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN;
 (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0741

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
72020 ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/27/86-03/27/86	1	500.	500.	500.	500.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0742

NPS Station ID: SHEN0742
 Location: MILL RUN TRIBUTARY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin:
 Minor Basin:
 RF1 Index: 02070006
 RF3 Index: 02070006028000.00

LAT/LON: 38.870281/ -78.360003

Depth of Water: 0
 Elevation: 360

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.97

Agency: 12NSS
 FIPS State/County: 51171 VIRGINIA/SHENANDOAH
 STORET Station ID(s): 2B047929L /SI02B047929L
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 13.00
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS, AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS. EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988) WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN; (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0742

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/27/86-04/10/86	2	9.2	9.2	10.6	7.8	3.92	1.98	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/27/86-04/10/86	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/27/86-04/10/86	2	12.5	12.5	15.	10.	12.5	3.536	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/27/86-04/10/86	2	63.	63.	64.	62.	2.	1.414	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/27/86-04/10/86	2	10.8	10.8	11.	10.6	0.08	0.283	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/27/86-04/10/86	2	7.4	7.4	7.5	7.3	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/27/86-04/10/86	2	7.389	7.389	7.5	7.3	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/27/86-04/10/86	2	0.041	0.041	0.05	0.032	0.	0.013	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/27/86-04/10/86	2	468.1	468.1	532.6	403.6	8320.5	91.217	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/27/86-04/10/86	2	28.	28.	32.	24.	32.	5.657	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/27/86-04/10/86	2	0.004	0.004	0.005	0.002	0.	0.002	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/27/86-04/10/86	2	1.15	1.15	1.3	1.	0.045	0.212	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/27/86-04/10/86	2	5.85	5.85	6.5	5.2	0.845	0.919	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/27/86-04/10/86	2	7.7	7.7	8.2	7.2	0.5	0.707	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/27/86-04/10/86	2	2.2	2.2	2.3	2.1	0.02	0.141	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/27/86-04/10/86	2	0.845	0.845	0.85	0.84	0.	0.007	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/27/86-04/10/86	2	1.155	1.155	1.16	1.15	0.	0.007	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/27/86-04/10/86	2	0.95	0.95	1.	0.9	0.005	0.071	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/27/86-04/10/86	2	7.1	7.1	7.3	6.9	0.08	0.283	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0742

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/27/86-04/10/86	2	0.035	0.035	0.04	0.03	0.	0.007	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/27/86-04/10/86	2	7.	7.	7.5	6.5	0.5	0.707	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/27/86-04/10/86	2	3.	3.	5.	1.	8.	2.828	**	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/27/86-04/10/86	2	21.	21.	30.	12.	162.	12.728	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/27/86-04/10/86	2	0.005	0.005	0.01	0.	0.	0.007	**	**	**	**
71885	IRON (UG/L AS FE)	03/27/86-04/10/86	2	1.	1.	2.	0.	2.	1.414	**	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/27/86-04/10/86	2	1180.	1180.	1180.	1180.	0.	0.	**	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/27/86-04/10/86	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
83509	STREAM, WIDTH METER	03/27/86-04/10/86	2	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0742

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00						2	0	0.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	0	0.00						2	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0743

NPS Station ID: SHEN0743
 Location: MILL RUN
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin:
 Minor Basin:
 RF1 Index: 02070006
 RF3 Index: 02070006001000.00

LAT/LON: 38.870560/ -78.359449

Depth of Water: 0
 Elevation: 358

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.02

Agency: 12NSS
 FIPS State/County: 51171 VIRGINIA/SHENANDOAH
 STORET Station ID(s): 2B047919L /SI02B047919L
 Within Park Boundary: No

Date Created: 10/22/88

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.90
 Distance from RF3: 0.05

On/Off RF1:
 On/Off RF3:

Description:
 THESE DATA WERE COLLECTED DURING PHASE I OF THE NATIONAL STREAM SURVEY AS PART OF EPA'S NATIONAL SURFACE WATER SURVEY AND
 AQUATIC EFFECTS RESEARCH PROGRAM UNDER THE NATIONAL ACID PRECIPITATION ASSESSMENT PROGRAM. THE SURVEY DESIGN, METHODS,
 AND DATA LIMITATIONS ARE DESCRIBED IN: KAUFMANN, P.R., ET AL. 1988. CHEMICAL CHARACTERISTICS OF STREAMS
 IN THE MID-ATLANTIC AND SOUTHEASTERN UNITED STATES. VOL. I: POPULATION DESCRIPTIONS AND PHYSICO-CHEMICAL RELATIONSHIPS.
 EPA/600/3-88/021A, U.S. ENVIRON. PROT. AGENCY, WASHINGTON, D.C. THE DATA IN STORET ARE THOSE REPORTED IN KAUFMANN ET AL. (1988)
 WITH THE FOLLOWING EXCEPTIONS: (1) UNITS FOR CHEMICAL PARAMETERS ARE TYPICALLY IN MG/L RATHER THAN MICROEQ/L; (2) NO
 SUBSTITUTED VALUES ARE PROVIDED FOR SUSPECT DATA; (3) TAGS AND FLAGS USED TO IDENTIFY SUSPICIOUS DATA ARE NOT SHOWN;
 (4) CALCULATED OR DERIVED VARIABLES ARE EXCLUDED.

Parameter Inventory for Station: SHEN0743

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/27/86-04/10/86	2	8.45	8.45	9.7	7.2	3.125	1.768	**	**	**	**
00064	DEPTH OF STREAM, MEAN (FT)	03/27/86-04/10/86	2	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	03/27/86-04/10/86	2	15.	15.	15.	15.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	03/27/86-04/10/86	2	39.5	39.5	42.	37.	12.5	3.536	**	**	**	**
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	03/27/86-04/10/86	2	10.9	10.9	11.2	10.6	0.18	0.424	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/27/86-04/10/86	2	4.7	4.7	4.8	4.6	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/27/86-04/10/86	2	4.689	4.689	4.8	4.6	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/27/86-04/10/86	2	20.484	20.484	25.119	15.849	42.966	6.555	**	**	**	**
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS UEQ/L	03/27/86-04/10/86	2	-20.7	-20.7	-18.9	-22.5	6.48	2.546	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	03/27/86-04/10/86	2	0.02	0.02	0.03	0.01	0.	0.014	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	03/27/86-04/10/86	2	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	03/27/86-04/10/86	2	2.4	2.4	2.5	2.3	0.02	0.141	**	**	**	**
00691	CARBON, DISSOLVED INORGANIC (MG/L AS C)	03/27/86-04/10/86	2	0.145	0.145	0.2	0.09	0.006	0.078	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	03/27/86-04/10/86	2	1.2	1.2	1.2	1.2	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	03/27/86-04/10/86	2	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	03/27/86-04/10/86	2	0.68	0.68	0.71	0.65	0.002	0.042	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	03/27/86-04/10/86	2	0.98	0.98	1.	0.96	0.001	0.028	**	**	**	**
00941	CHLORIDE, DISSOLVED IN WATER MG/L	03/27/86-04/10/86	2	1.	1.	1.	1.	0.	0.	**	**	**	**
00946	SULFATE, DISSOLVED (MG/L AS SO4)	03/27/86-04/10/86	2	11.2	11.2	11.4	11.	0.08	0.283	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0743

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/27/86-04/10/86	2	0.07	0.07	0.07	0.07	0.	0.	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	03/27/86-04/10/86	2	5.65	5.65	6.1	5.2	0.405	0.636	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	03/27/86-04/10/86	2	174.35	174.35	248.8	99.9	11085.605	105.288	**	**	**
01105	ALUMINUM, TOTAL (UG/L AS AL)	03/27/86-04/10/86	2	343.	343.	455.	231.	25088.	158.392	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	03/27/86-04/10/86	2	0.025	0.025	0.05	0.	0.001	0.035	**	**	**
71885	IRON (UG/L AS FE)	03/27/86-04/10/86	2	7.995	7.995	15.99	0.	127.84	11.307	**	**	**
72020	ELEVATION IN FEET ABOVE MEAN SEA LEVEL	03/27/86-04/10/86	2	1175.	1175.	1175.	1175.	0.	0.	**	**	**
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	03/27/86-04/10/86	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**
83509	STREAM, WIDTH METER	03/27/86-04/10/86	2	3.	3.	3.	3.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0743

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	2	0	0.00						2	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	2	0	0.00						2	0	0.00			
		Other-Lo Lim.	6.5	2	2	1.00						2	2	1.00			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	2	2	1.00						2	2	1.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	2	0	0.00						2	0	0.00			
		Drinking Water	250.	2	0	0.00						2	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	2	0	0.00						2	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00						2	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00						2	0	0.00			
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	2	0	0.00						2	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0744

NPS Station ID: SHEN0744
 Location: KARO LANDING
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1B-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070006000100.19

LAT/LON: 38.871393/ -78.253337

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 0.18

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSFS010.48
 Within Park Boundary: No

Date Created: 05/27/89

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 02 TOPO MAP #: 0022 TOPO MAP NAME: BENTONVILLE, VA

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 3.40
 Distance from RF3: 0.15

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0744

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0745

NPS Station ID: SHEN0745
 Location: S FORK SHEN AT RT 619 FRONT ROYA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005006400.00
 Description:

LAT/LON: 38.903615/ -78.215003

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 5.400
 RF3 Mile Point: 2.39

Agency: 1112A9WQ
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): UP-POT-87 /SHEN-087 /87 /S FK 087
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.18

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0745

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0746

NPS Station ID: SHEN0746
 Location: S FORK SHEN AT RT 619 FRONTROYAL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005002701.72
 Description:

LAT/LON: 38.903615/ -78.215003

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 5.400
 RF3 Mile Point: 4.10

Agency: 1112A9WQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): UP-POT-087 /087
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.25

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0746

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/13/73-04/18/73	2	9.5	9.5	15.	4.	60.5	7.778	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/20/72-04/18/73	3	9.7	10.9	13.8	9.2	6.37	2.524	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/20/72-04/18/73	3	1.8	1.733	2.1	1.3	0.163	0.404	**	**	**
00400	PH (STANDARD UNITS)	02/13/73-04/18/73	2	7.7	7.7	7.9	7.5	0.08	0.283	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	02/13/73-04/18/73	2	7.655	7.655	7.9	7.5	0.084	0.29	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/13/73-04/18/73	2	0.022	0.022	0.032	0.013	0.	0.013	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	09/20/72-04/18/73	3	0.135	0.11	0.14	0.055	0.002	0.048	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/20/72-04/18/73	3	0.467	0.706	1.283	0.369	0.252	0.502	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	09/20/72-04/18/73	3	1.22	1.227	1.34	1.12	0.012	0.11	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	09/20/72-04/18/73	3	0.21	0.23	0.33	0.15	0.008	0.092	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/20/72-02/13/73	2	2.65	2.65	3.1	2.2	0.405	0.636	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	09/20/72-02/13/73	2	29.15	29.15	35.8	22.5	88.445	9.405	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	04/18/73-04/18/73	1 ##	10.	10.	10.	10.	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/13/73-02/13/73	1	39.	39.	39.	39.	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	02/13/73-04/18/73	2 ##	81.5	81.5	113.	50.	1984.5	44.548	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2	410.	410.	490.	330.	12800.	113.137	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2	2.604	2.604	2.69	2.519	0.015	0.121	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			402.119							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	2 ##	44.	44.	78.	10.	2312.	48.083	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	2 ##	1.446	1.446	1.892	1.	0.398	0.631	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			27.928							
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	02/13/73-04/18/73	2	1.	1.	1.	1.	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	09/20/72-04/18/73	3	0.32	0.327	0.49	0.17	0.026	0.16	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	02/13/73-02/13/73	1 ##	0.	0.	0.	0.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0746

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
00400	PH	Fresh Chronic	9.	2	0	0.00				1	0	0.00	1	0	0.00			
		Other-Lo Lim.	6.5	2	0	0.00				1	0	0.00	1	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0746

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00								1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00				1	0	0.00							
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	0	0.00				1	0	0.00		1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	0	0.00				1	0	0.00		1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00				1	0	0.00							
	Drinking Water	2.	1	0	0.00				1	0	0.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0747

NPS Station ID: SHEN0747
 Location: APPROX. 1 MI. UPSTREAM OF RT. 619 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005001
 RF3 Index: 02070005000102.60

LAT/LON: 38.904170/ -78.214726
 Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 5.400
 RF3 Mile Point: 2.59

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSSF004.23 /VA1B02-X0067/VA1B6X0067
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 02 TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VIRGINIA

Parameter Inventory for Station: SHEN0747

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/04/72-04/12/74	19	13.3	14.289	27.8	1.1	67.487	8.215	3.3	7.2	22.2	26.7
00300	OXYGEN, DISSOLVED MG/L	05/04/72-04/12/74	19	10.4	10.426	14.	7.2	4.026	2.007	7.8	8.4	12.2	13.2
00310	BOD, 5 DAY, 20 DEG C MG/L	11/17/72-11/17/72	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	05/04/72-04/12/74	18	8.5	8.283	9.	7.	0.363	0.602	7.18	7.95	8.85	9.
00400	CONVERTED PH (STANDARD UNITS)	05/04/72-04/12/74	18	8.5	7.847	9.	7.	0.565	0.751	7.18	7.95	8.85	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/72-04/12/74	18	0.003	0.014	0.1	0.001	0.001	0.026	0.001	0.001	0.011	0.067
00403	PH, LAB, STANDARD UNITS SU	05/04/72-04/12/74	15	8.	8.053	9.	6.9	0.304	0.551	7.2	7.8	8.5	8.94
00403	CONVERTED PH, LAB, STANDARD UNITS	05/04/72-04/12/74	15	8.	7.716	9.	6.9	0.426	0.652	7.2	7.8	8.5	8.94
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/04/72-04/12/74	15	0.01	0.019	0.126	0.001	0.001	0.031	0.001	0.003	0.016	0.074
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/04/72-04/12/74	17	90.	98.176	186.	9.	2386.654	48.853	10.6	72.	143.	157.2
00500	RESIDUE, TOTAL (MGL)	09/20/72-09/20/72	1	157.	157.	157.	157.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11/17/72-04/12/74	12 ##	0.05	0.078	0.4	0.01	0.011	0.103	0.016	0.05	0.05	0.31
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11/17/72-04/12/74	12 ##	0.008	0.009	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.024
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11/17/72-04/12/74	11	1.099	1.248	3.299	0.31	0.595	0.771	0.386	0.79	1.399	2.977
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11/17/72-04/12/74	12	0.4	0.438	0.8	0.05	0.071	0.267	0.065	0.225	0.7	0.8
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	05/04/72-04/12/74	17	122.	139.824	262.	68.	2940.529	54.227	80.8	99.	173.5	242.8
01002	ARSENIC, TOTAL (UG/L AS AS)	05/04/72-08/07/73	2 ##	1.5	1.5	2.5	0.5	2.	1.414	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/04/72-04/12/74	5 ##	5.	4.1	5.	0.5	4.05	2.012	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/04/72-04/12/74	7 ##	5.	9.286	30.	5.	86.905	9.322	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/04/72-04/12/74	7 ##	5.	5.714	10.	5.	3.571	1.89	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/04/72-04/12/74	7 ##	5.	7.143	10.	5.	7.143	2.673	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	08/07/73-04/12/74	3 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/04/72-04/12/74	15 ##	5.	8.	20.	5.	17.143	4.14	5.	5.	10.	14.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/04/72-04/12/74	16 ##	50.	340.625	1400.	50.	245739.583	495.721	50.	50.	725.	1330.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/04/72-04/12/74	16 ##	1.699	2.113	3.146	1.699	0.344	0.587	1.699	1.699	2.791	3.124
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/04/72-04/12/74			129.682								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	11/17/72-04/12/74	12	0.1	0.154	0.4	0.05	0.017	0.132	0.05	0.063	0.25	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11/17/72-04/12/74	12	0.1	0.142	0.35	0.01	0.01	0.101	0.025	0.085	0.2	0.335
71900	MERCURY, TOTAL (UG/L AS HG)	05/04/72-04/12/74	7 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0747

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	19	0	0.00	7	0	0.00	8	0	0.00	4	0	0.00			
00400 PH	Fresh Chronic	9.	18	4	0.22	6	3	0.50	8	0	0.00	4	1	0.25			
	Other-Lo Lim.	6.5	18	0	0.00	6	0	0.00	8	0	0.00	4	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	15	1	0.07	5	0	0.00	7	1	0.14	3	0	0.00			
	Other-Lo Lim.	6.5	15	0	0.00	5	0	0.00	7	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	12	0	0.00	3	0	0.00	7	0	0.00	2	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	11	0	0.00	2	0	0.00	7	0	0.00	2	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	50.	2	0	0.00	1	0	0.00				1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1 &	0	0.00	1	0	0.00									
	Drinking Water	5.	1 &	0	0.00	1	0	0.00									
01034 CHROMIUM, TOTAL	Drinking Water	100.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	1300.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	15.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	3	0	0.00	1	0	0.00				2	0	0.00			
	Drinking Water	100.	3	0	0.00	1	0	0.00				2	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	15	0	0.00	6	0	0.00	6	0	0.00	3	0	0.00			
	Drinking Water	5000.	15	0	0.00	6	0	0.00	6	0	0.00	3	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	16	5	0.31	6	2	0.33	7	1	0.14	3	2	0.67			
71900 MERCURY, TOTAL	Fresh Acute	2.4	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			
	Drinking Water	2.	7	0	0.00	3	0	0.00	1	0	0.00	3	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0748

NPS Station ID: SHEN0748
 Location: HAPPY CREEK AT FRONT ROYAL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin:
 Minor Basin:
 RF1 Index: 02070005
 RF3 Index: 02070006002600.00
 Description:

LAT/LON: 38.905560/ -78.186115

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.33

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01636210
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 2.20
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0748

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/21/69-05/21/69	1	18.	18.	18.	0.	0.	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	10/10/52-05/21/69	2	3.5	3.5	6.	1.	12.5	3.536	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	10/10/52-05/21/69	2	5.	5.	5.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/10/52-05/21/69	2	107.5	107.5	110.	105.	12.5	3.536	**	**	**
00400	PH (STANDARD UNITS)	10/10/52-05/21/69	2	7.4	7.4	7.5	7.3	0.02	0.141	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/10/52-05/21/69	2	7.389	7.389	7.5	7.3	0.02	0.142	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/10/52-05/21/69	2	0.041	0.041	0.05	0.032	0.	0.013	**	**	**
00405	CARBON DIOXIDE (MG/L AS CO2)	10/10/52-10/10/52	1	3.	3.	3.	3.	0.	0.	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	10/10/52-05/21/69	2	40.5	40.5	48.	33.	112.5	10.607	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	10/10/52-05/21/69	2	49.5	49.5	59.	40.	180.5	13.435	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	05/21/69-05/21/69	1	0.	0.	0.	0.	0.	0.	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/10/52-10/10/52	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	05/21/69-05/21/69	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	10/10/52-05/21/69	2	42.5	42.5	47.	38.	40.5	6.364	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/10/52-05/21/69	2	2.5	2.5	5.	0.	12.5	3.536	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	10/10/52-05/21/69	2	10.5	10.5	11.	10.	0.5	0.707	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	10/10/52-05/21/69	2	3.95	3.95	4.7	3.2	1.125	1.061	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	10/10/52-05/21/69	2	4.8	4.8	5.	4.6	0.08	0.283	**	**	**
00931	SODIUM ADSORPTION RATIO	10/10/52-05/21/69	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**
00932	SODIUM, PERCENT	10/10/52-05/21/69	2	19.5	19.5	21.	18.	4.5	2.121	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	10/10/52-05/21/69	2	0.85	0.85	1.3	0.4	0.405	0.636	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	10/10/52-05/21/69	2	5.	5.	6.	4.	2.	1.414	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	10/10/52-05/21/69	2	6.	6.	7.	5.	2.	1.414	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	10/10/52-05/21/69	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	10/10/52-05/21/69	2	14.5	14.5	15.	14.	0.5	0.707	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	05/21/69-05/21/69	1	30.	30.	30.	30.	0.	0.	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	10/10/52-05/21/69	2	74.5	74.5	75.	74.	0.5	0.707	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/10/52-05/21/69	2	71.5	71.5	76.	67.	40.5	6.364	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/10/52-05/21/69	2	0.76	0.76	1.26	0.26	0.5	0.707	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/10/52-05/21/69	2	0.1	0.1	0.1	0.1	0.	0.	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	10/10/52-05/21/69	2	0.8	0.8	1.5	0.1	0.98	0.99	**	**	**
71885	IRON (UG/L AS FE)	10/10/52-10/10/52	1	20.	20.	20.	20.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0748

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	2	0	0.00	1	0	0.00				1	0	0.00			
	Other-Lo Lim.	6.5	2	0	0.00	1	0	0.00				1	0	0.00			
00618 NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	1	0	0.00	1	0	0.00									
	Fresh Acute	860.	2	0	0.00	1	0	0.00				1	0	0.00			
00940 CHLORIDE, TOTAL IN WATER	Drinking Water	250.	2	0	0.00	1	0	0.00				1	0	0.00			
	Drinking Water	250.	2	0	0.00	1	0	0.00				1	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00	1	0	0.00				1	0	0.00			
00950 FLUORIDE, DISSOLVED AS F	Drinking Water	4.	2	0	0.00	1	0	0.00				1	0	0.00			
71851 NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	2	0	0.00	1	0	0.00				1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0749

NPS Station ID: SHEN0749
 Location: VAWA519R
 Station Type: /TYPA/AMBNT/SPRING
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070007
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070007
 RF3 Index: 02070007017606.86

LAT/LON: 38.907698/ -78.135698

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 11NPSWRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): SHEN_NURE_33 /4092393
 Within Park Boundary: No

Date Created: 08/22/98

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Description:
 THE STATION IS LOCATED ON THE FRONT ROYAL VIRGINIA 7.5' SERIES (TOPOGRAPHIC) QUADRANGLE. THE SITE IS AT A SPRING AND IS OUTSIDE OF THE SHENANDOAH NATIONAL PARK BOUNDARIES. THE SAMPLES WERE FILTERED THROUGH A LESS THAN OR EQUAL TO 0.8 UM MEMBRANE FILTER AT THE SITE. DATA ARE FROM THE "U.S. GEOLOGICAL SURVEY NATIONAL GEOCHEMICAL DATA BASE: NATIONAL URANIUM RESOURCE EVALUATION DATA FOR THE CONTERMINOUS UNITED STATES" 1994 CD-ROM BY J.D. HOFFMAN AND K. BUTTLEMAN (USGS DIGITAL DATA SERIES DDS-18-A). THE DATA BASE INCLUDES STREAM SEDIMENT; SOIL; SURFACE WATER; AND GROUND WATER DATA. THE "UNIQID" FIELD ENTRY WAS USED TO CREATE THE SECONDARY STATION NAME. THE "SRLID" FIELD ENTRY (SAVANNAH RIVER LABORATORY SAMPLE NUMBER) WAS USED TO CREATE THE STATION LOCATION. THE SAMPLES WERE ANALYZED BY SAVANNAH RIVER LABORATORY. DATA WERE PROCESSED AND UPLOADED TO STORET BY RYAN SHY; NATIONAL PARK SERVICE WATER RESOURCES DIVISION; 1201 OAK RIDGE DRIVE SUITE 250; FORT COLLINS CO 80525 (TEL. 970-225-3516).

Parameter Inventory for Station: SHEN0749

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	04/08/77-04/08/77	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	04/08/77-04/08/77	1	68.	68.	68.	68.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	04/08/77-04/08/77	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	04/08/77-04/08/77	1	6.6	6.6	6.6	6.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	04/08/77-04/08/77	1	0.251	0.251	0.251	0.251	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	04/08/77-04/08/77	1	35.	35.	35.	35.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	04/08/77-04/08/77	1	2.69	2.69	2.69	2.69	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	04/08/77-04/08/77	1	29.	29.	29.	29.	0.	0.	**	**	**	**
01085	VANADIUM, DISSOLVED (UG/L AS V)	04/08/77-04/08/77	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	04/08/77-04/08/77	1	57.	57.	57.	57.	0.	0.	**	**	**	**
22703	URANIUM, NATURAL, DISSOLVED	04/08/77-04/08/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
50700	FLUORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/08/77-04/08/77	1	20.	20.	20.	20.	0.	0.	**	**	**	**
50760	CHLORINE, DISSOLVED, FILTERED WATER SAMPLE UG/L	04/08/77-04/08/77	1	3200.	3200.	3200.	3200.	0.	0.	**	**	**	**
82331	DYSPROSIUM, DISSOLVED AS DY IN WATER UG/L	04/08/77-04/08/77	1##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0749

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	1	0	0.00							1	0	0.00			
	Other-Lo Lim.	6.5	1	0	0.00							1	0	0.00			
	Drinking Water	20.	1	0	0.00							1	0	0.00			
22703 URANIUM, NATURAL DISSOLVED																	

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0750

NPS Station ID: SHEN0750
 Location: ROUTE 55 BRIDGE AT FRONT ROYAL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070005006400.00

LAT/LON: 38.910893/ -78.185116

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BHPY002.60 /VA1B01DX0022/VA1B6X0022
 Within Park Boundary: No

Date Created: / /

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.05

On/Off RF1:
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: HAPPY CREEK SECTION: 01D TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Parameter Inventory for Station: SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	91	15.	13.467	27.8	0.4	64.786	8.049	2.02	5.6	20.	23.98
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/13/71-06/30/71	4	9.	8.625	14.	2.5	22.896	4.785	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	92	10.05	10.323	15.6	5.2	4.6	2.145	7.66	8.8	12.	13.2
00310	BOD, 5 DAY, 20 DEG C MG/L	12/05/68-01/27/72	10	1.55	2.5	10.2	0.6	7.84	2.8	0.63	1.05	2.7	9.45
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	90	7.8	7.776	10.	6.5	0.451	0.672	7.	7.3	8.	8.7
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	90	7.8	7.385	10.	6.5	0.605	0.778	7.	7.3	8.	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	90	0.016	0.041	0.316	0.	0.003	0.056	0.002	0.01	0.05	0.1
00403	PH, LAB, STANDARD UNITS SU	12/05/68-09/24/73	9	7.3	7.344	8.	7.	0.11	0.332	7.	7.05	7.55	8.
00403	CONVERTED PH, LAB, STANDARD UNITS	12/05/68-09/24/73	9	7.3	7.253	8.	7.	0.12	0.346	7.	7.05	7.55	8.
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-09/24/73	9	0.05	0.056	0.1	0.01	0.001	0.032	0.01	0.03	0.09	0.1
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-01/10/73	8	27.5	29.5	39.	23.	30.857	5.555	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	41	101.	329.878	6205.	19.	1121919.51	1059.207	64.4	90.	125.	186.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	41	43.	162.39	2470.	9.	267537.744	517.241	17.2	25.	66.5	102.8
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	41	60.	172.341	3735.	10.	341769.58	584.611	28.6	43.	82.	126.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	41	4.	157.329	3960.	0.	486800.183	697.711	0.5	0.5	10.	32.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	40	2.	91.613	1930.	0.	155881.788	394.819	0.	0.5	4.	10.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	40	1.5	69.775	2320.	0.	134890.833	367.275	0.	0.5	7.5	23.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	58 ##	0.05	0.562	29.5	0.01	14.949	3.866	0.049	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	61 ##	0.005	0.006	0.01	0.	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	55	0.3	0.364	1.	0.005	0.054	0.233	0.138	0.2	0.49	0.716
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	60	0.2	0.953	29.8	0.05	16.561	4.07	0.05	0.1	0.3	0.49
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	06/22/78-02/06/79	6	0.315	0.408	0.8	0.09	0.078	0.279	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-08/09/78	12 ##	2.5	4.292	31.	0.5	71.43	8.452	0.65	1.	2.5	22.6
01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-08/09/78	16 ##	5.	4.969	10.	0.5	3.082	1.756	2.95	5.	5.	6.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/09/78	23 ##	5.	10.435	80.	5.	258.893	16.09	5.	5.	10.	22.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/09/78	22 ##	5.	7.5	30.	5.	30.357	5.51	5.	5.	10.	10.
01045	IRON, TOTAL (UG/L AS FE)	11/16/70-04/13/71	3	300.	233.333	300.	100.	13333.333	115.47	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-08/09/78	21	5.	8.643	30.	1.	50.979	7.14	2.	5.	10.	21.6
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-04/13/71	2	45.	45.	60.	30.	450.	21.213	**	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/16/73-08/09/78	10 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-08/09/78	22 ##	5.	17.727	170.	5.	1261.255	35.514	5.	5.	12.5	41.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	07/16/68-10/12/70	14	3300.	7273.929	43000.	15.	123836869.918	11128.202	222.5	930.	11000.	27000.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	07/16/68-10/12/70	14	3.498	3.387	4.633	1.176	0.715	0.846	1.905	2.968	4.041	4.337

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31505 GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			2439.139								
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/14/78	73	100.	655.479	8000.	50.	2301080.67	1516.931	50.	50.	550.	1560.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/14/78	73	2.	2.25	3.903	1.699	0.409	0.64	1.699	1.699	2.739	3.185
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			178.032								
39380 DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	05/02/71-05/02/71	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	60 ##	0.05	0.813	24.	0.025	15.899	3.987	0.05	0.05	0.088	0.1
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	60	0.04	0.13	5.5	0.005	0.498	0.706	0.005	0.01	0.05	0.1
71900 MERCURY, TOTAL (UG/L AS HG)	09/09/70-08/09/78	22 ##	0.25	0.355	2.2	0.15	0.18	0.424	0.25	0.25	0.25	0.565

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0750

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070 TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	4	0	0.00							4	0	0.00			
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	92	0	0.00	28	0	0.00	36	0	0.00	28	0	0.00			
00400 PH	Fresh Chronic	9.	90	5	0.06	28	1	0.04	35	1	0.03	27	3	0.11			
	Other-Lo Lim.	6.5	90	1	0.01	28	0	0.00	35	1	0.03	27	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	9	0	0.00	2	0	0.00	4	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	9	0	0.00	2	0	0.00	4	0	0.00	3	0	0.00			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	61	0	0.00	16	0	0.00	25	0	0.00	20	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	55	0	0.00	14	0	0.00	22	0	0.00	19	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	12	0	0.00	6	0	0.00	2	0	0.00	4	0	0.00			
	Drinking Water	50.	12	0	0.00	6	0	0.00	2	0	0.00	4	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	2 &	1	0.50	1	0	0.00				1	1	1.00			
	Drinking Water	5.	3 &	1	0.33	1	0	0.00				2	1	0.50			
01034 CHROMIUM, TOTAL	Drinking Water	100.	23	0	0.00	7	0	0.00	7	0	0.00	9	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	22	1	0.05	6	0	0.00	7	0	0.00	9	1	0.11			
	Drinking Water	1300.	22	0	0.00	6	0	0.00	7	0	0.00	9	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	21	0	0.00	7	0	0.00	7	0	0.00	7	0	0.00			
	Drinking Water	15.	21	3	0.14	7	1	0.14	7	2	0.29	7	0	0.00			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	10	0	0.00	3	0	0.00	3	0	0.00	4	0	0.00			
	Drinking Water	100.	10	0	0.00	3	0	0.00	3	0	0.00	4	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	22	1	0.05	6	1	0.17	7	0	0.00	9	0	0.00			
	Drinking Water	5000.	22	0	0.00	6	0	0.00	7	0	0.00	9	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	14	9	0.64	8	7	0.88	2	0	0.00	4	2	0.50			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	73	32	0.44	19	10	0.53	31	12	0.39	23	10	0.43			
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	22	0	0.00	8	0	0.00	7	0	0.00	7	0	0.00			
	Drinking Water	2.	22	1	0.05	8	0	0.00	7	0	0.00	7	1	0.14			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	4	21.35	19.15	27.8	6.1	87.47	9.353	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	4	8.25	8.9	12.	7.1	4.607	2.146	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	4	8.25	8.275	8.8	7.8	0.209	0.457	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	4	8.182	8.116	8.8	7.8	0.243	0.493	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	4	0.007	0.008	0.016	0.002	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	3	16.7	13.333	20.	3.3	78.223	8.844	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	3	9.8	10.667	14.6	7.6	12.813	3.58	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	3	8.	8.1	8.5	7.8	0.13	0.361	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	3	8.	8.015	8.5	7.8	0.141	0.375	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	3	0.01	0.01	0.016	0.003	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	9	17.2	14.456	26.7	3.9	69.203	8.319	3.9	5.6	21.1	26.7
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	10	9.9	10.12	13.6	7.4	4.384	2.094	7.44	8.4	12.15	13.5
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	10	7.45	7.57	9.	7.	0.371	0.609	7.	7.	7.825	8.89
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	10	7.447	7.331	9.	7.	0.435	0.659	7.	7.	7.825	8.89
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	10	0.036	0.047	0.1	0.001	0.002	0.039	0.002	0.015	0.1	0.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	2	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	3 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	3	0.2	0.233	0.3	0.2	0.003	0.058	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	3	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	2 ##	425.	425.	800.	50.	281250.	530.33	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	2 ##	2.301	2.301	2.903	1.699	0.725	0.851	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			200.								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	3 ##	0.025	0.033	0.05	0.025	0.	0.014	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	2	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	10	14.75	13.92	24.4	2.2	71.873	8.478	2.42	4.4	23.3	24.29
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	10	10.9	10.92	14.	7.8	5.628	2.372	7.84	8.8	13.65	13.98
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	10	7.8	7.69	8.7	6.7	0.434	0.659	6.71	6.95	8.2	8.65
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	10	7.8	7.272	8.7	6.7	0.628	0.793	6.71	6.95	8.2	8.65
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	10	0.016	0.053	0.2	0.002	0.005	0.073	0.002	0.006	0.115	0.195
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10	500.	1935.	8000.	50.	10274472.222	3205.382	55.	250.	2600.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10	2.69	2.771	3.903	1.699	0.497	0.705	1.729	2.358	3.153	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			590.572								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	9	12.8	12.044	21.1	2.8	43.143	6.568	2.8	5.	18.05	21.1
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	9	9.9	10.5	13.2	8.6	2.798	1.673	8.6	9.25	12.3	13.2
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	9	7.	7.256	8.	6.7	0.245	0.495	6.7	6.8	7.75	8.
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	9	7.	7.054	8.	6.7	0.291	0.539	6.7	6.8	7.75	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	9	0.1	0.088	0.2	0.01	0.005	0.072	0.01	0.018	0.158	0.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	2	0.035	0.035	0.06	0.01	0.001	0.035	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	2	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	2	0.79	0.79	0.89	0.69	0.02	0.141	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	2	0.25	0.25	0.3	0.2	0.005	0.071	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	350.	1362.5	6000.	50.	4316250.	2077.559	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	2.5	2.623	3.778	1.699	0.588	0.767	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			420.202								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	2	0.04	0.04	0.05	0.03	0.	0.014	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	10	14.45	13.1	24.4	1.1	72.638	8.523	1.1	3.575	19.45	24.4
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	10	10.	10.11	15.6	5.2	8.81	2.968	5.44	7.75	12.225	15.33
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	8	7.35	7.512	9.2	7.	0.507	0.712	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	8	7.325	7.282	9.2	7.	0.567	0.753	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	8	0.047	0.052	0.1	0.001	0.001	0.033	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	9	0.05	0.061	0.1	0.01	0.001	0.032	0.01	0.045	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	10	0.01	0.008	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	10	0.495	0.501	0.79	0.17	0.049	0.221	0.175	0.318	0.702	0.785
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	10	0.35	1.39	11.	0.1	11.443	3.383	0.1	0.175	0.5	9.98
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10	300.	680.	2900.	50.	902888.889	950.205	50.	50.	1050.	2790.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10	2.452	2.402	3.462	1.699	0.469	0.685	1.699	1.699	2.991	3.442
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			252.273								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	10 ##	0.05	2.05	20.	0.05	39.778	6.307	0.05	0.05	0.063	18.01
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	10	0.1	0.625	5.5	0.03	2.935	1.713	0.032	0.05	0.113	4.965

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	8	14.7	12.013	20.	1.1	47.938	6.924	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	8	10.7	10.525	12.6	6.7	4.134	2.033	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	9	8.	7.717	8.5	6.5	0.398	0.63	6.5	7.25	8.125	8.5
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	9	8.	7.25	8.5	6.5	0.643	0.802	6.5	7.25	8.125	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	9	0.01	0.056	0.316	0.003	0.01	0.102	0.003	0.008	0.066	0.316
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	9 ##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	9 ##	0.005	0.004	0.005	0.	0.	0.002	0.	0.005	0.005	0.005
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	9	0.2	0.316	1.	0.005	0.084	0.289	0.005	0.18	0.425	1.
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	9	0.2	0.206	0.5	0.05	0.018	0.133	0.05	0.1	0.25	0.5
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	50.	143.75	700.	50.	51026.786	225.891	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	1.699	1.917	2.845	1.699	0.159	0.399	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			82.698								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	9 ##	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	9 ##	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	10	13.6	13.17	25.	1.7	65.698	8.105	1.81	5.275	20.275	24.61
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	10	11.2	10.74	12.8	6.3	3.936	1.984	6.57	9.75	12.325	12.79
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	11	7.8	8.118	10.	7.	0.75	0.866	7.1	7.5	8.7	9.8
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	11	7.8	7.657	10.	7.	0.984	0.992	7.1	7.5	8.7	9.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	11	0.016	0.022	0.1	0.	0.001	0.028	0.	0.002	0.032	0.086
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	10###	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	10###	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	10	0.22	0.291	0.7	0.005	0.046	0.215	0.017	0.15	0.428	0.69
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	10	0.1	0.13	0.3	0.05	0.008	0.089	0.05	0.05	0.2	0.29
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10###	50.	325.	2000.	50.	401250.	633.443	50.	50.	275.	1880.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10###	1.699	2.01	3.301	1.699	0.349	0.591	1.699	1.699	2.226	3.261
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			102.257								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	10###	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	10###	0.045	0.035	0.05	0.005	0.	0.019	0.006	0.018	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	10	15.	14.38	23.9	0.6	49.753	7.054	1.54	10.	21.375	23.73
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	10	9.8	9.71	13.8	5.9	4.008	2.002	6.13	8.65	10.6	13.48
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	9	7.7	7.644	8.	6.8	0.173	0.416	6.8	7.4	8.	8.
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	9	7.7	7.433	8.	6.8	0.223	0.472	6.8	7.4	8.	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	9	0.02	0.037	0.158	0.01	0.002	0.048	0.01	0.01	0.041	0.158
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	9###	0.05	0.056	0.1	0.05	0.	0.017	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	10###	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	10	0.3	0.335	0.8	0.1	0.036	0.189	0.108	0.233	0.398	0.762
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	9	0.1	0.122	0.3	0.05	0.008	0.091	0.05	0.05	0.2	0.3
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	9###	50.	161.111	600.	50.	39861.111	199.652	50.	50.	250.	600.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	9###	1.699	1.986	2.778	1.699	0.177	0.421	1.699	1.699	2.301	2.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			96.854								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	9###	0.05	0.061	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	10	0.02	0.025	0.07	0.005	0.	0.02	0.006	0.01	0.028	0.068

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	9	9.	12.511	27.2	0.4	133.184	11.541	0.4	1.8	25.2	27.2
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	9	9.4	10.222	13.4	7.2	5.964	2.442	7.2	8.2	13.1	13.4
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	9	8.	8.022	8.7	7.	0.377	0.614	7.	7.5	8.6	8.7
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	9	8.	7.654	8.7	7.	0.529	0.727	7.	7.5	8.6	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	9	0.01	0.022	0.1	0.002	0.001	0.032	0.002	0.003	0.032	0.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	8###	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	8###	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	8	0.305	0.339	0.59	0.15	0.019	0.137	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	8	0.25	0.294	0.9	0.05	0.075	0.273	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	250.	406.25	1200.	50.	202455.357	449.95	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	2.389	2.32	3.079	1.699	0.329	0.573	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			208.707					**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	8###	0.05	0.069	0.2	0.05	0.003	0.053	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	8###	0.008	0.019	0.06	0.005	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	8	15.75	14.25	24.	1.	63.143	7.946	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	8	10.45	10.375	13.	8.1	2.256	1.502	**	**	**	**
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	8	8.	8.088	9.5	7.2	0.547	0.74	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	8	8.	7.718	9.5	7.2	0.703	0.838	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	8	0.01	0.019	0.063	0.	0.	0.022	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	8 ##	0.05	3.744	29.5	0.05	108.308	10.407	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	8 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	3	0.18	0.31	0.7	0.05	0.118	0.344	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	8	0.2	4.4	29.8	0.1	107.411	10.364	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	50.	106.25	400.	50.	14598.214	120.823	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	1.699	1.887	2.602	1.699	0.102	0.319	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				77.111								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	8	0.1	3.206	24.	0.05	70.748	8.411	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	8	0.01	0.019	0.05	0.005	0.	0.018	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	1	2.	2.	2.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	1	12.4	12.4	12.4	12.4	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	28	21.1	20.471	27.8	2.1	27.004	5.196	14.94	17.35	23.825	27.02
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	28	8.45	8.521	11.	5.9	1.438	1.199	7.02	7.8	9.425	10.22
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	28	8.	8.082	9.	7.	0.279	0.528	7.46	7.725	8.5	8.71
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	28	8.	7.779	9.	7.	0.374	0.611	7.46	7.725	8.5	8.71
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	28	0.01	0.017	0.1	0.001	0.001	0.023	0.002	0.003	0.019	0.036
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	11	129.	681.273	6205.	97.	3357042.818	1832.223	97.4	108.	152.	5002.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	11	55.	267.727	2470.	9.	533896.418	730.682	12.2	29.	71.	1990.4
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	11	84.	413.545	3735.	36.	1214588.673	1102.084	37.6	48.	123.	3013.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	11	1.	370.818	3960.	0.	1417584.464	1190.624	0.1	0.5	34.	3183.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	11	0.5	151.818	1640.	0.	243636.864	493.596	0.	0.5	10.	1314.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	11	0.5	219.182	2320.	0.	485826.064	697.012	0.	0.5	24.	1868.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	15 ##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	16 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	14	0.28	0.323	0.69	0.1	0.027	0.163	0.135	0.215	0.388	0.645
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	15	0.2	0.263	0.8	0.05	0.037	0.191	0.08	0.1	0.4	0.56
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	19	400.	1160.526	8000.	50.	4680994.152	2163.561	50.	50.	1000.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	19	2.602	2.459	3.903	1.699	0.574	0.757	1.699	1.699	3.	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			287.519								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	15 ##	0.05	0.073	0.2	0.05	0.002	0.042	0.05	0.05	0.1	0.14
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	16	0.045	0.04	0.1	0.005	0.001	0.031	0.005	0.01	0.05	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	36	4.4	5.889	15.6	0.4	21.194	4.604	1.07	2.05	10.	13.51
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	36	12.1	11.931	15.6	5.2	3.311	1.82	9.97	10.8	13.	13.86
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	35	7.5	7.434	9.2	6.5	0.34	0.583	6.8	7.	8.	8.
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	35	7.5	7.157	9.2	6.5	0.419	0.647	6.8	7.	8.	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	35	0.032	0.07	0.316	0.001	0.005	0.071	0.01	0.01	0.1	0.158
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	15	94.	305.6	3219.	62.	650029.829	806.244	69.2	86.	114.	1380.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	15	45.	198.933	2357.	14.	356927.924	597.434	15.8	25.	68.	994.4
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	15	48.	108.667	862.	19.	44105.381	210.013	24.4	32.	76.	416.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	15	2.	151.267	2190.	0.	318145.995	564.044	0.3	0.5	14.	890.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	15	2.	131.067	1930.	0.	247672.567	497.667	0.3	0.5	5.	778.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	14	0.75	21.75	260.	0.	4727.76	68.759	0.	0.	10.75	137.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	24 ##	0.05	1.278	29.5	0.01	36.137	6.011	0.025	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	25 ##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	22	0.49	0.489	1.	0.005	0.075	0.275	0.153	0.215	0.71	0.863
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	25	0.2	1.808	29.8	0.05	38.688	6.22	0.05	0.075	0.3	4.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	31 ##	50.	245.161	1200.	50.	94559.14	307.505	50.	50.	400.	800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	31 ##	1.699	2.1	3.079	1.699	0.239	0.489	1.699	1.699	2.602	2.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			125.896								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	25 ##	0.05	1.818	24.	0.05	37.229	6.102	0.05	0.05	0.075	8.12
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	25	0.03	0.254	5.5	0.005	1.196	1.093	0.005	0.01	0.05	0.12

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/16/68-02/06/79	27	16.	16.307	25.	4.4	26.956	5.192	8.32	13.9	19.5	24.
00300	OXYGEN, DISSOLVED MG/L	07/16/68-02/06/79	28	9.95	10.057	13.8	6.7	2.888	1.7	8.1	8.85	10.95	12.75
00400	PH (STANDARD UNITS)	07/16/68-12/14/78	27	7.8	7.902	10.	6.7	0.536	0.732	7.16	7.5	8.2	9.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0750

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	07/16/68-12/14/78	27	7.8	7.528	10.	6.7	0.681	0.825	7.16	7.5	8.2	9.1
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	07/16/68-12/14/78	27	0.016	0.03	0.2	0.	0.002	0.041	0.001	0.006	0.032	0.07
00500	RESIDUE, TOTAL (MG/L)	12/05/68-02/06/79	15	97.	96.467	197.	19.	1544.267	39.297	43.6	76.	115.	154.4
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/06/79	15	34.	48.6	187.	14.	2088.971	45.705	16.4	20.	49.	139.
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-02/06/79	15	55.	59.133	143.	10.	1027.838	32.06	14.2	42.	69.	114.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-02/06/79	15	6.	6.833	20.	0.5	34.238	5.851	0.5	2.	10.	18.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-02/06/79	14	2.	2.036	7.	0.	3.672	1.916	0.	0.5	3.	5.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-02/06/79	15	5.	5.033	16.	0.5	22.338	4.726	0.5	1.	6.	14.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	19 ##	0.05	0.055	0.1	0.04	0.	0.016	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	20 ##	0.005	0.006	0.01	0.	0.	0.002	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	19	0.22	0.25	0.69	0.005	0.022	0.147	0.05	0.18	0.3	0.41
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	20	0.2	0.402	4.299	0.05	0.875	0.936	0.05	0.1	0.275	0.84
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	23	100.	791.304	8000.	50.	3095148.221	1759.303	50.	50.	600.	2820.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	23	2.	2.281	3.903	1.699	0.474	0.688	1.699	1.699	2.778	3.45
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			191.143								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	20 ##	0.05	0.113	1.2	0.025	0.066	0.257	0.028	0.05	0.05	0.1
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	19	0.05	0.041	0.1	0.005	0.001	0.027	0.005	0.02	0.05	0.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0751

NPS Station ID: SHEN0751
 Location: FRONT ROYAL UPSTRM OF FMC,ETC.
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070006001002.96
 Description:

LAT/LON: 38.912504/ -78.219170

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 4.800
 RF3 Mile Point: 2.98

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 075 /075 /FMC 05 /141-00
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.09

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0751

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0752

NPS Station ID: SHEN0752
 Location: S.F.SHEN.R. LURAY AV BR FRNT RYL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005001
 RF3 Index: 02070005000226.76
 Description:

LAT/LON: 38.913337/ -78.210560

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 5.090
 RF3 Mile Point: 26.86

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 021 /021 /SF SHEN S-19
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0752

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/67-06/16/67	9	26.	26.333	29.	23.	4.063	2.016	23.	24.75	28.25	29.
00060	FLOW, STREAM, MEAN DAILY CFS	06/14/67-06/16/67	3	539.	540.	550.	531.	91.	9.539	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/14/67-06/16/67	9	8.8	8.656	14.	5.3	9.378	3.062	5.3	5.7	11.15	14.
00310	BOD, 5 DAY, 20 DEG C MG/L	06/14/67-06/16/67	9	8.7	8.589	12.2	5.3	5.674	2.382	5.3	6.3	10.6	12.2
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/14/67-06/15/67	5	490.	468.	700.	330.	23220.	152.381	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	06/14/67-06/15/67	5	2.69	2.653	2.845	2.519	0.019	0.138	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			449.266								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	5 ##	10.	34.	130.	10.	2880.	53.666	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	5 ##	1.	1.223	2.114	1.	0.248	0.498	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			16.703								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0752

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	9	0	0.00						9	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	0	0.00						5	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	0	0.00						5	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0753

NPS Station ID: SHEN0753
 Location: S.F.SHEN.R. LURAY AV BR FRNT RYL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070005001
 RF3 Index: 02070005003202.61
 Description:

LAT/LON: 38.913337/ -78.210560

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 5.090
 RF3 Mile Point: 2.65

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 077 /077 /SFSHEN-S19
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0753

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/69-08/18/69	2	24.75	24.75	25.	24.5	0.125	0.354	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/29/69-08/18/69	2	20.75	20.75	33.	8.5	300.125	17.324	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/29/69-08/18/69	2	6.3	6.3	6.6	6.	0.18	0.424	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/29/69-08/18/69	2	2.25	2.25	2.9	1.6	0.845	0.919	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/69-07/29/69	1	0.044	0.044	0.044	0.044	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/69-07/29/69	1	0.779	0.779	0.779	0.779	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/29/69-08/18/69	2	1.385	1.385	1.42	1.35	0.002	0.049	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/18/69	2	26000.	26000.	34800.	17200.	154880000.	12445.079	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/18/69	2	4.389	4.389	4.542	4.236	0.047	0.216	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =		24465.486									
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/18/69	2	11250.	11250.	22100.	400.	235445000.	15344.217	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/18/69	2	3.473	3.473	4.344	2.602	1.518	1.232	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =		2973.214									
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/29/69-08/18/69	2	7.875	7.875	9.75	6.	7.031	2.652	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/29/69-08/18/69	2	0.5	0.5	0.56	0.44	0.007	0.085	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0753

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00								
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00								
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00								
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00								
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0754

NPS Station ID: SHEN0754 LAT/LON: 38.913616/ -78.210004

Location: DGIF BOAT LAUNCH LURAY AVE - WARREN COUNTY

Station Type: /TYPA/AMBNT/STREAM

RMI-Indexes:

RMI-Miles:

HUC: 02070005

Major Basin: 02-NORTH-ATLANTIC

Minor Basin: 1-POTOMAC-SHENANDOAH

RF1 Index: 02070005

RF3 Index: 02070005000100.87

Description:

VIRGINIA STATE WATER CONTROL BOARD

RIVER: S FORK SHENANDOAH RIVER

AMBIENT MONITORING

SECTION: 02

BASIN: 1B SHENANDOAH

TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VIRGINIA

Agency: 21VASWCB

FIPS State/County: 51187 VIRGINIA/WARREN

STORET Station ID(s): 1BSSF003.50

Within Park Boundary: No

Date Created: 04/08/89

Aquifer:

Water Body ID:

ECO Region:

Distance from RF1: 0.40

Distance from RF3: 0.03

On/Off RF1:

On/Off RF3:

Parameter Inventory for Station: SHEN0754

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/16/92-07/16/92	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01004 ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	07/16/92-07/16/92	3 ##	0.125	0.125	0.125	0.125	0.	0.	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/16/92-07/16/92	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/16/92-07/16/92	1	11.	11.	11.	11.	0.	0.	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/16/92-07/16/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/16/92-07/16/92	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/16/92-07/16/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01069 NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	07/16/92-07/16/92	3 ##	0.5	0.667	1.	0.5	0.083	0.289	**	**	**	**
01073 THALLIUM,TISSUE,WET WEIGHT,MG/KG	07/16/92-07/16/92	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/16/92-07/16/92	1	210.	210.	210.	210.	0.	0.	**	**	**	**
01149 SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	07/16/92-07/16/92	3	0.45	0.453	0.49	0.42	0.001	0.035	**	**	**	**
34252 BERYLLIUM WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34258 B-BHC-BETA WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
34263 DELTA BENZENE HEXACHLORIDE WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
34360 ENDOSULFAN, BETA WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34365 ENDOSULFAN, ALPHA WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34664 PCB - 1221 WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34667 PCB - 1232 WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34669 PCB - 1248 WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34670 PCB - 1260 WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34674 PCB - 1016 WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34680 ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34682 CHLORDANE(TECH MIX & METABS),TISSUEWET WGT,MG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34685 ENDRIN WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34686 HEPTACHLOR EPOXIDE WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34687 HEPTACHLOR WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34688 HEXACHLORO BENZENE WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34689 PCB - 1242 WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34690 PCB - 1254 WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34691 TOXAPHENE WET WGT TISMG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
38744 CHLORPYRIFOS-METHYL TISWETWGTMG/KG	07/16/92-07/16/92	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/16/92-07/16/92	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
39069 CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0754

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
39072	CHLORDANE-NONACHLOR.TRANS ISO.TISSUE,WET WT,UG/G	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39074	BHC-ALPHA ISOMER.TISSUE UG/G WET WGT	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/16/92-07/16/92	1 ##	250.	250.	250.	250.	250.	0.	0.	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	1 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/16/92-07/16/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/16/92-07/16/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/16/92-07/16/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.5	0.	0.	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/16/92-07/16/92	1 ##	250.	250.	250.	250.	250.	0.	0.	**	**	**
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	07/16/92-07/16/92	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/16/92-07/16/92	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/16/92-07/16/92	3	0.07	0.067	0.1	0.03	0.001	0.035	**	**	**	**
71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/16/92-07/16/92	3	2.	2.	2.	2.	0.	0.	**	**	**	**
71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/16/92-07/16/92	3	9.	10.333	13.	9.	5.333	2.309	**	**	**	**
71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/16/92-07/16/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/16/92-07/16/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/16/92-07/16/92	3	5.	5.	5.	5.	0.	0.	**	**	**	**
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	07/16/92-07/16/92	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**
81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	07/16/92-07/16/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	07/16/92-07/16/92	3 ##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	07/16/92-07/16/92	3 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	07/16/92-07/16/92	3 ##	0.05	0.067	0.1	0.05	0.001	0.029	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0755

NPS Station ID: SHEN0755
 Location: RT. 619 BRIDGE AT GAGING STATION
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005001
 RF3 Index: 02070005000100.87
 Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: S FORK SHENANDOAH

LAT/LON: 38.913616/ -78.210059

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 5.090
 RF3 Mile Point: 1.76

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSSF003.56 /VA1B02-X0066/VA1B6X0066
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 1.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 SECTION: 02 TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VIRGINIA

Parameter Inventory for Station: SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	294	15.85	15.497	31.	0.	74.712	8.644	3.9	8.	23.7	26.85
00070	TURBIDITY, (JACKSON CANDLE UNITS)	28	2.75	5.332	40.	0.2	60.274	7.764	0.47	1.2	6.15	11.4
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	53	3.4	8.204	118.	0.7	309.838	17.602	1.	1.65	6.	16.68
00080	COLOR (PLATINUM-COBALT UNITS)	23	16.	17.565	39.	8.	41.166	6.416	9.8	14.	20.	25.
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	110	299.5	299.036	608.	118.	6582.09	81.13	202.	242.25	352.	387.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	95	289.	279.779	532.	133.	4523.536	67.257	190.4	233.	323.	358.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	79	9.8	10.058	16.8	5.6	6.327	2.515	6.9	8.1	11.9	13.5
00300p	OXYGEN, DISSOLVED MG/L	214	10.6	10.712	16.1	6.	4.356	2.087	8.2	9.2	12.225	13.45
00310p	BOD, 5 DAY, 20 DEG C MG/L	214	1.	1.471	9.	0.5	1.461	1.209	0.5	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	204	8.	9.275	44.	0.5	38.481	6.203	3.5	6.	11.	15.
00400p	PH (STANDARD UNITS)	287	8.5	8.465	10.	6.7	0.359	0.599	7.7	8.	8.97	9.2
00400p	CONVERTED PH (STANDARD UNITS)	287	8.5	8.022	10.	6.7	0.556	0.746	7.7	8.	8.97	9.2
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	287	0.003	0.01	0.2	0.	0.	0.021	0.001	0.001	0.01	0.02
00403p	PH, LAB, STANDARD UNITS SU	229	8.2	8.176	9.6	6.8	0.248	0.498	7.5	7.9	8.5	8.7
00403p	CONVERTED PH, LAB, STANDARD UNITS	229	8.2	7.878	9.6	6.8	0.337	0.58	7.5	7.9	8.5	8.7
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	229	0.006	0.013	0.158	0.	0.	0.021	0.002	0.003	0.013	0.032
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	227	118.	117.515	670.	8.	2339.109	48.364	71.	94.	139.	152.
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	9	14.	19.111	71.	1.	484.111	22.003	1.	4.	28.5	71.
00500	RESIDUE, TOTAL (MG/L)	40	173.5	173.8	232.	106.	1175.395	34.284	120.8	148.5	204.25	220.9
00505	RESIDUE, TOTAL VOLATILE (MG/L)	39	40.	75.821	900.	18.	23921.835	154.667	25.	30.	51.	71.
00510	RESIDUE, TOTAL FIXED (MG/L)	39	140.	134.128	194.	74.	1084.273	32.928	83.	109.	161.	175.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	206	3.	12.876	658.	0.5	2364.1	48.622	1.5	2.5	10.	21.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	206##	2.	3.425	100.	0.	54.647	7.392	1.	1.5	3.	6.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	206	2.5	10.311	558.	0.	1709.427	41.345	1.5	1.5	6.	16.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	263##	0.05	0.076	1.7	0.02	0.022	0.15	0.02	0.02	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	263	0.01	0.014	0.26	0.005	0.	0.019	0.005	0.005	0.02	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	257	1.099	1.133	13.79	0.025	0.841	0.917	0.488	0.795	1.385	1.676
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	259	0.4	0.459	4.	0.05	0.141	0.375	0.2	0.3	0.5	0.8
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	6	1.575	1.343	1.7	0.7	0.214	0.463	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	201	0.1	0.164	4.	0.05	0.083	0.288	0.05	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	125	0.11	0.288	21.	0.005	3.497	1.87	0.036	0.055	0.165	0.214
00680p	CARBON, TOTAL ORGANIC (MG/L AS C)	205	4.	5.036	34.	0.5	15.471	3.933	2.	2.6	6.	9.
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	221	130.	127.407	285.	17.	1201.497	34.663	84.	105.5	148.5	167.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00901	HARDNESS, CARBONATE (MG/L AS CaCO3)	09/09/70-10/12/70	2	158.	158.	166.	150.	128.	11.314	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	05/09/74-12/02/98	104	10.	10.925	52.	0.25	32.485	5.7	6.	13.75	16.	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	144	13.	16.248	291.	0.25	559.611	23.656	10.	16.	22.	
00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/87-01/11/93	32	0.115	0.121	0.27	0.025	0.004	0.066	0.05	0.158	0.25	
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/05/89-01/11/93	30	3.5	4.22	12.2	0.1	11.237	3.352	0.51	1.375	9.42	
01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-08/09/78	12 ##	1.25	1.625	2.5	0.5	0.642	0.801	0.65	1.	2.5	
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/20/79-06/24/96	2 ##	16.2	16.2	21.	11.4	46.08	6.788	**	**	**	
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/27/83-06/24/96	1 ##	1.45	1.45	1.45	1.45	0.	0.	**	**	**	
01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-07/07/82	16 ##	5.	4.188	5.	0.5	3.063	1.75	0.5	5.	5.	
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-06/24/96	1 ##	0.21	0.21	0.21	0.21	0.	0.	**	**	**	
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-06/24/96	2	38.55	38.55	45.8	31.3	105.125	10.253	**	**	**	
01034	CHROMIUM, TOTAL (UG/L AS CR)	11/16/70-07/07/82	22 ##	5.	7.75	30.	0.5	56.137	7.492	5.	5.	6.25	
01042	COPPER, TOTAL (UG/L AS CU)	11/16/70-07/07/82	22 ##	5.	7.273	20.	5.	27.922	5.284	5.	5.	20.	
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/20/79-06/24/96	2	24.85	24.85	37.2	12.5	305.045	17.466	**	**	**	
01045	IRON, TOTAL (UG/L AS FE)	11/16/70-07/07/82	4	250.	235.	400.	40.	23566.667	153.514	**	**	**	
01051	LEAD, TOTAL (UG/L AS PB)	08/18/70-07/07/82	23	5.	9.717	46.	1.	109.019	10.441	1.7	5.	10.	
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/20/79-06/24/96	2	50.5	50.5	80.1	20.9	1752.32	41.861	**	**	**	
01055	MANGANESE, TOTAL (UG/L AS MN)	04/13/71-07/07/82	2	55.	55.	90.	20.	2450.	49.497	**	**	**	
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/16/73-08/09/78	10 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	
01067	NICKEL, TOTAL (UG/L AS NI)	07/07/82-07/07/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-06/24/96	2	14.48	14.48	28.6	0.36	398.749	19.969	**	**	**	
01092	ZINC, TOTAL (UG/L AS ZN)	06/16/70-07/07/82	75	10.	26.2	200.	5.	1568.811	39.608	5.	5.	30.	
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/20/79-06/24/96	2	92.05	92.05	134.	50.1	3519.605	59.326	**	**	**	
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/27/83-06/24/96	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/16/70-10/12/70	5	930.	1178.	2400.	230.	1050570.	1024.973	**	**	**	
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	06/16/70-10/12/70	5	2.968	2.879	3.38	2.362	0.248	0.498	**	**	**	
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			756.613								
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/02/98	272 ##	50.	283.272	8000.	50.	753898.11	868.273	50.	50.	100.	
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/02/98	272 ##	1.699	1.955	3.903	1.699	0.225	0.475	1.699	1.699	2.	
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			90.224								
32240	TANNIN AND LIGNIN (MG/L)	10/19/92-11/17/92	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	05/09/74-01/19/83	3	0.004	1.668	5.	0.001	8.325	2.885	**	**	**	
34480	THALLIUM DRY WGTBOTMG/KG	06/27/83-06/24/96	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/07/82	3	0.	0.	0.	0.	0.	0.	**	**	**	
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/27/83-06/24/96	1	0.	0.	0.	0.	0.	0.	**	**	**	
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	06/30/71-06/30/71	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/07/82-07/07/82	1	0.	0.	0.	0.	0.	0.	**	**	**	
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/27/83-06/27/83	1	0.	0.	0.	0.	0.	0.	**	**	**	
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**	
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/17/82-07/22/85	8	0.	0.013	0.1	0.	0.001	0.035	**	**	**	
70505	PHOSPHATE, TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	59	0.1	0.194	0.6	0.05	0.023	0.151	0.05	0.05	0.3	
70507p	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	137	0.08	0.11	0.6	0.005	0.01	0.102	0.03	0.05	0.11	
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-07/07/82	23 ##	0.25	0.298	1.3	0.15	0.051	0.227	0.19	0.25	0.4	
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/20/79-06/24/96	2 ##	0.9	0.9	1.7	0.1	1.28	1.131	**	**	**	
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	06/03/92-06/23/94	25	2.8	6.848	52.	0.6	114.518	10.701	0.82	1.65	8.3	

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

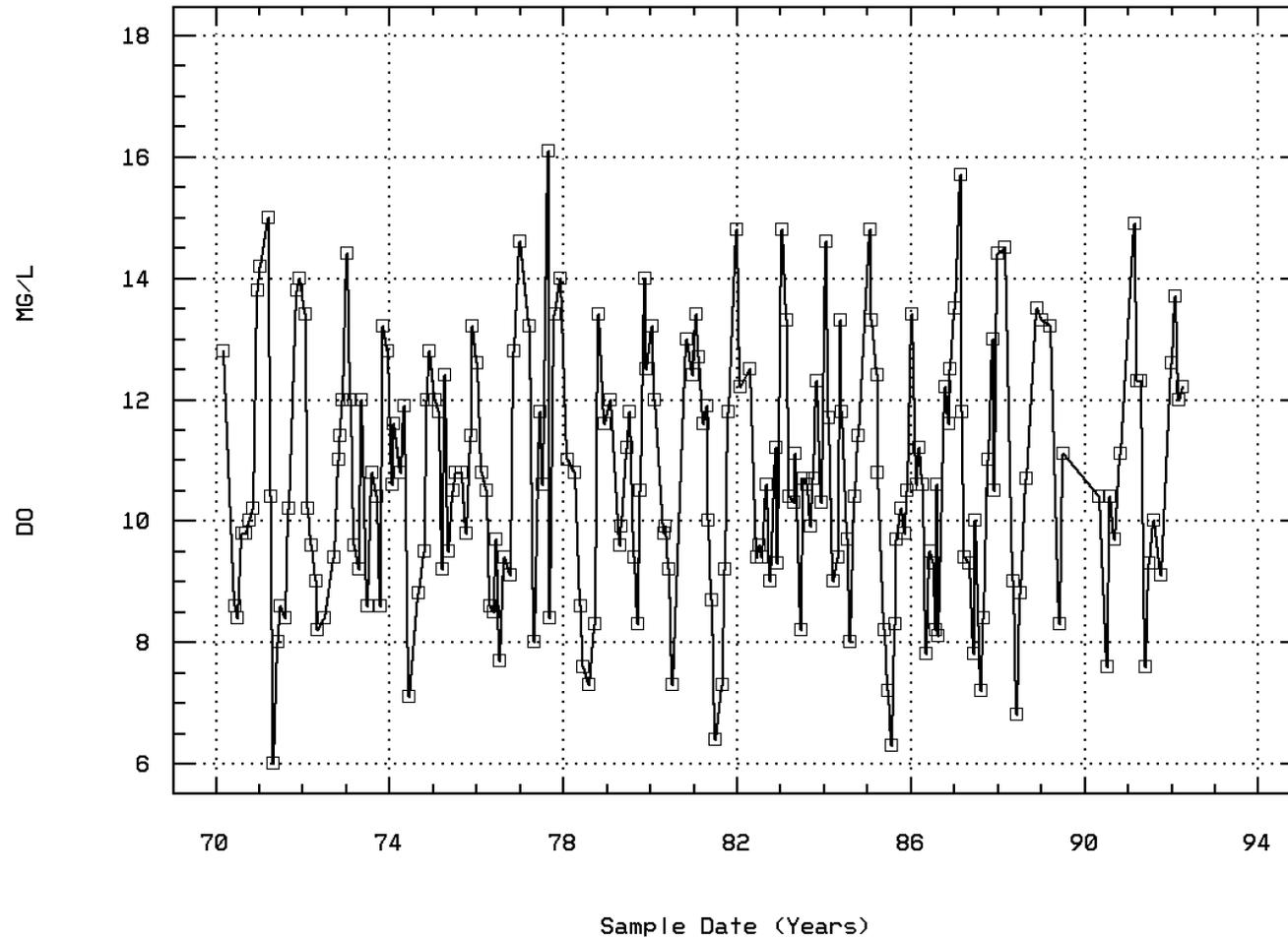
EPA Water Quality Criteria Analysis for Station: SHEN0755

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS		28	0	0.00	7	0	0.00	10	0	0.00	11	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER		53	2	0.04	20	0	0.00	21	1	0.05	12	1	0.08			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE		79	0	0.00	25	0	0.00	34	0	0.00	20	0	0.00			
00300	OXYGEN, DISSOLVED		214	0	0.00	60	0	0.00	87	0	0.00	67	0	0.00			
00400	PH		287	71	0.25	85	26	0.31	117	27	0.23	85	18	0.21			
			287	0	0.00	85	0	0.00	117	0	0.00	85	0	0.00			
00403	PH, LAB		229	10	0.04	73	4	0.05	95	4	0.04	61	2	0.03			
			229	0	0.00	73	0	0.00	95	0	0.00	61	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N		263	0	0.00	78	0	0.00	110	0	0.00	75	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N		257	1	0.00	76	0	0.00	107	1	0.01	74	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.		6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
00940	CHLORIDE, TOTAL IN WATER		104	0	0.00	34	0	0.00	42	0	0.00	28	0	0.00			
			104	0	0.00	34	0	0.00	42	0	0.00	28	0	0.00			
00945	SULFATE, TOTAL (AS SO4)		144	1	0.01	44	1	0.02	63	0	0.00	37	0	0.00			
00951	FLUORIDE, TOTAL AS F		32	0	0.00	10	0	0.00	13	0	0.00	9	0	0.00			
01002	ARSENIC, TOTAL		12	0	0.00	6	0	0.00	2	0	0.00	4	0	0.00			
			12	0	0.00	6	0	0.00	2	0	0.00	4	0	0.00			
01027	CADMIUM, TOTAL		3 &	0	0.00	2	0	0.00	0	0	0.00	1	0	0.00			
			3 &	0	0.00	2	0	0.00	0	0	0.00	1	0	0.00			
01034	CHROMIUM, TOTAL		22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
01042	COPPER, TOTAL		22	3	0.14	7	0	0.00	8	2	0.25	7	1	0.14			
			22	0	0.00	7	0	0.00	8	0	0.00	7	0	0.00			
01051	LEAD, TOTAL		23	0	0.00	8	0	0.00	8	0	0.00	7	0	0.00			
			23	0	0.00	8	0	0.00	8	0	0.00	7	0	0.00			
01065	NICKEL, DISSOLVED		23	4	0.17	8	1	0.13	8	2	0.25	7	1	0.14			
			10	0	0.00	3	0	0.00	3	0	0.00	4	0	0.00			
			10	0	0.00	3	0	0.00	3	0	0.00	4	0	0.00			
01067	NICKEL, TOTAL		1	0	0.00	1	0	0.00	0	0	0.00	0	0	0.00			
			1	0	0.00	1	0	0.00	0	0	0.00	0	0	0.00			
01092	ZINC, TOTAL		75	3	0.04	21	1	0.05	31	2	0.06	23	0	0.00			
			75	0	0.00	21	0	0.00	31	0	0.00	23	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C		5	2	0.40	4	2	0.50				1	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH		272	53	0.19	81	10	0.12	111	20	0.18	80	23	0.29			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP		2	0	0.00	2	0	0.00						0.00			
			2	0	0.00	2	0	0.00						0.00			
39300	P,P' DDT IN WHOLE WATER SAMPLE		2	0	0.00	2	0	0.00						0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE		2	0	0.00	2	0	0.00						0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE		2	0	0.00	2	0	0.00						0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE		3	0	0.00	3	0	0.00						0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE		2	0	0.00	2	0	0.00						0.00			
			2	0	0.00	2	0	0.00						0.00			
39380	DIELDRIN IN WHOLE WATER SAMPLE		2	0	0.00	2	0	0.00						0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE		2	0	0.00	2	0	0.00						0.00			
			2	0	0.00	2	0	0.00						0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE		2	0	0.00	2	0	0.00						0.00			
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE		1	0	0.00	1	0	0.00						0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE		2	0	0.00	2	0	0.00						0.00			
			2	0	0.00	2	0	0.00						0.00			
50060	CHLORINE, TOTAL RESIDUAL		8	1	0.13	6	1	0.17	1	0	0.00	1	0	0.00			
71900	MERCURY, TOTAL		23	0	0.00	8	0	0.00	8	0	0.00	7	0	0.00			
			23	0	0.00	8	0	0.00	8	0	0.00	7	0	0.00			
82078	TURBIDITY, FIELD		25	1	0.04	7	0	0.00	11	1	0.09	7	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station: SHEN0755 Parameter Code: 00300

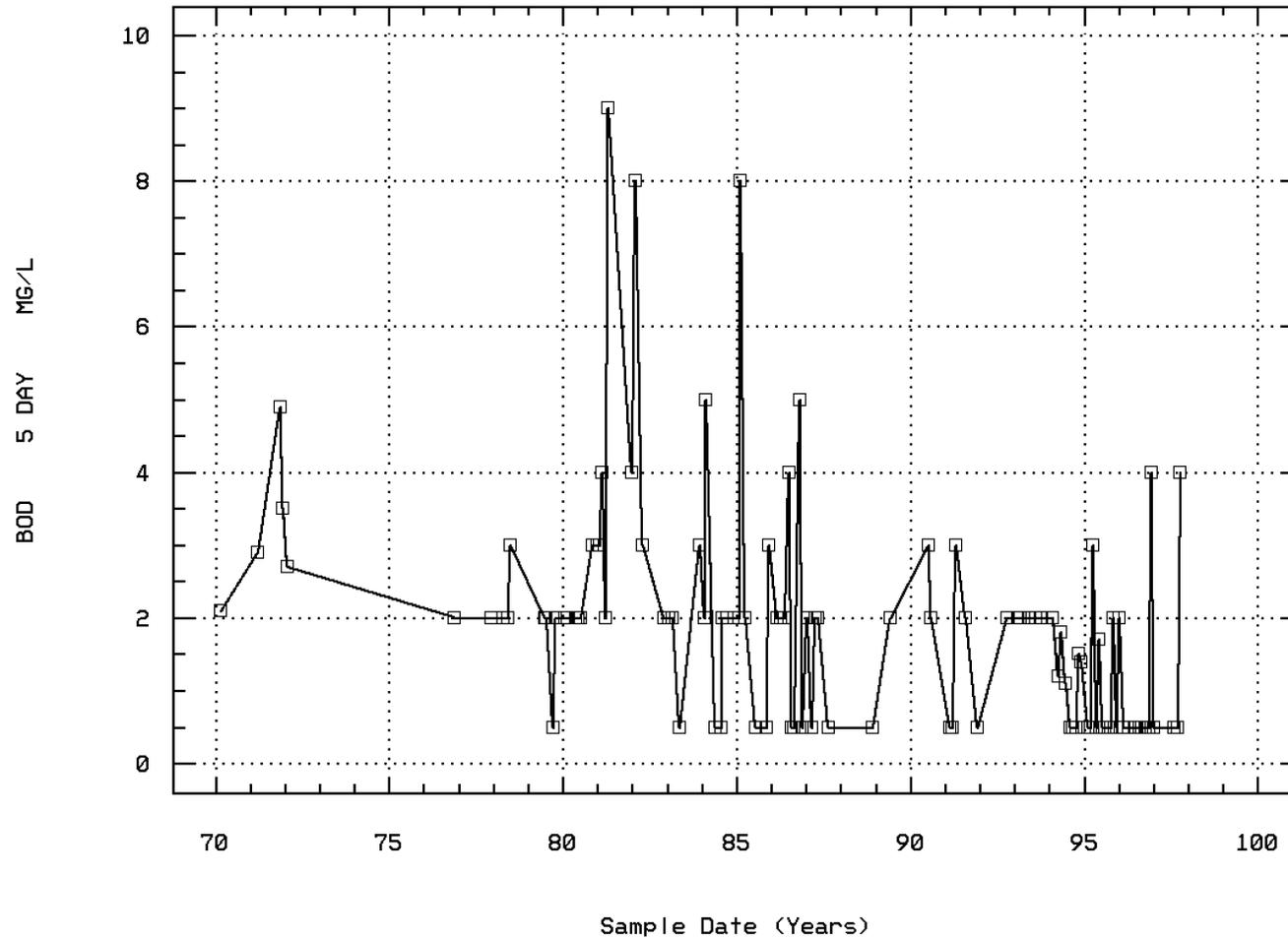
OXYGEN, DISSOLVED



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00310

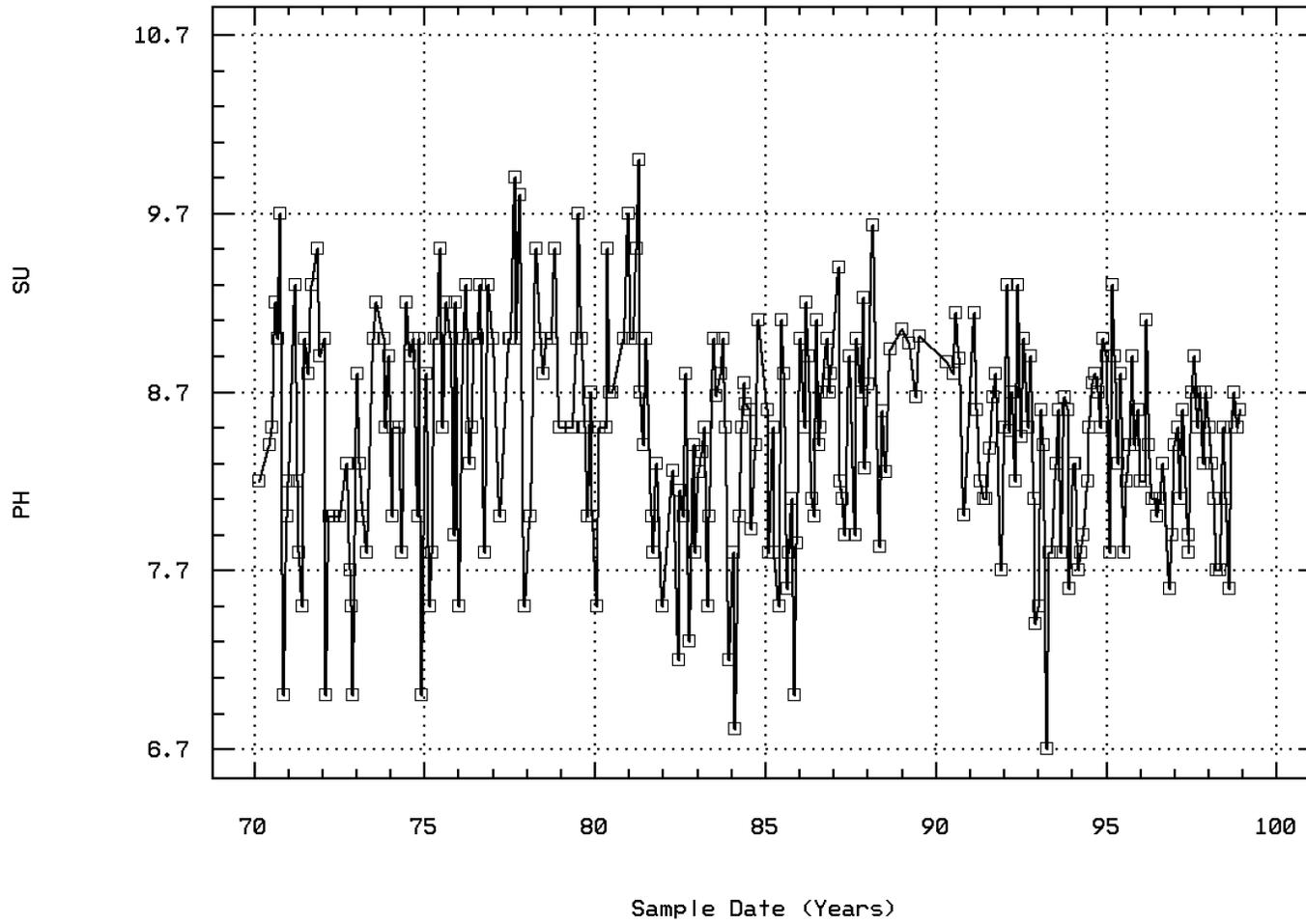
BOD, 5 DAY, 20 DEG C



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00400

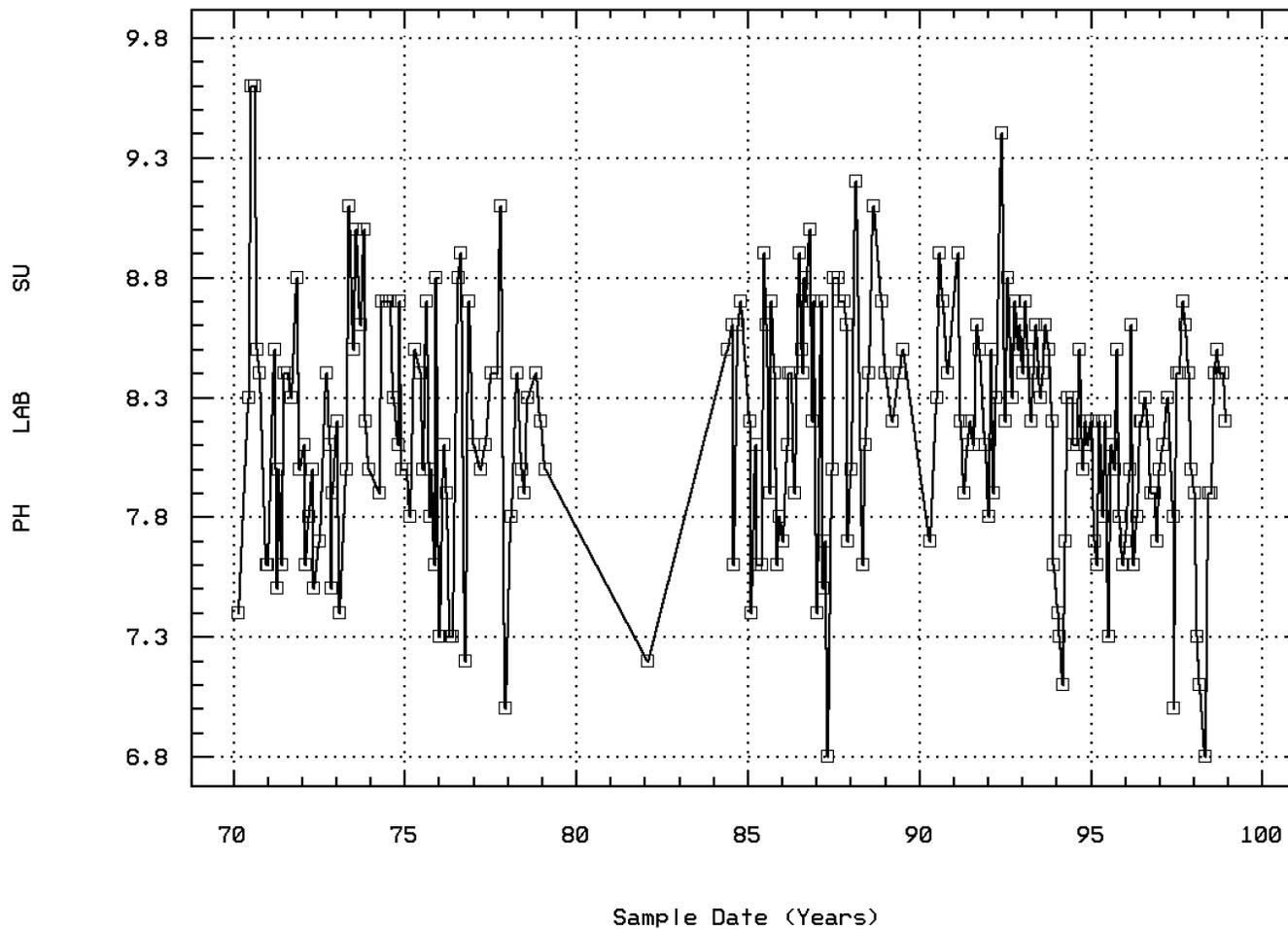
PH (STANDARD UNITS)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00403

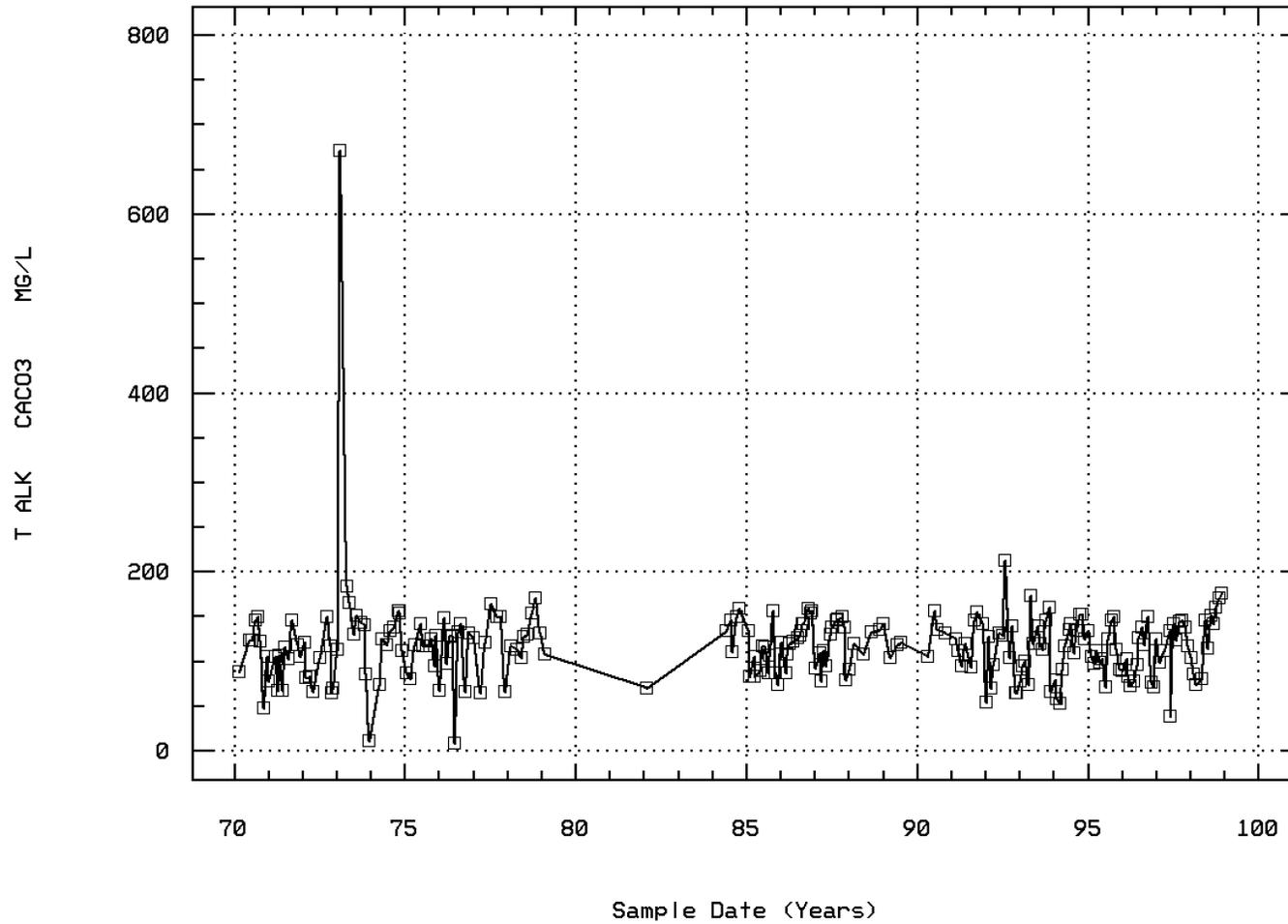
PH, LAB, STANDARD UNITS



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00410

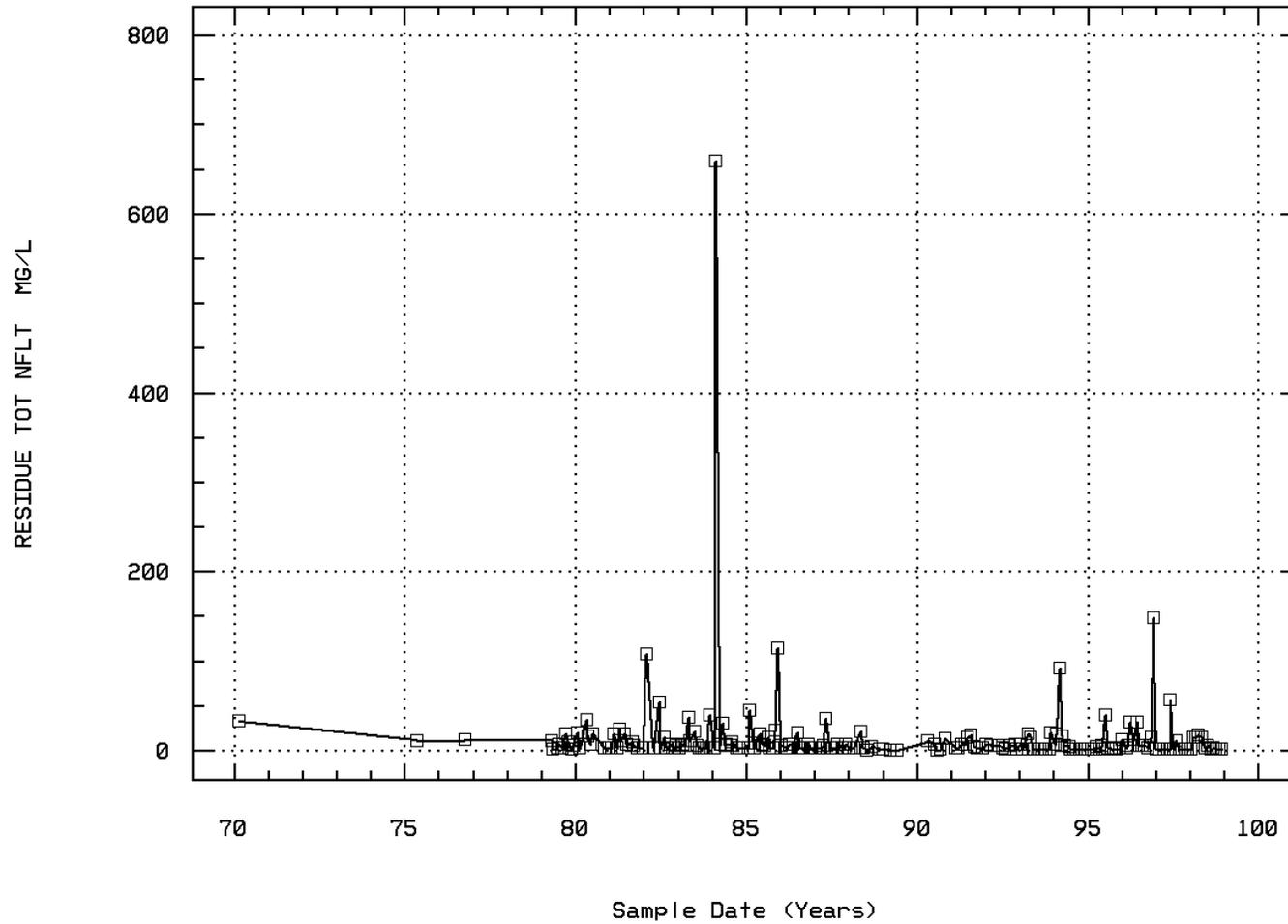
ALKALINITY, TOTAL (MG/L AS CaCO3)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00530

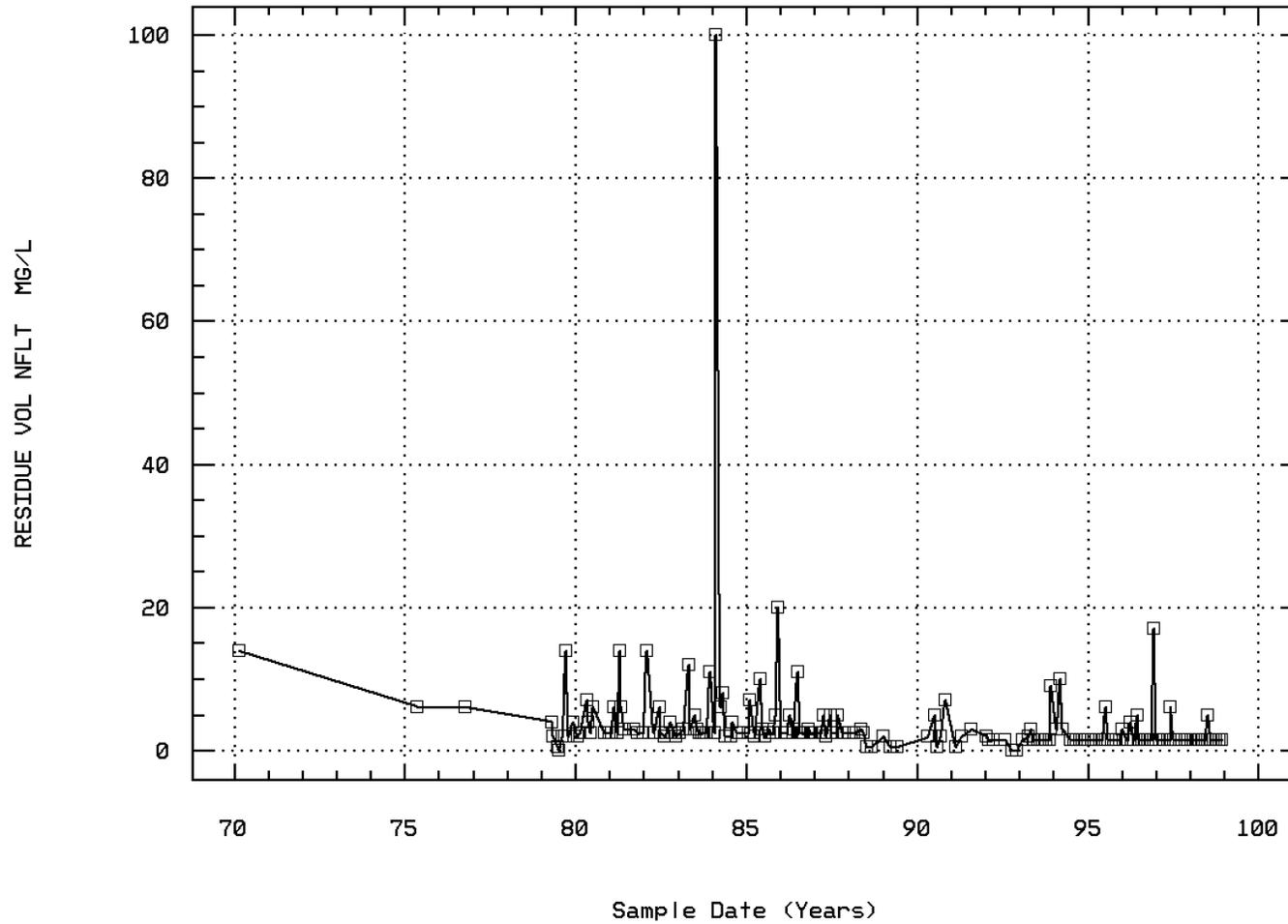
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00535

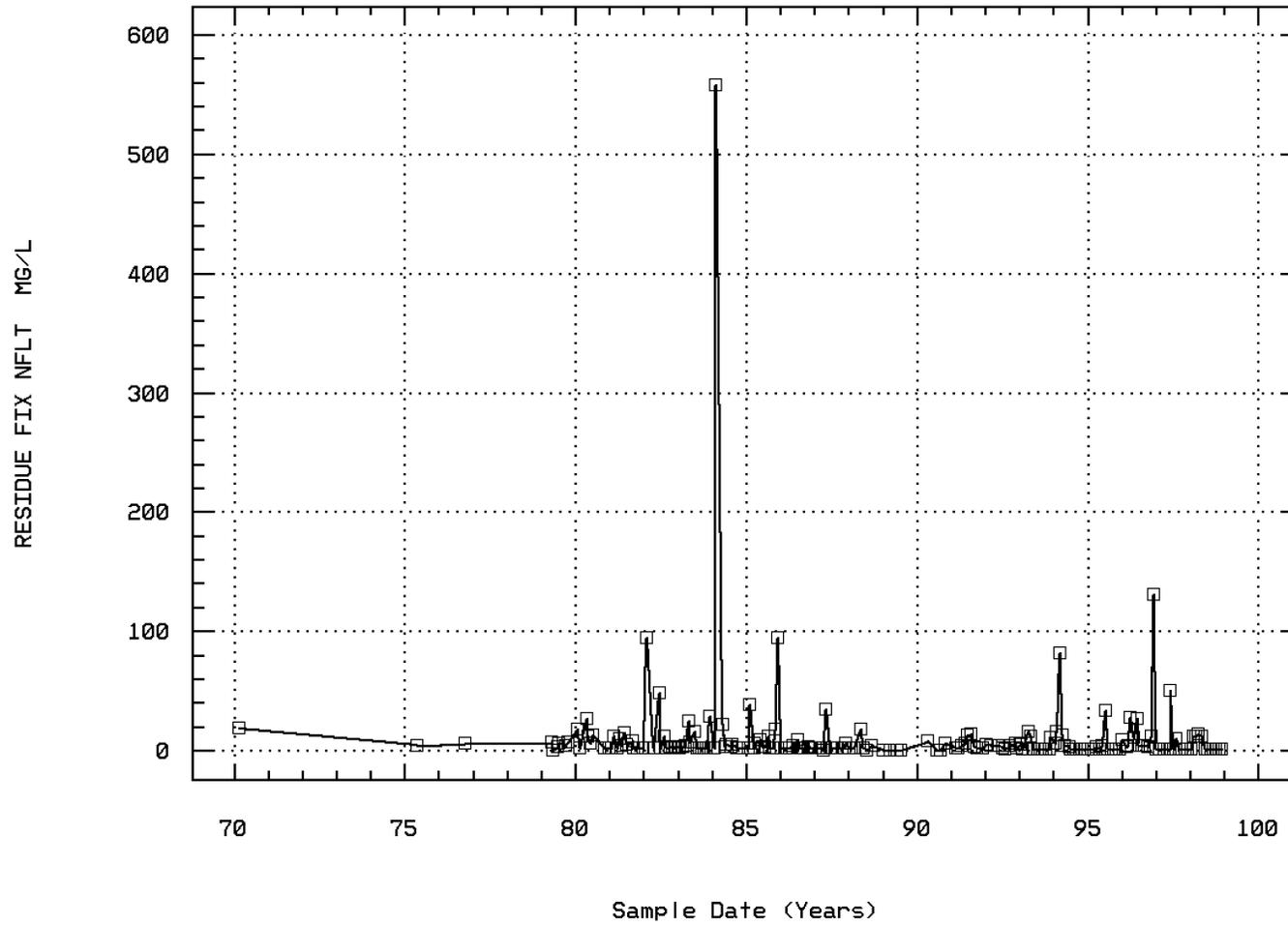
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00540

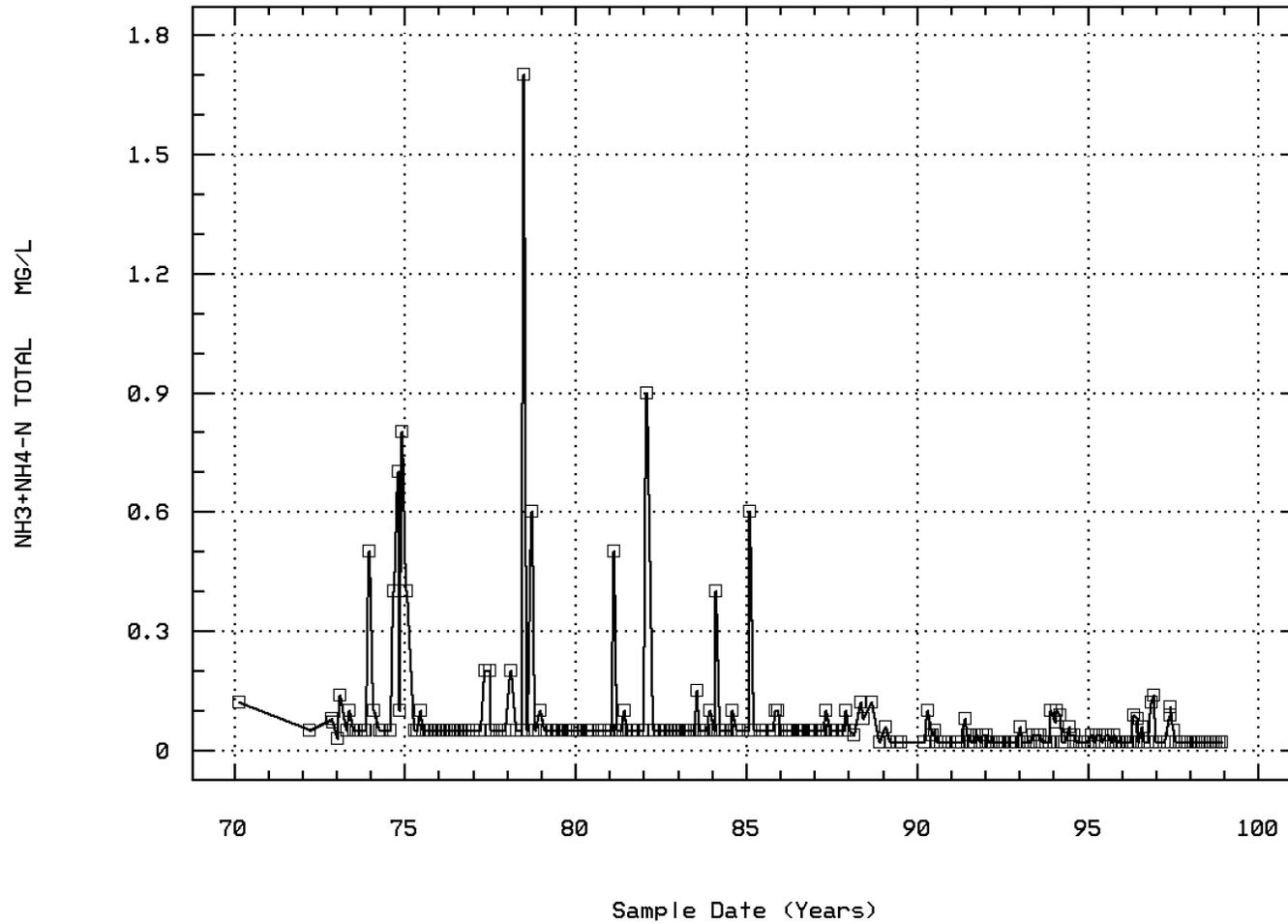
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00610

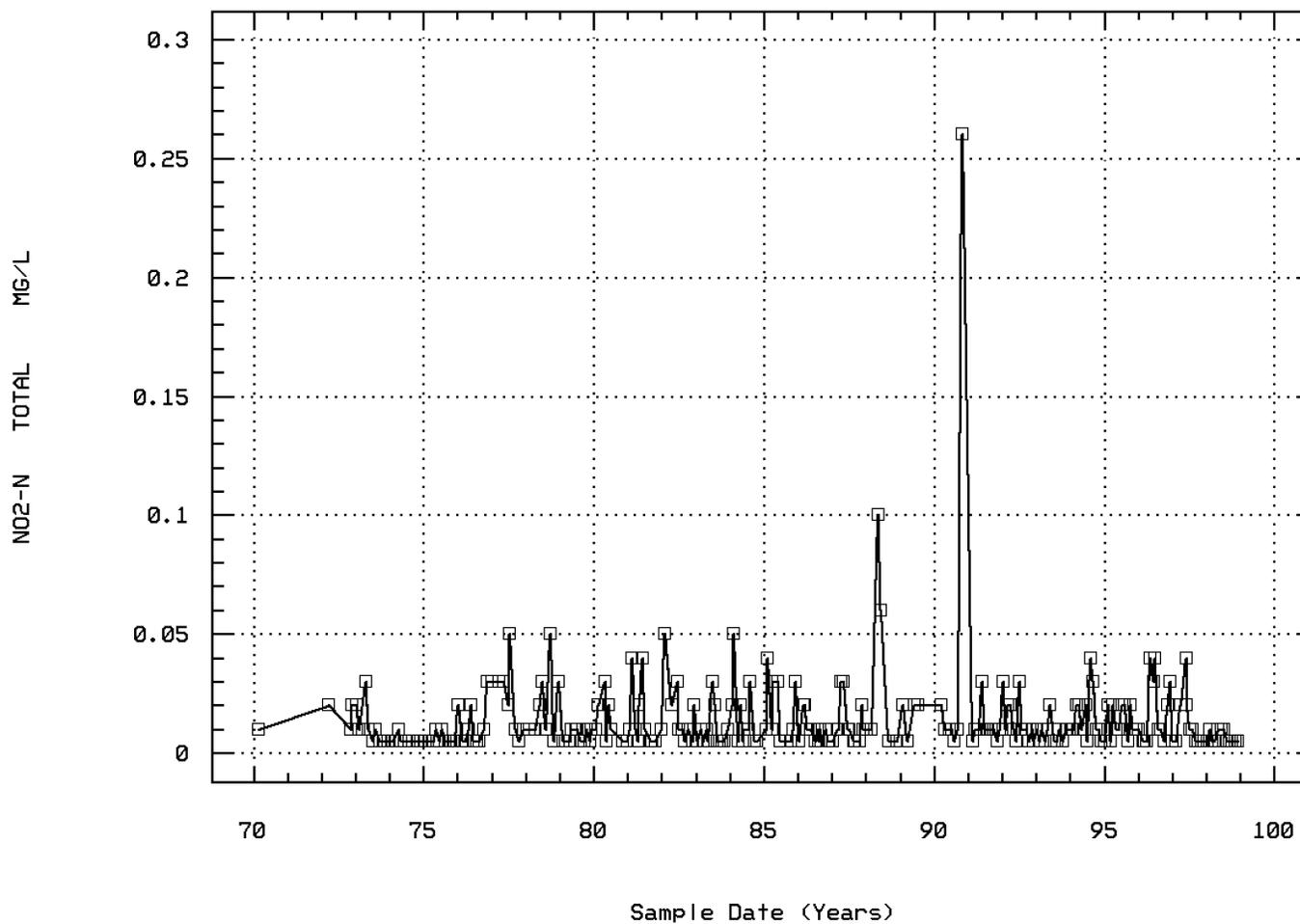
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00615

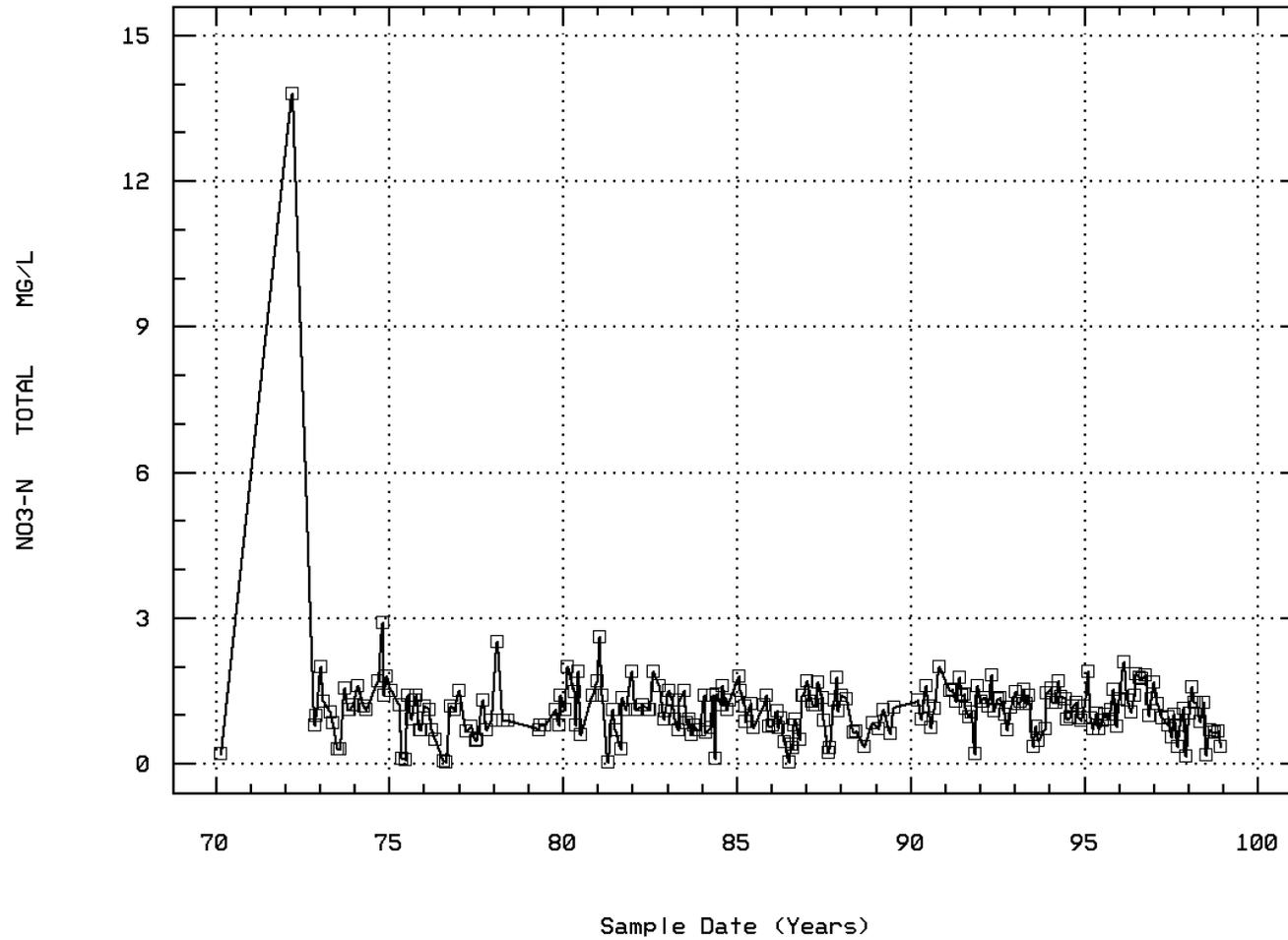
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00620

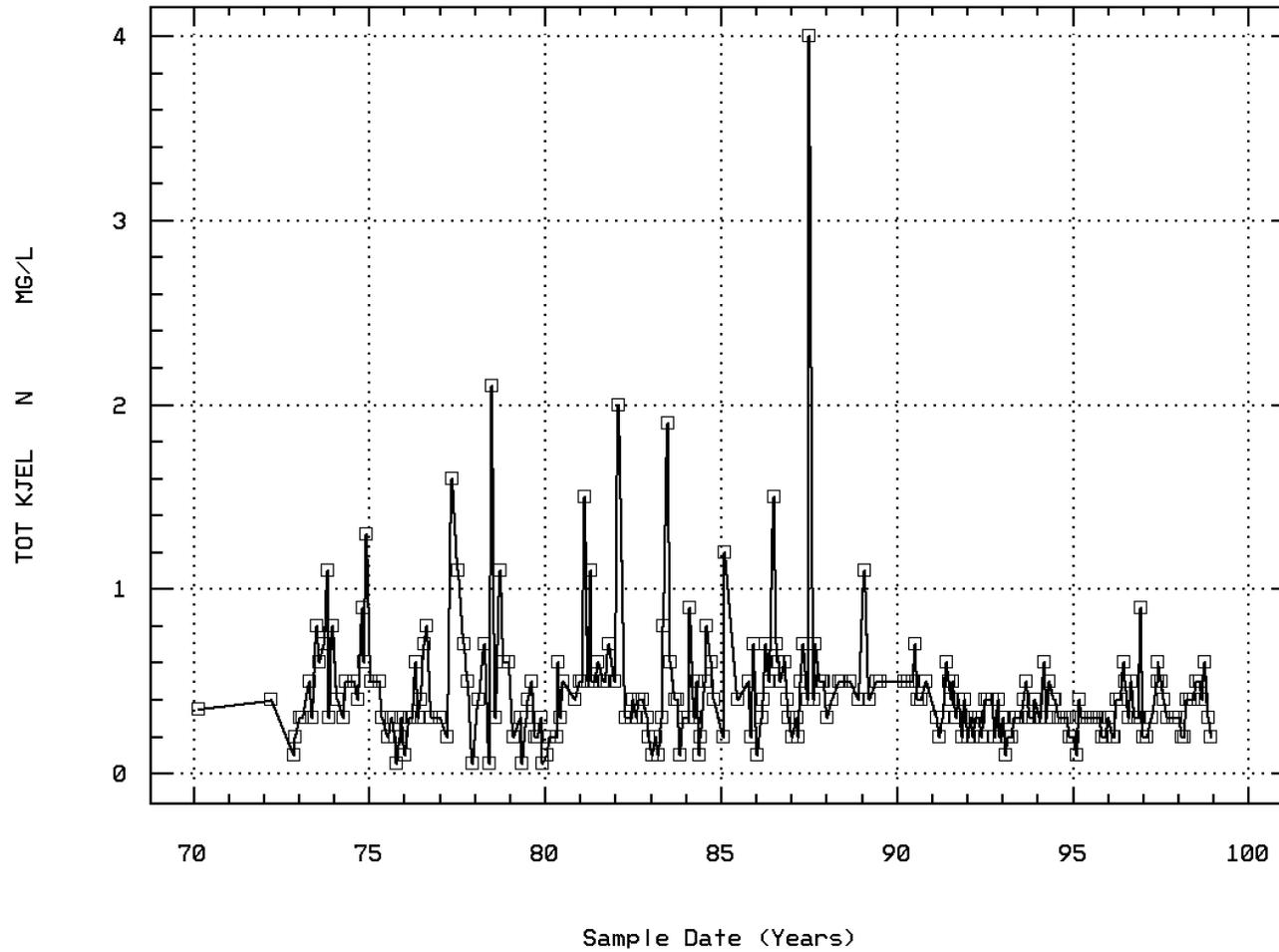
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00625

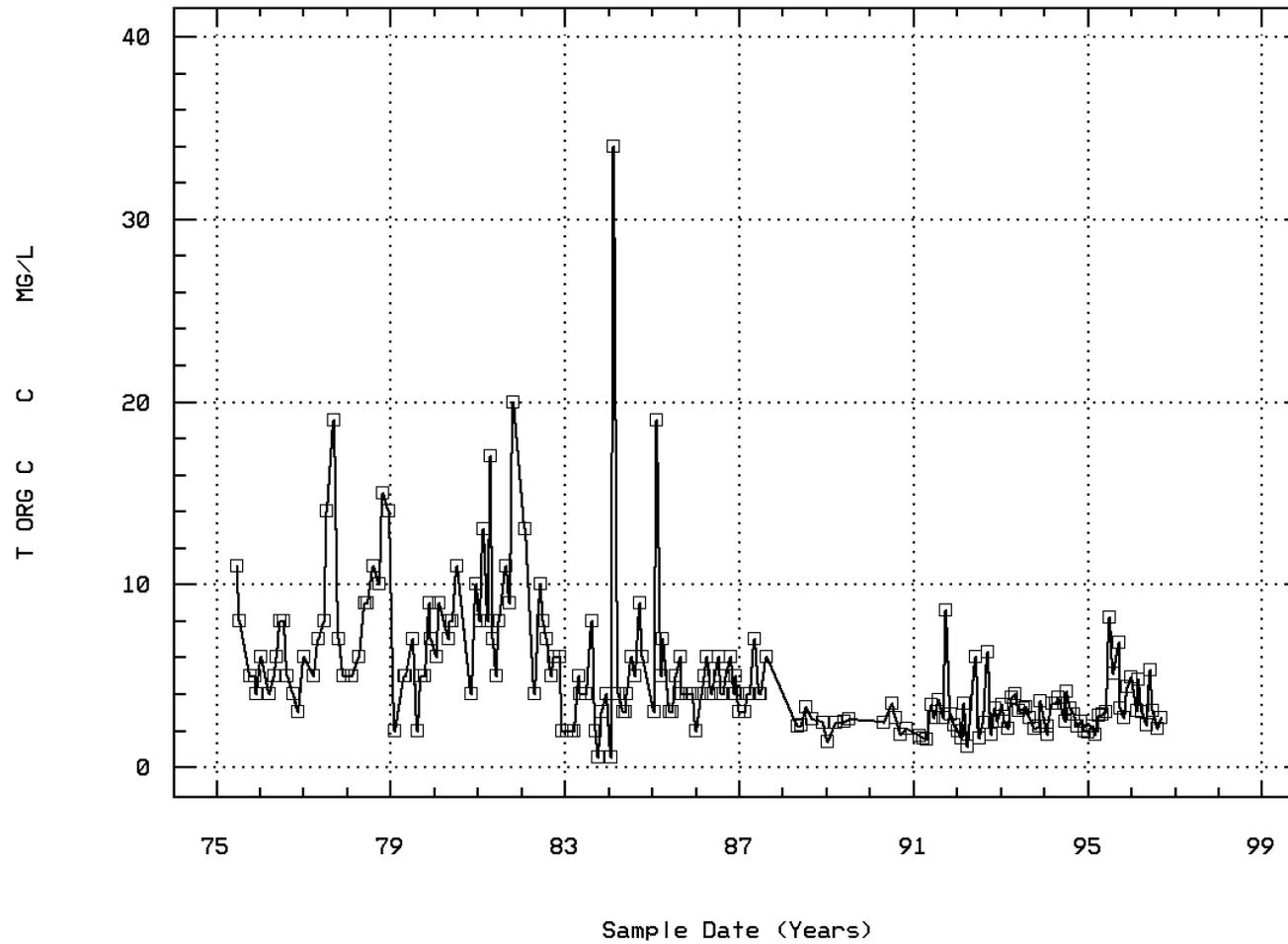
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00680

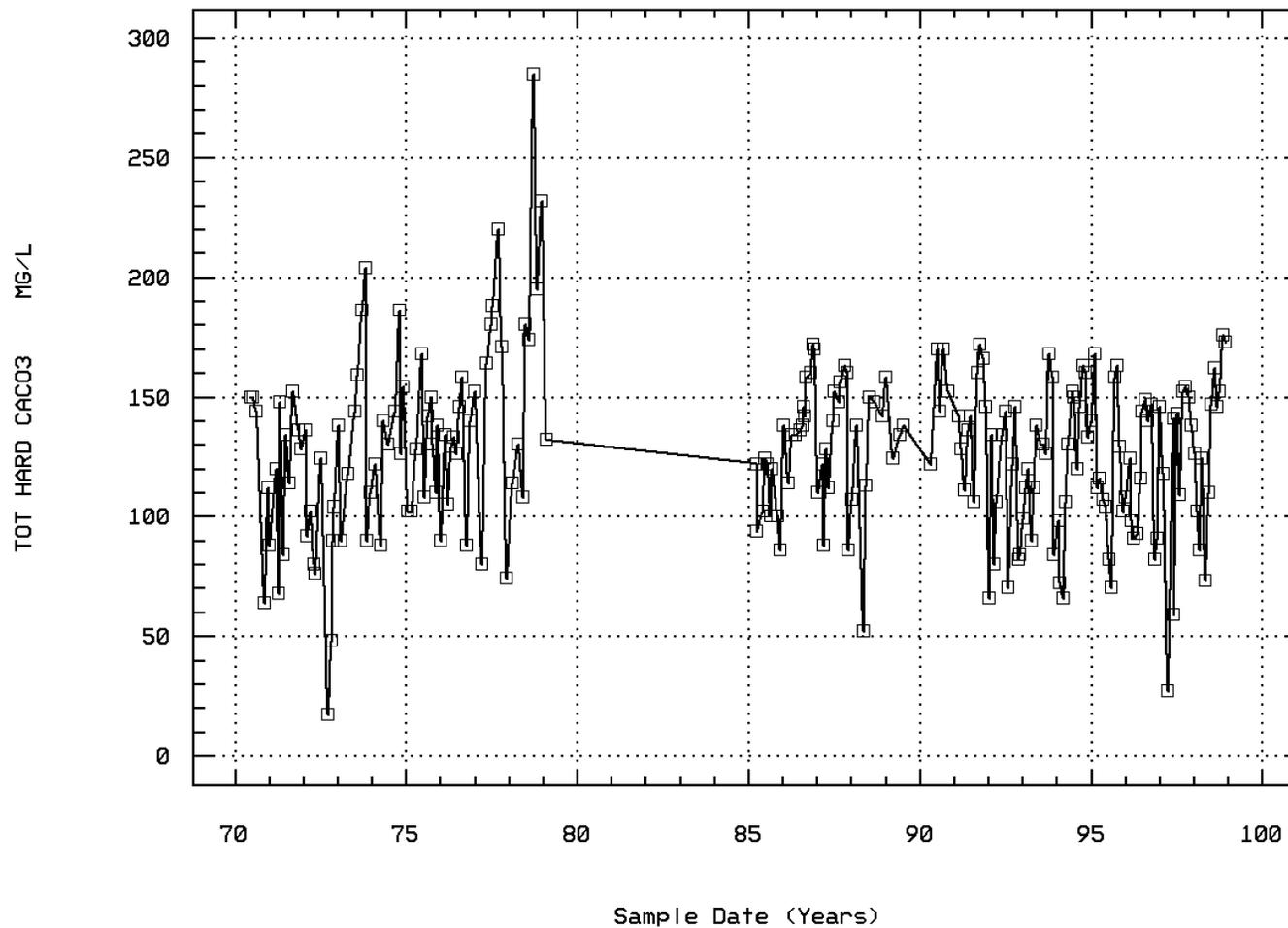
CARBON, TOTAL ORGANIC (MG/L AS C)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00900

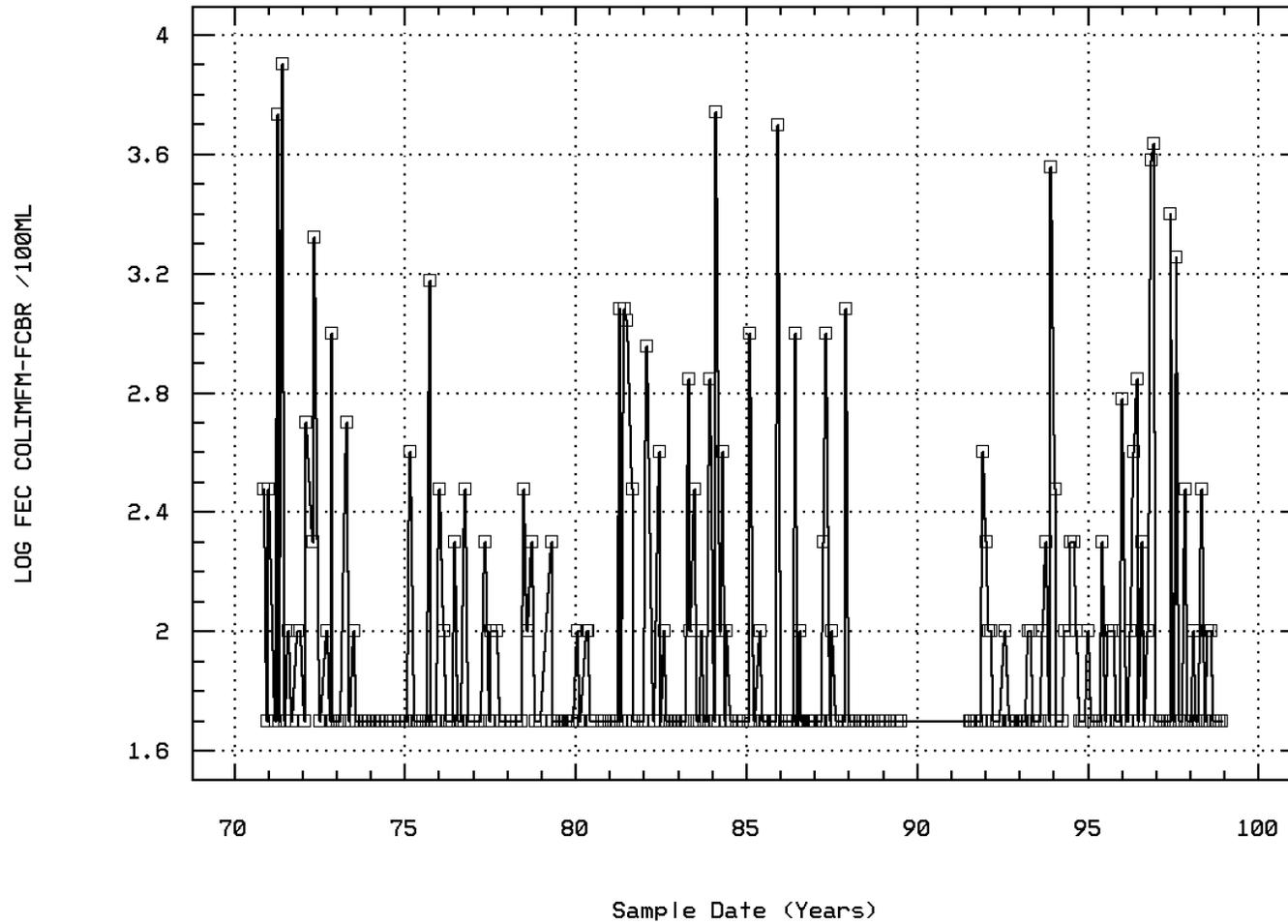
HARDNESS, TOTAL (MG/L AS CaCO3)



RT. 619 BRIDGE AT GAGING STATION

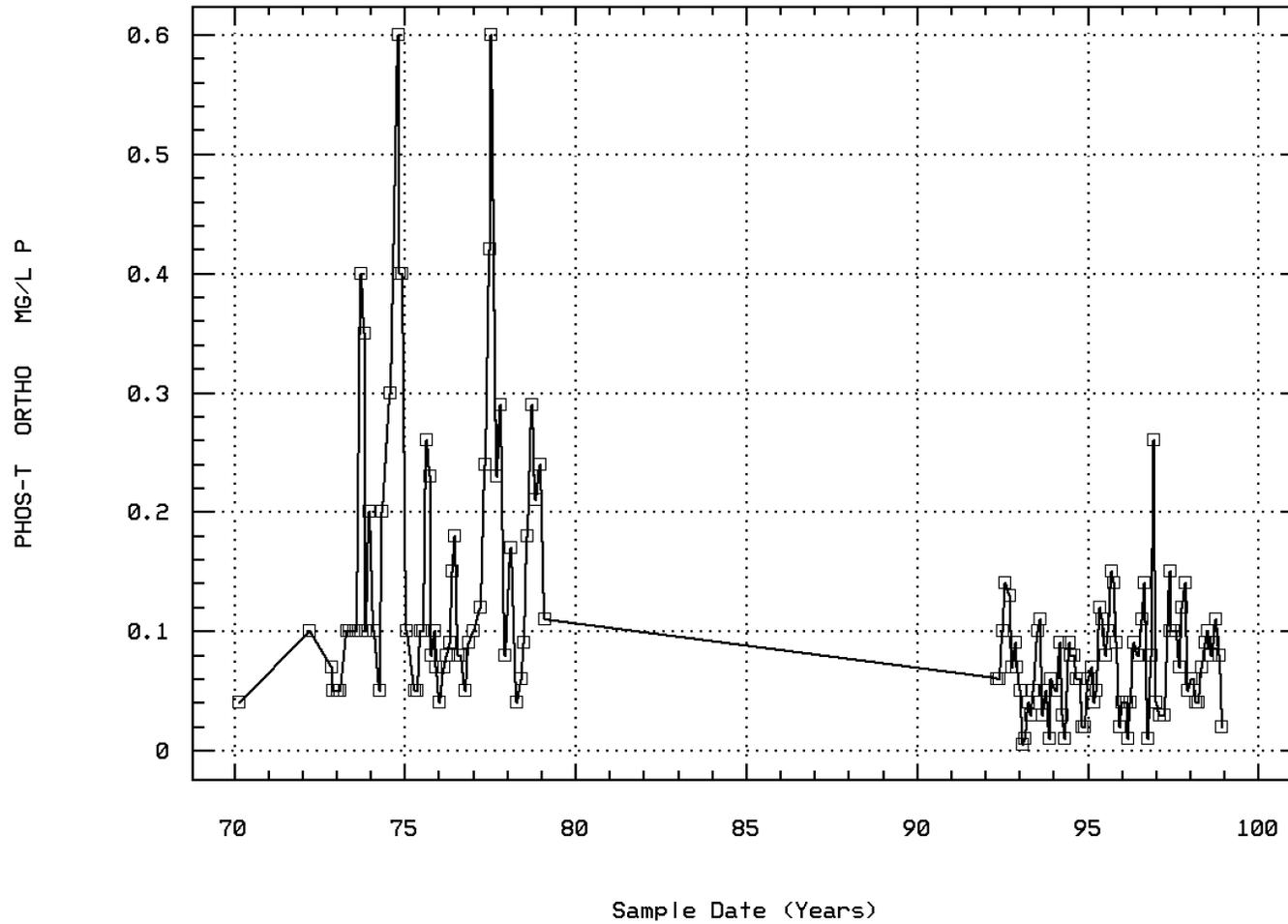
Station: SHEN0755 Parameter Code: 31616

LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 70507
PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



RT. 619 BRIDGE AT GAGING STATION

Annual Analysis for 1970 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	8	20.85	17.925	27.8	6.1	83.971	9.164	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	8	9.9	10.425	13.8	8.4	3.639	1.908	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	8	8.45	8.5	9.7	7.	0.683	0.826	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	8	8.447	7.805	9.7	7.	1.235	1.111	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	8	0.004	0.016	0.1	0.	0.001	0.034	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	7	8.4	8.486	9.6	7.4	0.748	0.865	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	7	8.4	7.955	9.6	7.4	1.076	1.037	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	7	0.004	0.011	0.04	0.	0.015	0.015	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	8	122.5	112.875	150.	47.	1102.696	33.207	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	33.	33.	33.	33.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	19.	19.	19.	19.	0.	0.	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	1	0.12	0.12	0.12	0.12	0.	0.	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	1	0.35	0.35	0.35	0.35	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	5	144.	124.	150.	64.	1374.	37.068	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	2##	175.	175.	300.	50.	31250.	176.777	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	2##	2.088	2.088	2.477	1.699	0.303	0.55	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			122.474								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	10	15.	15.5	29.4	2.2	99.513	9.976	2.37	5.55	26.975	29.24
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	10	10.3	10.86	15.	6.	10.045	3.169	6.2	8.3	14.05	14.92
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	3	3.5	3.767	4.9	2.9	1.053	1.026	**	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.85	8.65	9.5	7.5	0.469	0.685	7.53	8.1	9.3	9.48
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.847	8.185	9.5	7.5	0.709	0.842	7.53	8.1	9.3	9.48
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.001	0.007	0.032	0.	0.	0.01	0.	0.001	0.009	0.03
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	10	8.15	8.11	8.8	7.5	0.194	0.441	7.51	7.6	8.425	8.77
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	10	8.125	7.922	8.8	7.5	0.233	0.483	7.51	7.6	8.425	8.77
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.008	0.012	0.032	0.002	0.	0.011	0.002	0.004	0.025	0.031
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	10	105.	100.8	145.	67.	591.067	24.312	67.	75.25	115.75	142.3
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	10	124.	117.2	152.	68.	811.733	28.491	69.6	87.	139.	151.6
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	10	100.	1420.	8000.	50.	8125111.111	2850.458	50.	50.	1575.	7740.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	10	2.	2.291	3.903	1.699	0.707	0.841	1.699	1.699	2.791	3.886
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			195.366								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	10	15.3	13.24	21.7	5.	38.736	6.224	5.	5.45	17.525	21.53
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	10	9.9	10.26	13.4	8.2	2.8	1.673	8.22	8.85	11.55	13.26
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.	7.85	9.	7.	0.356	0.597	7.	7.375	8.075	8.93
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.	7.526	9.	7.	0.472	0.687	7.	7.375	8.075	8.93
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.01	0.03	0.1	0.001	0.001	0.038	0.001	0.009	0.049	0.1
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	10	7.85	7.86	8.4	7.5	0.087	0.295	7.5	7.575	8.1	8.37

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	10	7.847	7.778	8.4	7.5	0.095	0.307	7.5	7.575	8.1	8.37
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.014	0.017	0.032	0.004	0.	0.01	0.004	0.008	0.027	0.032
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	9	82.	94.556	150.	64.	887.278	29.787	64.	67.	118.5	150.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	3	0.07	0.067	0.08	0.05	0.	0.015	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	3	0.02	0.017	0.02	0.01	0.	0.006	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	3	0.98	5.187	13.79	0.79	55.522	7.451	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	3	0.2	0.233	0.4	0.1	0.023	0.153	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	10	91.	86.9	136.	17.	1212.1	34.815	20.1	69.	109.	134.8
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	9	100.	455.556	2100.	50.	481527.778	693.922	50.	50.	750.	2100.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	9	2.	2.235	3.322	1.699	0.399	0.632	1.699	1.699	2.849	3.322
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			171.927								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	3	0.07	0.073	0.1	0.05	0.001	0.025	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	11	15.6	13.945	28.3	1.1	88.263	9.395	1.1	5.6	18.9	28.2
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	11	10.8	11.055	14.4	8.6	3.873	1.968	8.6	9.2	12.8	14.16
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	9	8.8	8.611	9.2	7.8	0.239	0.488	7.8	8.15	9.	9.2
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	9	8.8	8.358	9.2	7.8	0.311	0.558	7.8	8.15	9.	9.2
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	9	0.002	0.004	0.016	0.001	0.	0.005	0.001	0.001	0.008	0.016
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	10	8.35	8.4	9.1	7.4	0.296	0.544	7.46	8.	9.	9.09
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	10	8.325	8.092	9.1	7.4	0.401	0.633	7.46	8.	9.	9.09
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.005	0.008	0.04	0.001	0.	0.012	0.001	0.001	0.01	0.037
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	10	141.5	179.	670.	10.	32116.444	179.211	17.5	106.	169.5	621.3
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	10##	0.05	0.107	0.5	0.03	0.02	0.142	0.032	0.05	0.11	0.464
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10##	0.008	0.011	0.03	0.005	0.	0.008	0.005	0.005	0.013	0.029
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10	1.099	1.071	1.979	0.29	0.264	0.514	0.291	0.705	1.354	1.936
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	10	0.55	0.57	1.099	0.3	0.078	0.279	0.3	0.3	0.8	1.069
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	9	138.	137.667	204.	90.	1616.	40.2	90.	100.	172.5	204.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	10##	50.	100.	500.	50.	20000.	141.421	50.	50.	62.5	460.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	10##	1.699	1.829	2.699	1.699	0.102	0.32	1.699	1.699	1.774	2.629
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			67.464								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	10	0.1	0.155	0.4	0.05	0.015	0.123	0.05	0.088	0.238	0.395

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	9	15.	13.567	26.1	2.2	62.628	7.914	2.2	6.65	19.7	26.1
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	9	10.8	10.567	12.8	7.1	3.278	1.81	7.1	9.15	11.95	12.8
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.5	8.39	9.2	7.	0.474	0.689	7.08	7.95	9.	9.18
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.5	7.835	9.2	7.	0.816	0.903	7.08	7.95	9.	9.18
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.003	0.015	0.1	0.001	0.001	0.03	0.001	0.011	0.092	
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	8	8.5	8.388	8.7	7.9	0.124	0.352	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	8	8.455	8.264	8.7	7.9	0.141	0.376	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	8	0.004	0.005	0.013	0.002	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	8	128.5	125.875	156.	73.	699.268	26.444	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	8	0.1	0.281	0.8	0.05	0.098	0.313	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	8##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	8	1.499	1.585	2.899	1.	0.365	0.604	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	8	0.5	0.612	1.299	0.3	0.11	0.331	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	8	135.	136.25	186.	88.	791.357	28.131	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	2	15.	15.	20.	10.	50.	7.071	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			50.									
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	7	0.3	0.293	0.6	0.05	0.037	0.192	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	11	13.9	14.9	27.8	3.9	71.25	8.441	4.12	8.9	22.2	27.58
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	11	10.8	11.036	13.2	9.2	1.585	1.259	9.26	9.8	12.	13.04
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	11	9.	8.673	9.5	7.5	0.434	0.659	7.56	7.9	9.2	9.44
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	11	9.	8.2	9.5	7.5	0.68	0.825	7.56	7.9	9.2	9.44
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	11	0.001	0.006	0.032	0.	0.	0.01	0.	0.001	0.013	0.028
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	10	8.	8.16	8.8	7.6	0.169	0.412	7.62	7.8	8.55	8.79
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	10	8.	8.011	8.8	7.6	0.194	0.441	7.62	7.8	8.55	8.79
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.01	0.01	0.025	0.002	0.	0.008	0.002	0.003	0.016	0.024
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	10	116.5	112.2	142.	80.	382.4	19.555	80.6	92.	125.75	140.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	10 ##	0.05	0.09	0.4	0.05	0.012	0.11	0.05	0.05	0.063	0.37
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10 ##	0.005	0.006	0.01	0.005	0.	0.002	0.005	0.005	0.006	0.01
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10	1.05	0.926	1.5	0.08	0.278	0.527	0.081	0.548	1.392	1.49
00625p	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	03/03/70-12/02/98	10	0.3	0.355	1.	0.05	0.07	0.265	0.065	0.2	0.5	0.95
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	5	5.	6.6	11.	4.	8.3	2.881	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	10	129.	127.8	168.	102.	495.511	22.26	102.	106.5	144.	166.2
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11 ##	50.	213.636	1500.	50.	193045.455	439.369	50.	50.	50.	1280.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11 ##	1.699	1.915	3.176	1.699	0.248	0.498	1.699	1.699	1.699	3.061
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			82.291									
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	10	0.1	0.114	0.26	0.05	0.005	0.072	0.05	0.065	0.133	0.257

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	10	14.7	16.95	30.	1.1	86.112	9.28	1.82	10.85	27.35	29.78
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	10	9.55	9.97	12.8	7.7	2.916	1.708	7.78	8.575	11.25	12.78
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	10	9.	8.7	9.3	7.5	0.422	0.65	7.53	8.175	9.3	9.3
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	10	9.	8.221	9.3	7.5	0.677	0.823	7.53	8.175	9.3	9.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.001	0.006	0.032	0.001	0.	0.01	0.001	0.001	0.008	0.03
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	9	7.9	7.944	8.9	7.2	0.505	0.711	7.2	7.3	8.75	8.9
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	9	7.9	7.576	8.9	7.2	0.658	0.811	7.2	7.3	8.75	8.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	9	0.013	0.027	0.063	0.001	0.001	0.026	0.001	0.002	0.05	0.063
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	10	128.	104.6	148.	8.	2005.156	44.779	13.8	66.75	134.25	147.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	10 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10 ##	0.008	0.012	0.03	0.005	0.	0.009	0.005	0.005	0.02	0.029

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10	1.	0.785	1.189	0.025	0.2	0.447	0.029	0.39	1.119	1.188
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	9	0.3	0.422	0.8	0.1	0.052	0.228	0.1	0.3	0.65	0.8
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	10	5.	5.	8.	1.	4.667	2.16	1.2	3.75	6.5	8.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	10	131.	124.9	158.	88.	545.656	23.359	88.2	101.25	141.5	156.8
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	10 ##	50.	120.	300.	50.	11222.222	105.935	50.	50.	225.	300.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	10 ##	1.699	1.945	2.477	1.699	0.118	0.343	1.699	1.699	2.345	2.477
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	10	0.08	0.091	0.18	0.04	0.002	0.043	0.041	0.065	0.105	0.177

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	9	9.5	13.744	30.	0.5	160.543	12.671	0.5	2.05	27.3	30.
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	9	13.2	12.233	16.1	8.	7.68	2.771	8.	9.5	14.3	16.1
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	8	9.	8.9	9.9	7.5	0.66	0.812	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	8	9.	8.241	9.9	7.5	1.156	1.075	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	8	0.001	0.006	0.032	0.	0.	0.011	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	7	8.1	8.157	9.	7.	0.396	0.629	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	7	8.1	7.716	9.1	7.	0.623	0.79	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	7	0.008	0.019	0.1	0.001	0.001	0.036	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	7	126.	119.857	164.	64.	1655.476	40.688	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	8 ##	0.05	0.087	0.2	0.05	0.005	0.069	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	8	0.025	0.023	0.05	0.005	0.	0.015	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	8	0.735	0.851	1.5	0.48	0.135	0.368	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	8	0.6	0.681	1.599	0.05	0.275	0.525	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	8	7.	8.875	19.	5.	24.982	4.998	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	8	167.5	153.625	220.	74.	2636.554	51.347	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	50.	81.25	200.	50.	2812.5	53.033	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	1.699	1.849	2.301	1.699	0.052	0.228	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	8	0.235	0.26	0.6	0.08	0.032	0.178	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	8	18.25	16.238	26.	0.4	90.523	9.514	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	8	9.7	9.825	13.4	7.3	4.774	2.185	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	3	2.	2.333	3.	2.	0.333	0.577	**	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	8	9.	8.913	9.5	8.	0.247	0.497	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	8	9.	8.639	9.5	8.	0.333	0.577	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	8	0.001	0.002	0.01	0.	0.	0.003	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	7	8.2	8.143	8.4	7.8	0.06	0.244	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	7	8.2	8.084	8.4	7.8	0.064	0.252	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	7	0.006	0.008	0.016	0.004	0.	0.005	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	8	128.5	130.625	170.	104.	467.125	21.613	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	8 ##	0.075	0.35	1.7	0.05	0.333	0.577	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	8	0.015	0.021	0.05	0.005	0.	0.015	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	3	0.89	1.423	2.5	0.88	0.869	0.932	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	8	0.6	0.731	2.1	0.05	0.401	0.633	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	8	9.5	9.875	15.	5.	12.125	3.482	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	8	177.	177.25	285.	108.	3709.929	60.909	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	50.	106.25	300.	50.	8883.929	94.255	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	1.699	1.909	2.477	1.699	0.101	0.317	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			81.119								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	8	0.175	0.16	0.29	0.04	0.008	0.089	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	10	17.5	16.14	25.8	2.	63.856	7.991	2.4	10.5	24.025	25.63
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	9	233.	257.889	373.	199.	4516.361	67.204	199.	202.5	326.5	373.
00300	OXYGEN, DISSOLVED (MG/L)	03/03/70-04/01/92	10	10.85	10.92	14.	8.3	2.904	1.704	8.41	9.55	12.125	13.85
00310	BOD, 5 DAY, 20 DEG C (MG/L)	03/03/70-12/02/98	9	1.	1.278	2.	0.5	0.319	0.565	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 (MG/L)	04/24/79-12/02/98	9	6.	5.778	10.	1.	7.444	2.728	1.	4.	8.	10.
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	9	8.5	8.656	9.7	8.	0.283	0.532	8.	8.25	9.	9.7
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	9	8.5	8.427	9.7	8.	0.342	0.584	8.	8.25	9.	9.7
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	9	0.003	0.004	0.01	0.	0.	0.004	0.	0.001	0.007	0.01
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	1	107.	107.	107.	107.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	5.	6.556	18.	2.	28.278	5.318	2.	2.5	10.	18.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	2.	3.278	14.	0.	18.069	4.251	0.	0.75	4.	7.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	3.	3.389	7.	0.5	7.361	2.713	0.5	1.	6.5	7.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	10 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10 ##	0.008	0.008	0.01	0.005	0.	0.003	0.005	0.005	0.01	0.01
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	9	1.	0.956	1.4	0.7	0.045	0.213	0.7	0.8	1.05	1.4
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	10	0.25	0.25	0.5	0.05	0.02	0.141	0.05	0.163	0.325	0.49
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	9	0.1	0.089	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	9	0.06	0.082	0.2	0.03	0.003	0.052	0.03	0.045	0.105	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	10	5.	4.8	9.	1.	6.4	2.53	1.1	2.	7.	8.8
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	1	132.	132.	132.	132.	0.	0.	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	9 ##	50.	66.667	200.	50.	2500.	50.	50.	50.	50.	200.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	9 ##	1.699	1.766	2.301	1.699	0.04	0.201	1.699	1.699	1.699	2.301
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			58.326								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	1	0.11	0.11	0.11	0.11	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	8	16.7	15.475	25.	2.	78.819	8.878	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	8	303.	322.75	496.	180.	9068.214	95.227	**	**	**	**
00300	OXYGEN, DISSOLVED (MG/L)	03/03/70-04/01/92	8	10.95	10.85	13.2	7.3	4.457	2.111	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C (MG/L)	03/03/70-12/02/98	8	2.	2.125	3.	1.	0.411	0.641	**	**	**	**
00340	COD, .25N K2CR2O7 (MG/L)	04/24/79-12/02/98	8	7.	9.125	23.	2.	43.839	6.621	**	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	8	8.7	8.763	9.7	7.5	0.46	0.678	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	8	8.7	8.265	9.7	7.5	0.743	0.862	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	8	0.002	0.005	0.032	0.	0.	0.011	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	8	11.	12.813	34.	2.5	130.638	11.43	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	8 ##	2.5	3.625	7.	2.	3.554	1.885	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	8	9.	10.438	27.	2.5	78.46	8.858	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	8 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	8	0.01	0.013	0.03	0.005	0.	0.009	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	8	1.435	1.371	2.	0.6	0.255	0.505	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	8	0.35	0.35	0.6	0.1	0.031	0.177	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	8	0.15	0.15	0.3	0.05	0.008	0.089	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	8	0.095	2.717	21.	0.005	54.582	7.388	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	8	8.	7.875	11.	4.	4.982	2.232	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	50.	68.75	100.	50.	669.643	25.877	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	1.699	1.812	2.	1.699	0.024	0.156	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			64.842							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	10	15.05	14.87	24.	1.	65.187	8.074	1.3	8.875	23.55
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	11	356.	374.364	503.	203.	7124.055	84.404	226.2	323.	429.
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	11	11.6	10.709	14.8	6.4	6.835	2.614	6.58	8.7	12.7
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	11	1.	2.545	9.	1.	6.073	2.464	1.	4.	8.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	11	12.	13.091	27.	4.	42.891	6.549	4.6	9.	15.
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	11	8.7	8.655	10.	7.5	0.557	0.746	7.56	8.	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	11	8.7	8.185	10.	7.5	0.799	0.894	7.56	8.	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	11	0.002	0.007	0.032	0.	0.	0.01	0.	0.001	0.01
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	11	6.	9.091	24.	2.5	58.191	7.628	2.5	2.5	18.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	11	2.5	4.	14.	1.	13.7	3.701	1.	2.5	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	11	4.	6.	15.	2.	20.7	4.55	2.1	2.5	10.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	11 ##	0.05	0.095	0.5	0.05	0.018	0.135	0.05	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	11	0.01	0.015	0.04	0.005	0.	0.013	0.005	0.005	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	11	1.1	1.134	2.6	0.025	0.501	0.707	0.08	0.7	1.4
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	11	0.5	0.673	1.5	0.5	0.108	0.329	0.5	0.5	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	11	0.2	0.245	0.4	0.1	0.009	0.093	0.12	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	11	0.19	0.219	0.34	0.15	0.005	0.071	0.15	0.16	0.3
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	11	8.	9.727	20.	1.	28.618	5.35	1.8	7.	13.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11 ##	50.	377.273	1200.	50.	263181.818	513.012	50.	50.	1100.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11 ##	1.699	2.143	3.079	1.699	0.405	0.637	1.699	1.699	3.041
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			138.898							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	10	18.75	17.35	27.	1.5	61.725	7.857	2.45	12.5	24.625
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	9	305.	304.667	390.	201.	4865.5	69.753	201.	232.5	374.5
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	10	10.1	10.44	12.5	9.	1.64	1.281	9.03	9.375	11.45
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	9	1.	2.111	8.	1.	5.361	2.315	1.	1.	2.5
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	9	10.	12.444	33.	6.	68.778	8.293	6.	7.	14.5
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	9	8.15	8.034	8.8	7.2	0.276	0.526	7.2	7.55	8.4
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	9	8.15	7.747	8.8	7.2	0.369	0.608	7.2	7.55	8.4
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	9	0.007	0.018	0.063	0.002	0.001	0.023	0.002	0.004	0.033
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	1	69.	69.	69.	69.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	5.	22.	108.	2.5	1314.875	36.261	2.5	2.5	34.	108.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	2.5	4.222	14.	2.	15.069	3.882	2.	2.25	5.	14.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	3.	18.889	94.	2.5	1014.486	31.851	2.5	2.5	30.	94.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	9##	0.05	0.144	0.9	0.05	0.08	0.283	0.05	0.05	0.05	0.9
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	9	0.01	0.018	0.05	0.005	0.	0.015	0.005	0.008	0.025	0.05
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	9	1.1	1.22	1.9	0.9	0.103	0.32	0.9	1.04	1.4	1.9
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	9	0.3	0.511	2.	0.2	0.316	0.562	0.2	0.3	0.4	2.
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	9	0.2	0.261	0.6	0.15	0.021	0.145	0.15	0.2	0.3	0.6
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	9	0.16	0.22	0.6	0.07	0.028	0.167	0.07	0.12	0.285	0.6
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	9	6.	6.778	13.	2.	10.694	3.27	2.	4.5	9.	13.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	2	20.5	20.5	24.	17.	24.5	4.95	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	9##	50.	188.889	900.	50.	84236.111	290.235	50.	50.	250.	900.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	9##	1.699	1.972	2.954	1.699	0.226	0.476	1.699	1.699	2.301	2.954
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			93.807								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	14.9	16.5	30.5	0.	96.598	9.828	1.65	9.275	26.7	29.75
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	12	281.	261.333	339.	138.	4847.515	69.624	139.8	214.25	320.5	336.3
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	12	10.65	11.05	14.8	8.2	2.921	1.709	8.71	10.3	12.	14.35
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	12	1.	1.292	3.	0.5	0.475	0.689	0.65	1.	1.75	2.7
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	12	6.5	7.458	16.	0.5	20.157	4.49	1.55	4.25	9.75	15.7
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	11	8.5	8.345	9.	7.2	0.338	0.581	7.26	8.	8.8	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	11	8.5	7.939	9.	7.2	0.519	0.721	7.26	8.	8.8	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	11	0.003	0.012	0.063	0.001	0.	0.019	0.001	0.002	0.01	0.057
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	5.	11.375	40.	2.5	188.597	13.733	2.5	2.5	18.25	39.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	2.75	4.208	12.	1.	12.43	3.526	1.45	2.5	4.5	11.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	2.75	8.208	29.	2.	92.975	9.642	2.15	2.5	13.75	27.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	12##	0.05	0.063	0.15	0.05	0.001	0.031	0.05	0.05	0.05	0.135
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12##	0.005	0.01	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.027
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.865	0.976	1.5	0.6	0.109	0.331	0.627	0.692	1.3	1.5
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	12	0.35	0.517	1.9	0.1	0.271	0.52	0.1	0.125	0.75	1.63
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	12	0.105	0.131	0.3	0.05	0.007	0.082	0.05	0.05	0.2	0.273
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	12	0.09	0.103	0.21	0.02	0.005	0.068	0.023	0.043	0.175	0.207
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	12	2.5	3.125	8.	0.5	4.188	2.046	0.65	2.	4.	7.1
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	11	19.	19.636	32.	12.	40.255	6.345	12.4	14.	25.	31.2
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12##	50.	187.5	700.	50.	62329.545	249.659	50.	50.	250.	700.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12##	1.699	2.005	2.845	1.699	0.208	0.456	1.699	1.699	2.358	2.845
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			101.16								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	10	19.05	17.51	27.5	2.5	68.59	8.282	3.05	9.5	24.	27.45
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	10	294.5	302.4	608.	133.	18415.822	135.705	134.8	205.	364.5	586.2
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	10	10.9	10.93	14.6	8.	4.122	2.03	8.1	9.3	12.175	14.47
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	10	1.	1.6	5.	0.5	1.767	1.329	0.5	0.875	2.	4.7
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	10	8.5	11.	39.	3.	106.889	10.339	3.2	5.75	10.5	36.6
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.45	8.252	9.1	6.81	0.418	0.647	6.909	7.898	8.66	9.065
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.447	7.684	9.1	6.81	0.777	0.881	6.909	7.897	8.66	9.065

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.004	0.021	0.155	0.001	0.002	0.047	0.001	0.002	0.013	0.141
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	5	8.6	8.4	8.7	7.6	0.205	0.453	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	5	8.6	8.151	8.7	7.6	0.282	0.531	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	5	0.003	0.007	0.025	0.002	0.	0.01	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	5	145.	139.2	158.	110.	340.7	18.458	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	10	5.5	72.75	658.	2.5	42352.569	205.797	2.5	2.5	14.25	595.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	10	2.5	13.05	100.	1.	937.858	30.624	1.1	2.	6.5	90.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	10	3.	60.45	558.	1.	30599.303	174.927	1.15	2.5	9.25	504.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	10###	0.05	0.09	0.4	0.05	0.012	0.11	0.05	0.05	0.063	0.37
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10	0.01	0.016	0.05	0.005	0.	0.015	0.005	0.005	0.023	0.048
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	10	1.25	1.093	1.61	0.09	0.216	0.465	0.146	0.725	1.408	1.592
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	10	0.45	0.46	0.9	0.1	0.065	0.255	0.11	0.275	0.65	0.89
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	10	0.11	0.137	0.3	0.05	0.007	0.084	0.05	0.05	0.2	0.29
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	10	0.105	0.093	0.17	0.005	0.003	0.053	0.009	0.04	0.135	0.168
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	10	4.5	7.45	34.	0.5	92.136	9.599	0.75	3.	6.75	31.5
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	9	16.	45.056	291.	0.5	8570.403	92.576	0.5	7.5	23.5	291.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	10###	50.	640.	5500.	50.	2927666.667	1711.043	50.	50.	175.	4990.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	10###	1.699	2.054	3.74	1.699	0.434	0.659	1.699	1.699	2.151	3.627
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			113.142								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	16.7	15.192	26.	1.	82.275	9.071	1.15	7.875	23.875	25.82
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	11	243.	250.091	338.	185.	2081.691	45.626	190.4	213.	291.	330.
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	12	10.	10.125	14.8	6.3	6.202	2.49	6.57	8.225	12.	14.35
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	12	1.	1.833	8.	0.5	4.288	2.071	0.5	1.	2.	6.5
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	12	7.	9.5	35.	2.	76.273	8.733	2.6	5.25	9.	29.3
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	12	7.825	8.038	9.1	7.	0.364	0.603	7.15	7.65	8.575	9.01
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	12	7.824	7.709	9.1	7.	0.482	0.694	7.15	7.65	8.575	9.01
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.015	0.02	0.1	0.001	0.001	0.027	0.001	0.003	0.023	0.079
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	12	8.	8.067	8.9	7.4	0.246	0.496	7.46	7.6	8.55	8.84
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	12	7.989	7.855	8.9	7.4	0.295	0.543	7.46	7.6	8.55	8.84
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.01	0.014	0.04	0.001	0.	0.012	0.001	0.003	0.025	0.035
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	12	97.	102.667	156.	73.	603.333	24.563	75.7	83.75	116.5	149.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	7.	20.417	114.	2.5	1025.811	32.028	2.5	22.	93.3	93.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	2.75	5.167	20.	2.	27.697	5.263	2.	2.5	6.5	17.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	4.5	16.083	94.	2.5	709.447	26.635	2.5	2.5	16.5	77.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	9###	0.05	0.122	0.6	0.05	0.033	0.18	0.05	0.05	0.1	0.6
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	9	0.01	0.019	0.04	0.005	0.	0.013	0.005	0.008	0.03	0.04
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	9	1.2	1.189	1.8	0.75	0.123	0.351	0.75	0.82	1.45	1.8
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	6	0.45	0.533	1.2	0.2	0.143	0.378	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	6	0.25	0.258	0.6	0.05	0.038	0.196	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	9	0.12	0.167	0.6	0.04	0.03	0.172	0.04	0.055	0.195	0.6
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	12	4.	5.583	19.	3.	19.356	4.4	3.	3.25	5.75	15.4
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	9	102.	107.778	124.	86.	204.444	14.298	86.	97.	122.	124.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	6	15.5	13.833	19.	1.	42.967	6.555	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11###	50.	590.909	5000.	50.	2218909.091	1489.6	50.	50.	100.	4200.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11###	1.699	2.026	3.699	1.699	0.46	0.679	1.699	1.699	2.	3.559
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			106.275								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	13	17.2	16.177	31.	0.	101.815	10.09	1.8	7.1	25.5	30.2
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	13	322.	313.769	396.	200.	3237.859	56.902	216.	273.5	360.	389.2
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	13	10.6	10.431	13.4	7.8	3.146	1.774	7.92	8.75	11.9	13.04
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	13	1.	1.654	5.	0.5	1.933	1.39	0.5	0.75	2.	4.6
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	13	11.	12.769	44.	2.	113.526	10.655	2.4	7.5	13.5	35.2
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	13	8.7	8.685	9.2	8.	0.138	0.372	8.04	8.45	9.	9.16
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	13	8.7	8.528	9.2	8.	0.165	0.406	8.04	8.45	9.	9.16
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	13	0.002	0.003	0.01	0.001	0.	0.003	0.001	0.001	0.004	0.009
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	13	8.4	8.438	9.	7.7	0.151	0.388	7.78	8.15	8.75	8.96
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	13	8.4	8.27	9.	7.7	0.181	0.426	7.78	8.15	8.75	8.96
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	13	0.004	0.005	0.02	0.001	0.	0.005	0.001	0.002	0.007	0.017
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	13	128.	130.308	159.	87.	415.231	20.377	95.	120.	147.5	157.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	13###	2.5	5.	20.	2.5	23.667	4.865	2.5	2.5	6.5	14.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	13###	2.5	3.423	11.	2.5	5.66	2.379	2.5	2.5	3.	8.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	13###	2.5	3.115	9.	2.	3.34	1.827	2.2	2.5	2.75	7.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	13###	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	13	0.01	0.009	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	13	0.79	0.746	1.4	0.025	0.169	0.411	0.139	0.415	1.01	1.4
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	13	0.5	0.554	1.5	0.1	0.111	0.333	0.18	0.35	0.65	1.18
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	13	0.2	0.2	0.3	0.05	0.011	0.106	0.05	0.1	0.3	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	13	0.16	0.135	0.25	0.01	0.008	0.091	0.014	0.04	0.215	0.242
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	13	5.	4.615	6.	2.	1.256	1.121	2.8	4.	5.5	6.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	12	140.	145.167	172.	114.	285.424	16.895	120.	134.5	159.5	171.4
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	6	21.	20.833	30.	12.	33.367	**	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	14###	50.	121.429	1000.	50.	64120.879	253.221	50.	50.	50.	550.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	14###	1.699	1.813	3.	1.699	0.123	0.351	1.699	1.699	1.699	2.5
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			65.073								

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	13.75	14.933	28.8	2.	82.715	9.095	2.93	7.075	25.25	27.96
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	12	296.	305.5	391.	202.	3885.	62.33	209.8	258.5	371.25	387.7
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	12	10.25	10.633	15.7	7.2	6.319	2.514	7.38	8.625	12.7	15.04
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	12	1.	1.167	2.	0.5	0.288	0.537	0.5	1.	1.75	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	12	9.	9.667	18.	3.	19.515	4.418	3.6	5.5	13.	16.8
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.485	8.56	9.4	7.9	0.309	0.556	7.9	8.05	9.058	9.383
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	10	8.434	8.301	9.4	7.9	0.384	0.619	7.9	8.05	9.057	9.383
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	10	0.004	0.005	0.013	0.	0.	0.005	0.	0.001	0.009	0.013
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	12	8.3	8.117	8.8	6.8	0.471	0.686	6.98	7.55	8.7	8.8
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	12	8.204	7.615	8.8	6.8	0.746	0.864	6.98	7.55	8.7	8.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.006	0.024	0.158	0.002	0.002	0.044	0.002	0.002	0.029	0.123
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	12	120.5	117.5	149.	77.	728.091	26.983	77.6	92.75	143.25	148.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	12###	2.5	6.167	36.	2.5	90.879	9.533	2.5	2.5	5.75	27.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	12###	2.5	2.958	5.	1.	1.703	1.305	1.3	2.5	4.375	5.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	12###	2.5	5.208	34.	0.	83.884	9.159	0.75	2.5	2.5	25.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	12###	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.01	0.013	0.03	0.005	0.	0.009	0.005	0.005	0.018	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	1.245	1.168	1.78	0.23	0.24	0.49	0.26	0.94	1.588	1.756
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	12	0.5	0.742	4.	0.2	1.079	1.039	0.2	0.325	0.65	3.01
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	12	0.15	0.458	4.	0.05	1.248	1.117	0.05	0.1	0.2	2.86
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	12	0.08	0.085	0.14	0.02	0.001	0.036	0.026	0.063	0.12	0.134
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	8	4.	4.375	7.	3.	1.982	1.408	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	12	134.	130.417	163.	86.	732.992	27.074	86.6	110.5	155.	162.1
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	5	27.	24.8	31.	13.	47.2	6.87	**	**	**	**

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12 ##	50.	241.667	1200.	50.	164469.697	405.549	50.	175.	1140.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12 ##	1.699	1.998	3.079	1.699	0.271	0.521	1.699	1.699	2.226
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		99.464								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	7	16.1	14.7	27.8	1.3	102.897	10.144	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	7	295.	273.429	354.	118.	6526.952	80.79	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	7	10.7	11.1	14.5	6.8	9.427	3.07	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	7	1.	0.929	1.	0.5	0.036	0.189	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	7	11.	10.429	17.	5.	18.619	4.315	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	6	8.665	8.663	9.63	7.83	0.378	0.614	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	6	8.659	8.36	9.63	7.83	0.488	0.698	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	6	0.002	0.004	0.015	0.	0.	0.005	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	7	8.4	8.443	9.2	7.6	0.35	0.591	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	7	8.4	8.142	9.2	7.6	0.455	0.675	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	7	0.004	0.007	0.025	0.001	0.	0.009	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	5	119.	116.8	135.	90.	340.7	18.458	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	7 ##	2.5	5.	21.	0.5	50.833	7.13	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	7 ##	2.5	1.786	3.	0.5	1.155	1.075	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	7 ##	2.5	4.429	18.	0.5	37.119	6.093	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	6	0.065	0.072	0.12	0.02	0.002	0.042	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	6	0.01	0.032	0.1	0.005	0.002	0.04	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	6	0.75	0.868	1.39	0.34	0.171	0.414	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	6	0.45	0.433	0.5	0.3	0.007	0.082	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	6	0.1	0.092	0.1	0.05	0.	0.02	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	6	0.055	0.054	0.11	0.005	0.002	0.042	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	5	2.4	2.56	3.3	2.2	0.193	0.439	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	7	138.	121.429	150.	52.	1219.952	34.928	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	1	18.	18.	18.	18.	0.	0.	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	5	19.	19.	23.	15.	12.5	3.536	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	50.	50.	50.	50.	0.	0.	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	8 ##	1.699	1.699	1.699	1.699	0.	0.	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		50.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	7	26.6	20.8	27.3	3.	110.17	10.496	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	4	294.	302.25	352.	269.	1238.917	35.198	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	1	299.	299.	299.	299.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	7	11.1	10.514	13.3	8.3	5.061	2.25	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	5	1.	1.4	2.	1.	0.3	0.548	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	5	11.	13.8	21.	7.	45.2	6.723	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	7	8.97	8.864	9.05	8.67	0.034	0.183	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	7	8.97	8.831	9.05	8.67	0.035	0.187	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	7	0.001	0.001	0.002	0.001	0.	0.001	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	5	8.4	8.38	8.5	8.2	0.012	0.11	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	5	8.4	8.368	8.5	8.2	0.012	0.11	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	5	0.004	0.004	0.006	0.003	0.	0.001	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	5	118.	120.6	142.	104.	186.8	13.667	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	5 ##	0.5	0.9	2.	0.5	0.425	0.652	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	5 ##	0.5	0.9	2.	0.5	0.425	0.652	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	5 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	4 ##	0.02	0.03	0.06	0.02	0.	0.02	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	4	0.02	0.016	0.02	0.005	0.	0.008	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	4	0.905	0.895	1.16	0.61	0.076	0.275	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	4	0.5	0.625	1.1	0.4	0.103	0.32	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	4	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	4	0.065	0.065	0.09	0.04	0.001	0.024	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	5	2.5	2.28	2.6	1.4	0.247	0.497	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	5	134.	137.6	158.	124.	156.8	12.522	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	5	11.	11.6	16.	10.	6.3	2.51	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	5	16.	17.4	22.	15.	7.8	2.793	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	5 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	5 ##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			50.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	5	25.7	22.92	28.9	13.7	37.112	6.092	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	2	315.	315.	338.	292.	1058.	32.527	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	3	264.	277.	363.	204.	6447.	80.293	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	5	10.4	9.84	11.1	7.6	1.813	1.346	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	5	1.	1.6	3.	1.	0.8	0.894	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	5	8.	7.8	10.	6.	3.2	1.789	**	**	**	**
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	5	8.87	8.742	9.14	8.01	0.184	0.429	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	5	8.87	8.531	9.14	8.01	0.24	0.489	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	5	0.001	0.003	0.01	0.001	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	5	8.4	8.4	8.9	7.7	0.21	0.458	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	5	8.4	8.191	8.9	7.7	0.265	0.514	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	5	0.004	0.006	0.02	0.001	0.	0.008	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	4	133.	131.75	156.	105.	438.25	20.934	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	5	6.	6.3	13.	0.5	27.7	5.263	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	5	2.	3.3	7.	0.5	6.95	2.636	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	5	1.	3.2	8.	0.5	12.575	3.546	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	7 ##	0.02	0.039	0.1	0.02	0.001	0.03	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	7	0.01	0.046	0.26	0.005	0.009	0.094	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	7	1.19	1.264	1.98	0.74	0.173	0.416	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	7	0.5	0.5	0.7	0.4	0.01	0.1	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	7	0.1	0.143	0.3	0.1	0.006	0.079	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	7	0.11	0.107	0.18	0.06	0.001	0.037	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	5	2.4	2.5	3.5	1.8	0.425	0.652	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	5	152.	151.6	170.	122.	402.8	20.07	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	5	12.	19.4	52.	9.	338.3	18.393	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	5	15.	16.4	20.	14.	6.3	2.51	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	9	20.	17.4	28.5	6.3	69.415	8.332	6.3	8.8	24.55	28.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	9	289.	298.444	360.	224.	2452.528	49.523	224.	256.	349.5	360.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	1	11.3	11.3	11.3	11.3	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	7	10.	10.786	14.9	7.6	6.221	2.494	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	10	1.	1.15	3.	0.5	0.614	0.784	0.5	0.5	1.25	2.9
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	9	7.	6.667	12.	3.	10.	3.162	3.	4.	9.5	12.
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	9	8.38	8.41	9.14	7.7	0.191	0.437	7.7	8.1	8.735	9.14
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	9	8.38	8.228	9.14	7.7	0.229	0.478	7.7	8.1	8.735	9.14
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	9	0.004	0.006	0.02	0.001	0.	0.006	0.001	0.002	0.008	0.02
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	9	8.2	8.289	8.9	7.9	0.099	0.314	7.9	8.1	8.55	8.9
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	9	8.2	8.206	8.9	7.9	0.106	0.326	7.9	8.1	8.55	8.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	9	0.006	0.006	0.013	0.001	0.	0.003	0.001	0.003	0.008	0.013
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	8	121.5	123.125	155.	93.	528.411	22.987	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	4.	6.611	17.	2.5	28.236	5.314	2.5	3.	10.5	17.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	1.	1.278	3.	0.5	0.569	0.755	0.5	1.	1.5	3.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	9	3.	5.389	14.	2.	22.861	4.781	2.	2.	9.5	14.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	11 ##	0.02	0.033	0.08	0.02	0.	0.018	0.02	0.02	0.04	0.072
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	11	0.01	0.011	0.03	0.005	0.	0.007	0.005	0.01	0.01	0.026
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	11	1.41	1.257	1.76	0.2	0.18	0.424	0.354	1.06	1.52	1.726
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	11	0.4	0.373	0.6	0.2	0.016	0.127	0.2	0.3	0.5	0.58
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	11	0.2	0.164	0.3	0.05	0.008	0.09	0.05	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	11	0.12	0.105	0.2	0.01	0.004	0.062	0.014	0.05	0.15	0.196
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	10	2.7	3.11	8.6	1.5	4.274	2.067	1.51	1.675	3.475	8.11
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	10	142.	140.9	172.	106.	476.989	21.84	106.5	123.75	161.5	171.4
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	9	10.	9.694	16.	0.25	23.153	4.812	0.25	6.5	13.5	16.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	9	15.	12.806	17.	0.25	24.653	4.965	0.25	12.	15.	17.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	6 ##	50.	108.333	400.	50.	20416.667	142.887	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	6 ##	1.699	1.849	2.602	1.699	0.136	0.369	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			70.711								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	10.7	13.542	26.5	3.9	58.326	7.637	4.56	6.85	20.65	25.72
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	11	254.	245.636	311.	155.	3545.655	59.545	158.4	178.	302.	310.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	8	9.55	9.488	12.7	6.9	4.244	2.06	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	4	12.4	12.625	13.7	12.	0.576	0.759	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	10	1.	1.1	2.	1.	0.1	0.316	1.	1.	1.	1.9
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	11	7.	7.727	14.	5.	6.018	2.453	5.2	6.	9.	13.
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.5	8.569	9.3	7.4	0.285	0.534	7.61	8.262	8.975	9.3
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.5	8.219	9.3	7.4	0.419	0.647	7.61	8.262	8.975	9.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.003	0.006	0.04	0.001	0.	0.011	0.001	0.001	0.006	0.03
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	11	8.5	8.455	9.4	7.8	0.195	0.441	7.82	8.2	8.7	9.28
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	11	8.5	8.281	9.4	7.8	0.228	0.477	7.82	8.2	8.7	9.28
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	11	0.003	0.005	0.016	0.	0.	0.005	0.001	0.002	0.006	0.015
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	11	103.	107.909	212.	54.	2154.491	46.416	56.	64.	131.	197.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	11	3.	3.5	7.	1.	5.65	2.377	1.	1.	5.	7.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	11	1.	1.045	2.	0.	0.373	0.611	0.	1.	1.5	1.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	11	2.	2.864	6.	1.	3.205	1.79	1.	1.	4.	5.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	12 ##	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.034
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.01	0.014	0.03	0.005	0.	0.009	0.005	0.006	0.02	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	1.235	1.215	1.81	0.69	0.074	0.271	0.783	1.033	1.348	1.675
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	12	0.3	0.292	0.4	0.2	0.008	0.09	0.2	0.2	0.4	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	12	0.1	0.158	0.4	0.1	0.008	0.09	0.1	0.1	0.2	0.34
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	4	0.055	0.055	0.06	0.05	0.	0.006	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	11	2.4	2.909	6.3	1.1	3.067	1.751	1.2	1.6	3.5	6.24
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	11	106.	106.182	146.	66.	949.964	30.821	66.8	80.	134.	145.6
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	11	8.	8.091	12.	4.	6.691	2.587	4.2	6.	10.	11.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	10	13.5	13.1	16.	9.	4.1	2.025	9.2	11.75	14.25	15.9
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11 ##	50.	77.273	200.	50.	2181.818	46.71	50.	50.	100.	180.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11 ##	1.699	1.836	2.301	1.699	0.043	0.207	1.699	1.699	2.	2.241
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	8	0.08	0.09	0.14	0.06	0.001	0.031	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	14.55	14.608	28.5	1.6	91.592	9.57	2.38	5.25	24.5	27.93
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	12	262.5	263.083	355.	178.	3678.629	60.652	178.9	204.75	311.5	353.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	12	9.95	10.708	16.8	7.1	8.272	2.876	7.28	8.475	12.6	16.08
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	12	1.	1.417	2.	1.	0.265	0.515	1.	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	12	8.5	9.167	16.	5.	11.242	3.353	5.3	6.25	11.5	15.4
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.05	8.031	8.67	6.7	0.362	0.602	6.94	7.65	8.6	8.649
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	12	7.982	7.571	8.67	6.7	0.593	0.77	6.94	7.65	8.6	8.649
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.01	0.027	0.2	0.002	0.003	0.055	0.002	0.003	0.023	0.149
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	12	8.4	8.367	8.7	7.6	0.082	0.287	7.78	8.225	8.575	8.67
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	12	8.4	8.246	8.7	7.6	0.098	0.313	7.78	8.225	8.575	8.67
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.004	0.006	0.025	0.002	0.	0.006	0.002	0.003	0.006	0.019
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	12	116.	115.	173.	66.	1195.636	34.578	68.1	82.25	144.25	169.1
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	11 ##	1.5	6.318	20.	1.5	56.164	7.494	1.5	1.5	15.	19.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	11 ##	1.5	2.318	9.	1.	5.164	2.272	1.1	1.5	2.	7.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	11 ##	1.5	4.955	16.	1.5	29.173	5.401	1.5	1.5	11.	15.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	12 ##	0.02	0.035	0.1	0.02	0.001	0.024	0.02	0.02	0.04	0.088
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.01	0.009	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.017
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	1.225	1.074	1.52	0.35	0.164	0.405	0.389	0.73	1.443	1.505
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	12	0.3	0.3	0.5	0.1	0.011	0.104	0.13	0.225	0.375	0.47
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	12 ##	0.075	0.083	0.2	0.05	0.002	0.044	0.05	0.05	0.1	0.17
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	12	3.15	3.	4.	2.1	0.445	0.667	2.1	2.275	3.55	3.94
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	12	123.	122.25	168.	84.	637.477	25.248	85.8	102.25	136.	165.
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	12	9.	10.25	18.	4.	20.023	4.475	4.6	7.	15.25	17.4
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	12	13.	13.667	19.	11.	6.606	2.57	11.	11.25	15.75	18.4
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12 ##	50.	370.833	3600.	50.	1036117.424	1017.899	50.	50.	100.	2580.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12 ##	1.699	1.979	3.556	1.699	0.286	0.534	1.699	1.699	2.	3.18
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	12	0.045	0.045	0.11	0.005	0.001	0.033	0.007	0.015	0.058	0.107

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	12.65	13.358	26.5	1.	67.354	8.207	1.18	7.325	18.95	26.23
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/94-12/02/98	6	1.6	1.467	2.	0.7	0.279	0.528	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	12	286.	272.5	360.	149.	4982.818	70.589	153.8	220.5	329.	359.1
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	12	9.1	9.775	14.	6.1	7.718	2.778	6.16	7.2	12.525	13.88
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	12	1.05	1.125	2.	0.5	0.242	0.492	0.5	0.625	1.475	1.94
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	12	8.	8.917	18.	6.	11.72	3.423	6.	6.25	10.	16.2
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.4	8.371	9.	7.7	0.173	0.416	7.73	7.975	8.738	8.94

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.389	8.19	9.	7.7	0.208	0.457	7.73	7.975	8.738	8.94
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.004	0.006	0.02	0.001	0.	0.006	0.001	0.002	0.011	0.019
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	12	8.1	7.925	8.5	7.1	0.198	0.445	7.16	7.475	8.275	8.44
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	12	8.1	7.694	8.5	7.1	0.257	0.506	7.16	7.475	8.275	8.44
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.008	0.02	0.079	0.003	0.001	0.024	0.004	0.005	0.035	0.071
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	12	120.5	111.917	152.	53.	1197.72	34.608	54.5	81.75	139.5	152.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	12##	2.75	12.667	92.	1.5	659.924	25.689	1.5	1.5	13.75	70.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	12##	1.5	2.333	10.	1.	6.288	2.508	1.	1.125	2.625	7.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	12##	2.25	11.083	82.	1.5	522.674	22.862	1.5	1.5	11.25	62.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	12##	0.03	0.043	0.1	0.02	0.001	0.03	0.02	0.02	0.068	0.097
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.01	0.016	0.04	0.005	0.	0.011	0.005	0.01	0.02	0.037
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	1.255	1.215	1.7	0.89	0.066	0.258	0.893	0.945	1.365	1.652
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	12	0.3	0.35	0.6	0.2	0.012	0.109	0.23	0.3	0.4	0.57
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	12	0.1	0.087	0.2	0.05	0.002	0.043	0.05	0.05	0.1	0.17
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	12	2.7	2.85	4.1	1.8	0.577	0.76	1.86	2.2	3.5	4.01
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	12	131.5	124.667	163.	66.	1086.97	32.969	67.8	100.	151.5	162.1
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	12	11.	10.5	17.	4.	20.091	4.482	4.3	6.	14.	16.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	12	11.	11.083	15.	7.	5.72	2.392	7.6	9.25	12.75	15.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11	100.	113.636	300.	50.	7045.455	83.937	50.	50.	200.	280.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11	2.	1.961	2.477	1.699	0.085	0.291	1.699	1.699	2.301	2.442
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11	2.	1.961	2.477	1.699	0.085	0.291	1.699	1.699	2.301	2.442
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	12	0.055	0.053	0.09	0.01	0.001	0.028	0.013	0.023	0.08	0.09

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	15.85	14.483	28.5	0.	85.098	9.225	0.39	6.3	22.475	27.
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/94-12/02/98	12	2.8	4.975	32.	0.8	73.711	8.586	0.86	1.625	3.625	23.78
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	12	290.5	291.167	389.	188.	3051.424	55.24	207.5	256.25	317.25	385.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	12	8.85	9.533	14.6	5.6	9.806	3.131	5.78	7.075	12.175	14.6
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	12##	0.5	0.975	3.	0.5	0.68	0.825	0.5	0.5	1.525	2.7
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	12	7.5	8.667	24.	2.5	32.379	5.69	2.5	6.25	9.	21.
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.5	8.525	9.3	7.8	0.213	0.461	7.8	8.225	8.9	9.18
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.489	8.306	9.3	7.8	0.265	0.515	7.8	8.225	8.9	9.18
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.003	0.005	0.016	0.001	0.	0.005	0.001	0.001	0.006	0.016
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	12	7.9	7.917	8.5	7.3	0.116	0.341	7.39	7.625	8.2	8.41
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	12	7.889	7.796	8.5	7.3	0.132	0.363	7.39	7.625	8.2	8.41
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.013	0.016	0.05	0.003	0.	0.013	0.004	0.006	0.024	0.043
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	12	108.	111.583	149.	71.	527.538	22.968	76.7	97.25	131.	147.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	12##	1.5	5.375	39.	1.5	113.551	10.656	1.5	1.5	3.75	28.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	12##	1.5	1.875	6.	1.5	1.688	1.299	1.5	1.5	1.5	4.65
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	12##	1.5	4.458	33.	1.5	81.43	9.024	1.5	1.5	2.625	24.3
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	12##	0.03	0.03	0.04	0.02	0.	0.01	0.02	0.02	0.04	0.04
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.01	0.013	0.02	0.005	0.	0.007	0.005	0.006	0.02	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.975	1.058	1.89	0.71	0.12	0.346	0.713	0.8	1.17	1.782
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	12	0.3	0.267	0.4	0.1	0.006	0.078	0.13	0.2	0.3	0.37
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	12	0.1	0.129	0.2	0.05	0.004	0.066	0.05	0.063	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	12	2.95	3.75	8.2	1.8	4.052	2.013	1.83	2.325	4.925	7.78
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	12	114.	120.917	168.	70.	985.538	31.393	73.6	102.5	153.5	166.5
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	12	11.	11.5	16.	5.	10.818	3.289	6.2	10.	15.25	16.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	12	12.	12.333	15.	9.	2.606	1.614	9.6	11.25	13.75	14.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12##	50.	79.167	200.	50.	2026.515	45.017	50.	50.	100.	170.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12##	1.699	1.849	2.301	1.699	0.041	0.203	1.699	1.699	2.	2.211
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12##	1.699	1.849	2.301	1.699	0.041	0.203	1.699	1.699	2.	2.211
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	12	0.085	0.086	0.15	0.02	0.002	0.04	0.026	0.053	0.118	0.147

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	11	8.3	14.018	28.2	3.8	83.824	9.156	4.22	6.9	22.7	27.78
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/94-12/02/98	12	8.95	18.233	118.	2.5	1020.741	31.949	2.77	4.525	15.975	88.78
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	1	352.	352.	352.	352.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	12	247.5	273.333	532.	194.	8986.061	94.795	195.2	204.75	311.	474.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	11	11.1	10.245	14.5	6.6	6.625	2.574	6.78	7.6	12.2	14.1
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	12 ##	0.5	1.042	4.	0.5	1.066	1.033	0.5	0.5	1.	3.4
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	12	7.5	8.958	30.	2.5	54.884	7.408	2.5	3.375	11.25	24.6
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	11	8.1	8.182	9.1	7.6	0.138	0.371	7.66	8.	8.3	8.96
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	11	8.1	8.069	9.1	7.6	0.152	0.39	7.66	8.	8.3	8.96
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	11	0.008	0.009	0.025	0.001	0.	0.006	0.001	0.005	0.01	0.023
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	12	7.95	8.008	8.6	7.6	0.088	0.297	7.63	7.725	8.2	8.51
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	12	7.947	7.925	8.6	7.6	0.096	0.309	7.63	7.725	8.2	8.51
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.011	0.012	0.025	0.003	0.	0.007	0.003	0.006	0.019	0.024
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	12	92.5	99.75	149.	71.	716.75	26.772	71.3	76.5	124.	145.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	8.5	23.	148.	3.	1655.091	40.683	3.	5.	27.5	113.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	12 ##	1.5	3.417	17.	1.5	19.72	4.441	1.5	1.5	3.75	13.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	6.5	20.	131.	3.	1300.182	36.058	3.	4.	23.25	100.1
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	12 ##	0.02	0.053	0.14	0.02	0.002	0.045	0.02	0.02	0.087	0.134
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.01	0.018	0.04	0.005	0.	0.014	0.005	0.005	0.03	0.04
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	1.365	1.472	2.1	0.99	0.138	0.372	0.993	1.113	1.8	2.025
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	12	0.35	0.408	0.9	0.2	0.039	0.198	0.2	0.3	0.5	0.81
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	12	0.1	0.121	0.4	0.05	0.011	0.103	0.05	0.05	0.175	0.34
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	9	3.1	3.478	5.3	2.1	1.437	1.199	2.1	2.5	4.85	5.3
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	12	112.	115.25	149.	82.	617.295	24.845	84.7	91.5	143.	148.4
00940	CHLORIDE,TOTAL IN WATER MG/L	05/09/74-12/02/98	12	8.	8.5	12.	5.	4.636	2.153	5.6	7.	10.5	12.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	12	11.	11.167	13.	9.	1.242	1.115	9.3	10.25	12.	12.7
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/02/98	12	150.	866.667	4300.	50.	2272424.242	1507.456	50.	50.	675.	4150.
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/02/98	12	2.151	2.378	3.633	1.699	0.508	0.713	1.699	1.699	2.828	3.617
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			238.757								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	12	0.08	0.082	0.26	0.01	0.005	0.068	0.01	0.04	0.105	0.224

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	14.5	15.2	25.	5.2	60.202	7.759	5.71	7.75	23.85	24.97
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/94-12/02/98	11	4.2	8.	51.	1.	206.556	14.372	1.02	1.3	5.3	42.02
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	11	299.	287.545	339.	133.	3418.473	58.468	155.2	275.	333.	338.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	11	11.7	10.909	13.2	7.1	3.675	1.917	7.3	9.1	11.9	13.
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	11	1.	1.136	4.	0.5	0.955	0.977	0.5	0.5	1.	3.4
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	11	7.	6.636	11.	2.5	7.205	2.684	2.5	5.	9.	10.6
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.5	8.425	8.9	7.8	0.117	0.341	7.83	8.15	8.7	8.84
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.5	8.291	8.9	7.8	0.136	0.369	7.83	8.15	8.7	8.84
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.003	0.005	0.016	0.001	0.	0.005	0.001	0.002	0.007	0.015
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	11	8.3	8.155	8.7	7.	0.221	0.47	7.16	8.	8.4	8.68
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	11	8.3	7.823	8.7	7.	0.341	0.584	7.16	8.	8.4	8.68
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	11	0.005	0.015	0.1	0.002	0.001	0.028	0.002	0.004	0.01	0.083
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	11	124.	119.273	145.	38.	944.418	30.731	50.	111.	141.	144.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	11 ##	1.5	7.318	56.	1.5	268.814	16.396	1.5	1.5	1.5	47.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	11 ##	1.5	1.909	6.	1.5	1.841	1.357	1.5	1.5	1.5	5.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	11 ##	1.5	6.682	50.	1.5	212.914	14.592	1.5	1.5	1.5	42.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	11 ##	0.02	0.037	0.11	0.02	0.001	0.033	0.02	0.02	0.05	0.106
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	11 ##	0.005	0.012	0.04	0.005	0.	0.011	0.005	0.005	0.02	0.036
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	11	0.93	0.867	1.67	0.14	0.181	0.425	0.18	0.53	1.14	1.58
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	11	0.3	0.418	1.	0.2	0.054	0.232	0.2	0.3	0.5	0.92
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	11	0.1	0.132	0.2	0.05	0.003	0.056	0.06	0.1	0.2	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	11	141.	121.545	154.	27.	1751.873	41.855	33.4	109.	150.	153.6
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	11	10.	11.182	18.	5.	17.364	4.167	5.6	8.	14.	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	11	12.	11.364	13.	9.	1.655	1.286	9.2	10.	12.	13.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11 ##	50.	454.545	2500.	50.	732727.273	855.995	50.	50.	300.	2360.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	11 ##	1.699	2.066	3.398	1.699	0.444	0.666	1.699	1.699	2.477	3.369
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			116.317								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	11	0.1	0.085	0.15	0.03	0.002	0.043	0.03	0.04	0.12	0.148

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

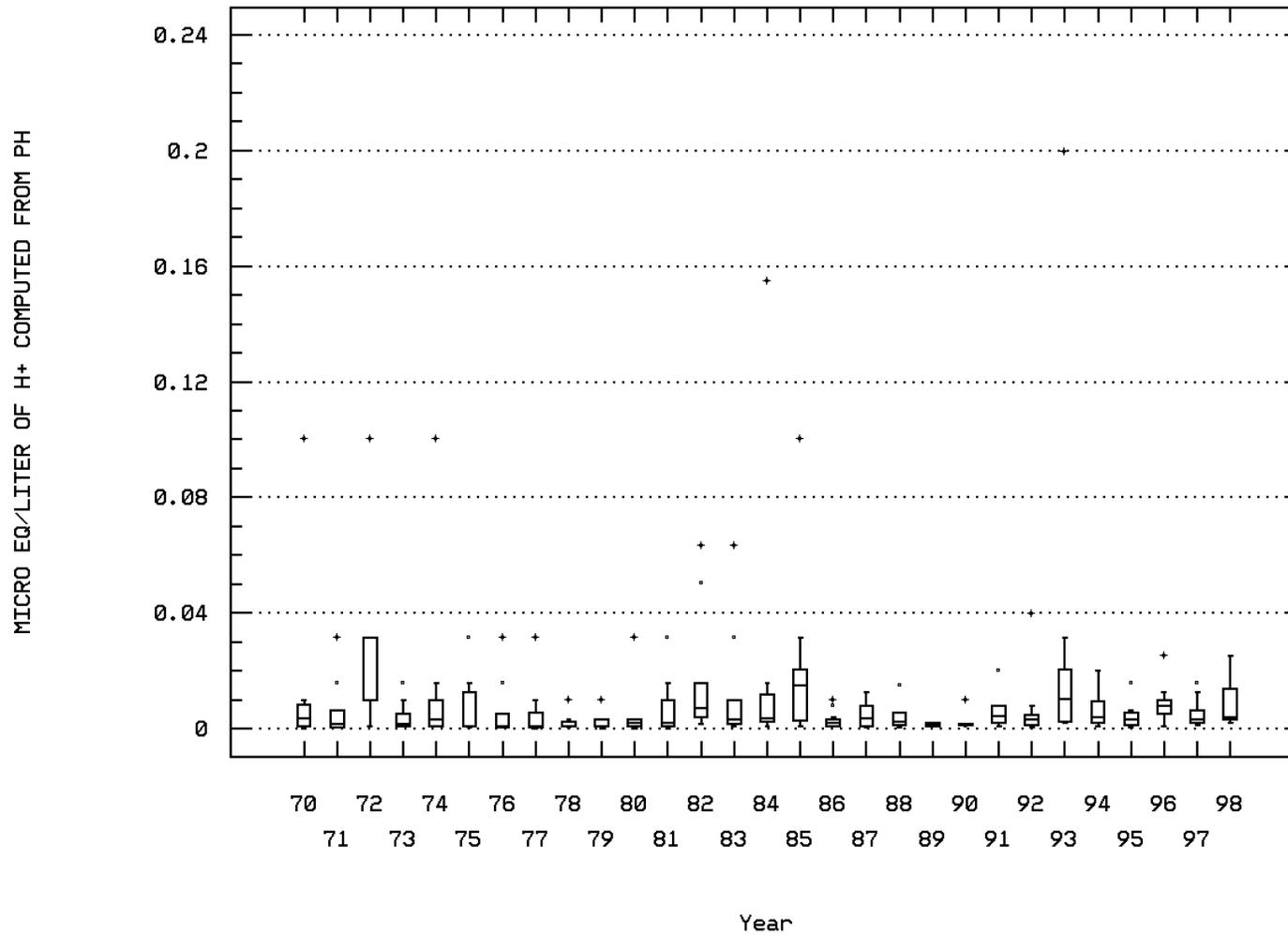
Annual Analysis for 1998 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	12	16.9	15.2	25.7	5.6	45.107	6.716	6.14	8.75	19.275	25.25
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	07/06/94-12/02/98	12	2.4	4.958	16.2	0.9	24.932	4.993	0.93	1.125	8.025	14.91
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	1	370.	370.	370.	370.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	12	325.	308.083	409.	192.	5700.447	75.501	192.3	234.5	369.25	406.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	12	8.9	9.542	13.5	6.4	4.728	2.174	6.43	8.275	11.425	12.93
00310	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	12 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	12	7.5	7.333	15.	2.5	18.697	4.324	2.5	2.5	9.	14.7
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.4	8.233	8.7	7.6	0.15	0.387	7.63	7.8	8.5	8.67
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	12	8.389	8.066	8.7	7.6	0.18	0.425	7.63	7.8	8.5	8.67
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	12	0.004	0.009	0.025	0.002	0.	0.008	0.002	0.003	0.017	0.024
00403	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	11	7.9	7.891	8.5	6.8	0.341	0.584	6.86	7.3	8.4	8.48
00403	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	11	7.9	7.501	8.5	6.8	0.508	0.713	6.86	7.3	8.4	8.48
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	11	0.013	0.032	0.158	0.003	0.002	0.049	0.003	0.004	0.05	0.143
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	11	141.	127.273	175.	74.	1385.418	37.221	75.2	85.	160.	174.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	12	3.	6.542	17.	1.5	40.612	6.373	1.5	1.5	14.	16.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	12 ##	1.5	1.792	5.	1.5	1.021	1.01	1.5	1.5	1.5	3.95
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	12 ##	1.5	5.167	14.	1.5	29.606	5.441	1.5	1.5	12.	13.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12 ##	0.005	0.007	0.01	0.005	0.	0.002	0.005	0.005	0.01	0.01
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	12	0.78	0.868	1.57	0.17	0.173	0.416	0.224	0.635	1.258	1.477
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	12	0.4	0.367	0.6	0.2	0.017	0.13	0.2	0.225	0.475	0.57
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	12	0.1	0.104	0.2	0.05	0.001	0.033	0.065	0.1	0.1	0.17
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	12	136.	131.417	176.	73.	1128.629	33.595	76.9	104.	159.5	175.1
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	12	12.5	12.083	19.	6.	21.356	4.621	6.3	7.	16.	18.4
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	12	11.	10.917	14.	9.	2.083	1.443	9.	10.	12.	13.4
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12 ##	50.	83.333	300.	50.	5151.515	71.774	50.	50.	100.	240.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	12 ##	1.699	1.839	2.477	1.699	0.058	0.242	1.699	1.699	2.	2.334
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			69.036								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	12	0.075	0.07	0.11	0.02	0.001	0.027	0.026	0.045	0.09	0.107

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0755 Parameter Code: 00400

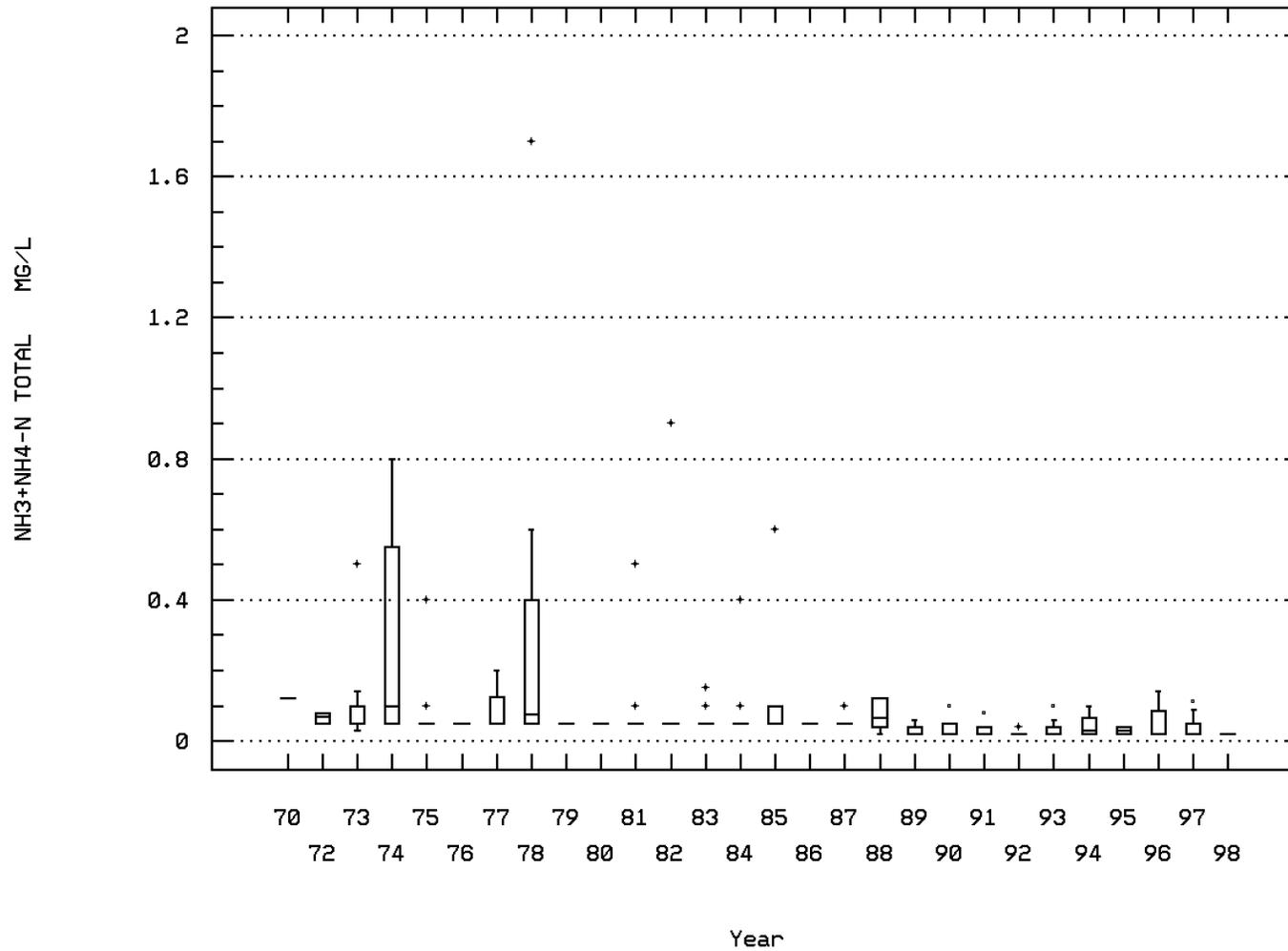
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00610

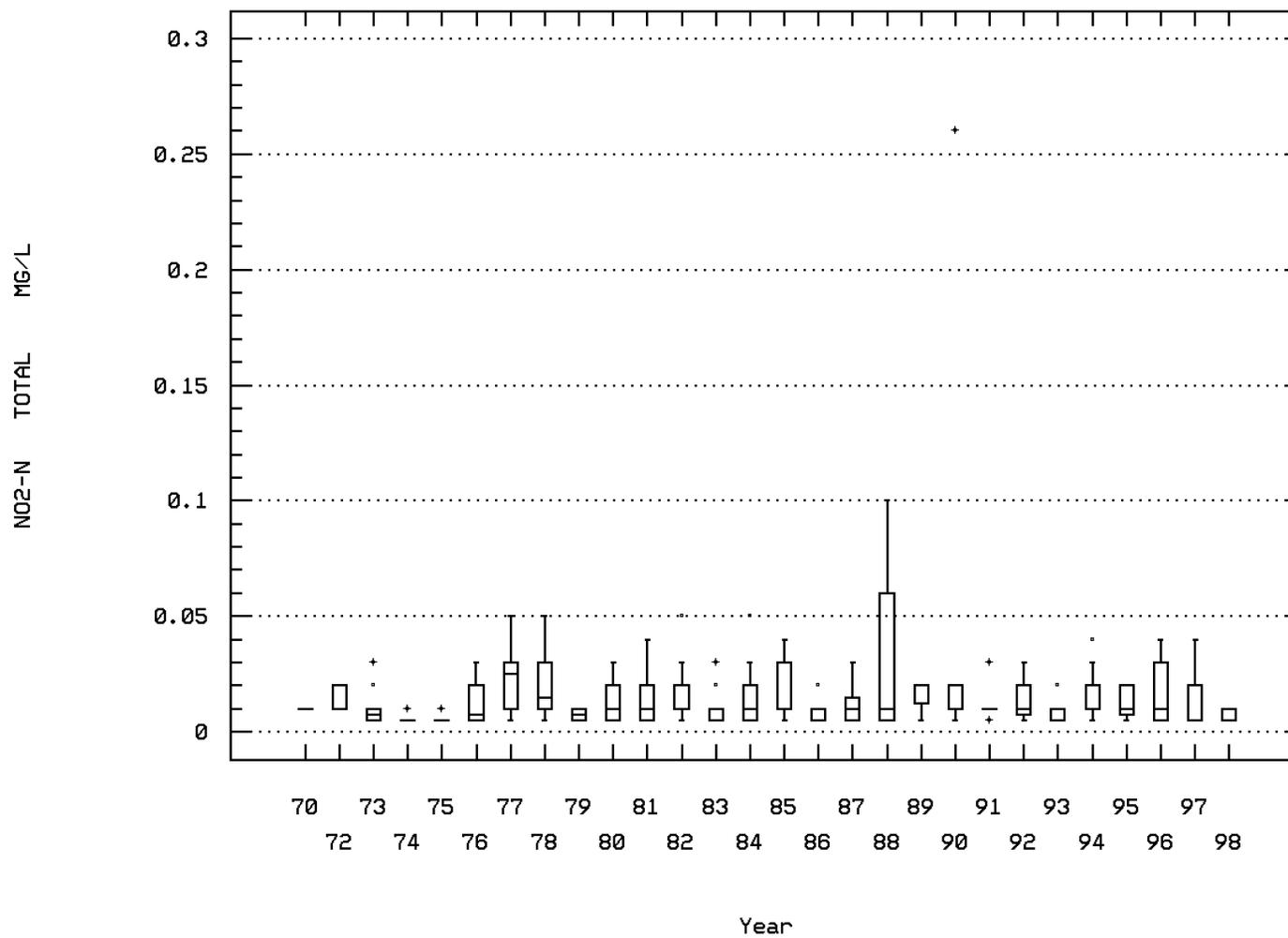
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00615

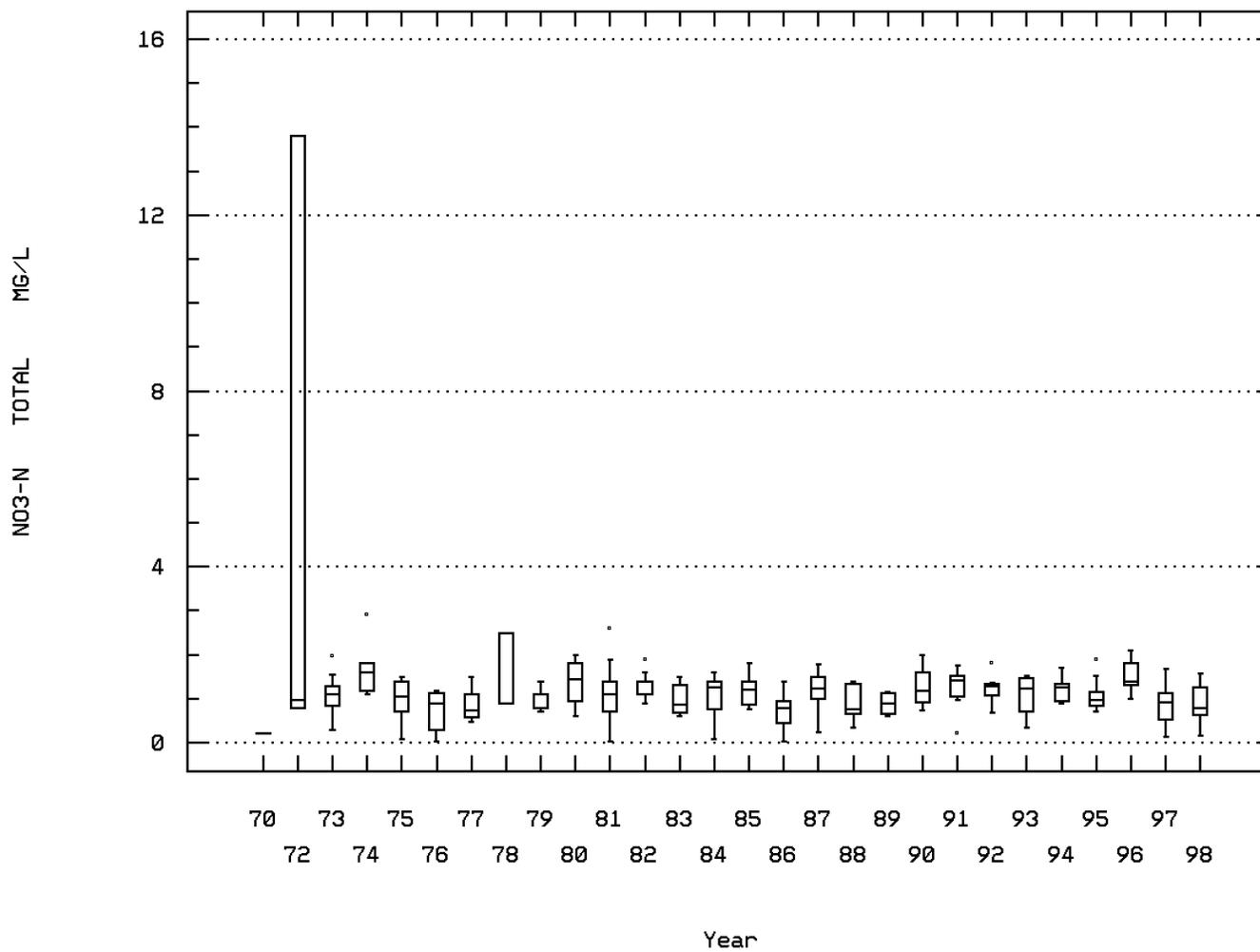
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00620

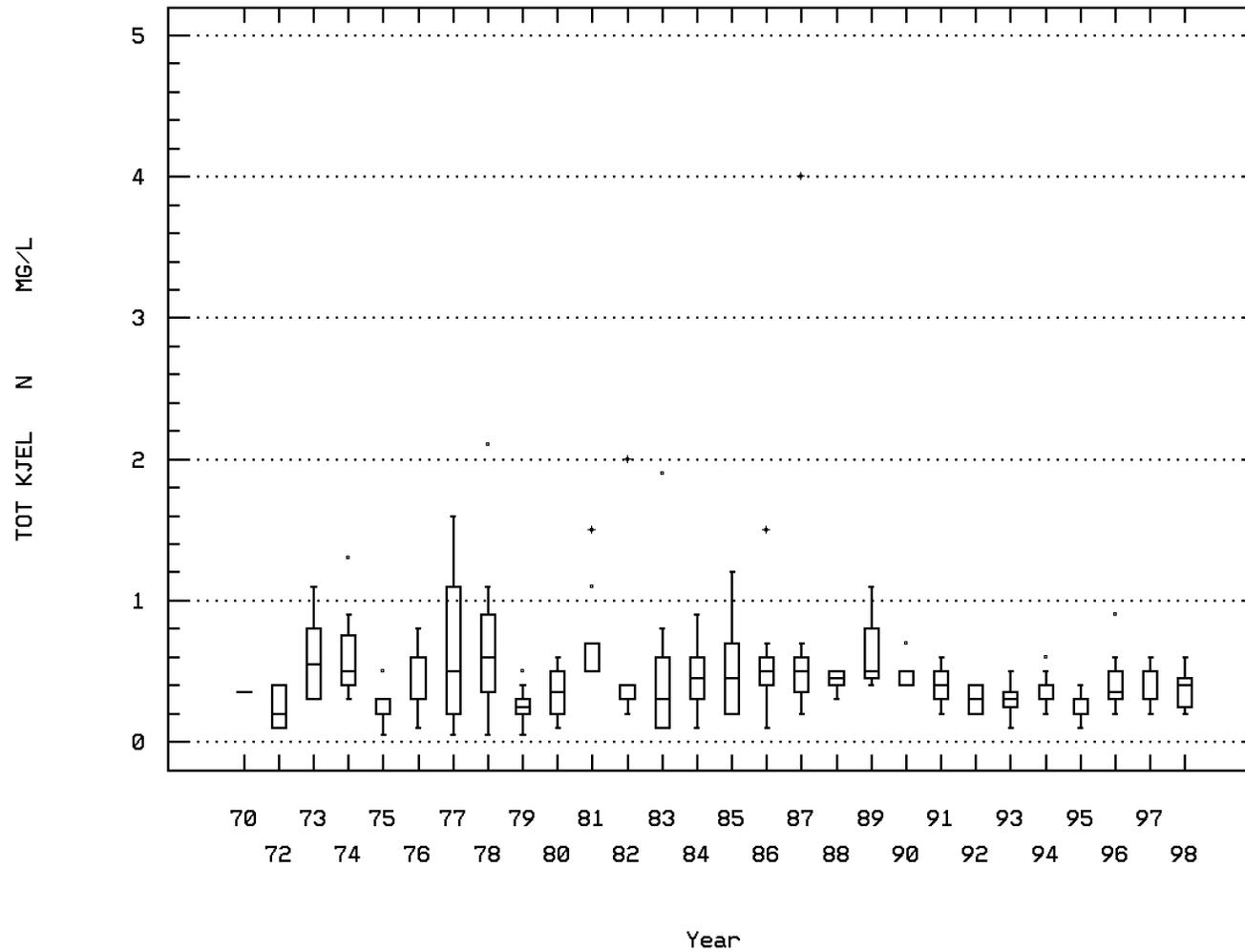
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00625

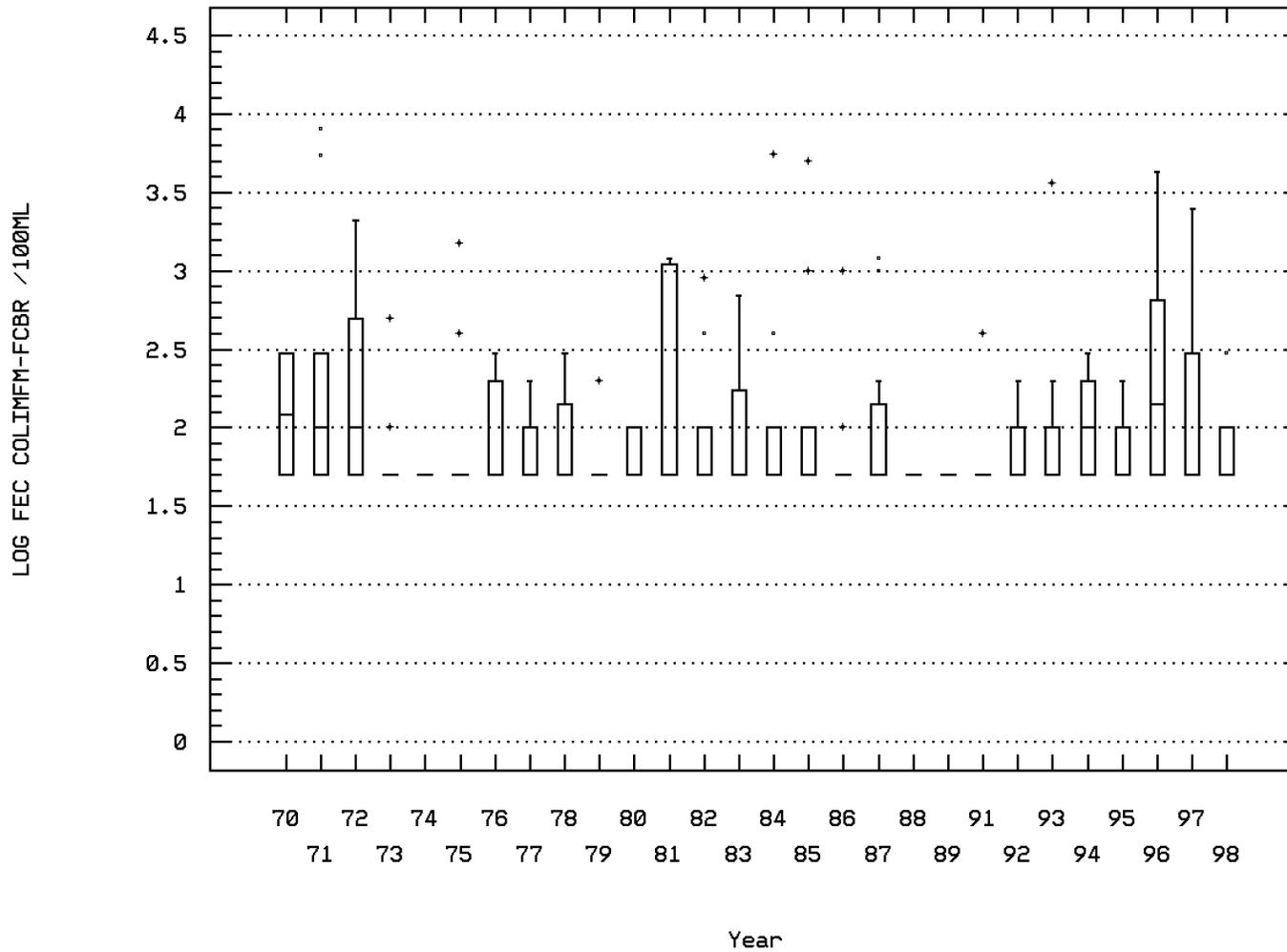
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 31616

LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



RT. 619 BRIDGE AT GAGING STATION

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	87	25.	23.976	31.	2.2	20.514	4.529	18.9	21.7	27.	28.5
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/02/71-04/01/92	7	1.9	3.7	11.	0.8	12.937	3.597	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	33	336.	339.03	608.	203.	4307.155	65.629	262.2	315.5	359.5	387.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	32	318.5	318.875	532.	188.	3830.952	61.895	233.	292.25	352.	376.7
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	25	7.6	7.888	11.8	5.6	2.464	1.57	6.16	6.75	8.65	10.56
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	60	9.4	9.403	16.1	6.3	2.325	1.525	7.33	8.4	10.4	10.8
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	65	1.	1.1	4.	0.5	0.533	0.73	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	65	8.	9.115	24.	0.5	23.475	4.845	3.4	6.	11.5	15.
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	85	8.7	8.625	9.9	7.3	0.249	0.499	7.86	8.3	9.	9.164
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	85	8.7	8.325	9.9	7.3	0.34	0.583	7.86	8.3	9.	9.164
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	85	0.002	0.005	0.05	0.	0.007	0.001	0.001	0.001	0.005	0.014
00403p	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	73	8.4	8.422	9.6	7.2	0.171	0.414	7.9	8.2	8.7	8.86
00403p	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	73	8.4	8.201	9.6	7.2	0.221	0.47	7.9	8.2	8.7	8.86
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	73	0.004	0.006	0.063	0.	0.	0.01	0.001	0.002	0.006	0.013
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	72	136.	132.333	212.	66.	477.746	21.857	103.9	119.5	145.75	151.7
00500	RESIDUE, TOTAL (MG/L)	03/03/70-08/04/92	13	185.	195.308	232.	148.	720.064	26.834	154.4	174.5	220.5	229.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/03/70-08/04/92	13	41.	111.385	900.	30.	56294.756	237.265	32.4	37.	60.5	568.4
00510	RESIDUE, TOTAL FIXED (MG/L)	03/03/70-08/04/92	13	148.	150.923	194.	100.	1038.744	32.23	103.6	123.	180.	193.2
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	66	2.75	5.235	39.	0.5	39.402	6.277	1.5	1.5	5.25	14.3
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	66##	1.5	2.477	14.	0.	4.98	2.232	1.	1.5	2.5	5.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	66##	2.5	3.75	33.	0.5	22.633	4.757	1.35	1.5	4.	9.3
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	78##	0.05	0.054	0.6	0.02	0.006	0.078	0.02	0.02	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	78	0.01	0.011	0.05	0.005	0.	0.01	0.005	0.005	0.01	0.021
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	76	0.985	0.934	1.9	0.025	0.211	0.459	0.3	0.607	1.198	1.603
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	78	0.4	0.537	4.	0.05	0.212	0.46	0.3	0.3	0.6	0.8
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	62	0.2	0.229	4.	0.05	0.243	0.493	0.1	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	35	0.15	0.151	0.38	0.08	0.003	0.059	0.096	0.11	0.18	0.214
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	64	5.	5.316	19.	0.5	11.035	3.322	2.05	2.75	7.	9.5
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	68	146.	142.441	285.	17.	1195.653	34.578	105.4	130.	157.5	170.2
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	34	12.	13.706	52.	5.	58.275	7.634	7.	10.75	16.	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	44	13.	21.295	291.	1.	1769.19	42.062	9.5	12.	18.75	26.5
01092	ZINC, TOTAL (UG/L AS ZN)	06/16/70-07/07/82	21	10.	31.905	190.	5.	1948.69	44.144	5.	5.	40.	88.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	81##	50.	129.63	1800.	50.	75486.111	274.747	50.	50.	100.	200.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	81##	1.699	1.88	3.255	1.699	0.106	0.326	1.699	1.699	2.	2.301
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			75.855								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	16	0.25	0.238	0.6	0.05	0.024	0.153	0.05	0.1	0.3	0.46
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	42	0.1	0.133	0.6	0.01	0.011	0.107	0.053	0.08	0.14	0.281

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	121	6.9	7.477	25.	0.	22.785	4.773	1.3	3.95	10.55	14.1
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/02/71-04/01/92	10	2.15	3.28	10.1	0.2	11.991	3.463	0.2	0.425	5.025	9.96
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	44	286.	295.636	503.	138.	8345.679	91.355	192.	220.5	367.25	393.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	39	257.	262.615	409.	149.	4829.927	69.498	172.	197.	309.	360.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	34	12.05	12.2	16.8	8.3	2.996	1.731	9.5	11.3	13.275	14.55
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	87	12.3	12.287	15.7	8.6	2.355	1.535	10.2	11.2	13.4	14.42
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	88	1.	1.711	8.	0.5	2.065	1.437	0.5	1.	2.	3.55
00340	COD, .25N K2CR2O7 MG/L	04/24/79-12/02/98	82	7.	9.738	44.	2.	65.89	8.117	2.5	5.	13.	16.
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	117	8.4	8.378	9.8	6.81	0.42	0.648	7.5	8.	8.9	9.2
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	117	8.4	7.891	9.8	6.81	0.659	0.812	7.5	8.	8.9	9.2
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	117	0.004	0.013	0.155	0.	0.001	0.025	0.001	0.001	0.01	0.032
00403p	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	95	8.1	8.068	9.2	7.	0.248	0.498	7.4	7.7	8.4	8.7
00403p	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	95	8.1	7.807	9.2	7.	0.317	0.563	7.4	7.7	8.4	8.7
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	95	0.008	0.016	0.1	0.001	0.	0.019	0.002	0.004	0.02	0.04

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	96	106.	112.677	670.	10.	4410.747	66.413	65.7	80.25	133.75	156.
00500	RESIDUE, TOTAL (MG/L)	03/03/70-08/04/92	13	175.	168.615	223.	106.	1546.756	39.329	110.	124.5	201.5	221.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/03/70-08/04/92	13	34.	35.769	64.	22.	146.026	12.084	22.4	25.5	44.	56.8
00510	RESIDUE, TOTAL FIXED (MG/L)	03/03/70-08/04/92	13	140.	132.846	173.	80.	955.641	30.913	85.2	100.	160.	172.2
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	82	2.5	19.476	658.	1.	5744.413	75.792	1.5	2.	7.	30.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	82 ##	2.5	4.293	100.	0.	127.395	11.287	1.	1.5	2.5	8.4
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	82 ##	2.5	16.226	558.	0.5	4150.661	64.426	1.5	1.5	6.	18.7
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	110 ##	0.05	0.09	0.9	0.02	0.024	0.154	0.02	0.02	0.06	0.138
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	110	0.01	0.014	0.26	0.005	0.001	0.026	0.005	0.005	0.013	0.029
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	107	1.25	1.348	13.79	0.14	1.688	1.299	0.7	0.94	1.5	1.818
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	109	0.3	0.386	2.	0.05	0.093	0.305	0.1	0.2	0.5	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	84	0.1	0.135	0.6	0.05	0.012	0.112	0.05	0.05	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	52	0.065	0.521	21.	0.005	8.401	2.898	0.02	0.043	0.168	0.314
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	79	3.5	4.938	34.	0.5	25.518	5.051	1.8	2.1	5.	10.
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	91	122.	123.264	232.	48.	1203.552	34.692	82.4	98.	146.	169.6
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	42	9.	10.286	20.	4.	19.575	4.424	5.	7.	14.	16.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	63	14.	15.254	31.	9.	24.741	4.974	10.4	12.	18.	22.6
01092	ZINC, TOTAL (UG/L AS Zn)	06/16/70-07/07/82	31	10.	28.226	200.	5.	2290.914	47.863	5.	5.	25.	50.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	111 ##	50.	320.27	5500.	50.	874562.654	935.181	50.	50.	100.	580.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	111 ##	1.699	1.941	3.74	1.699	0.259	0.509	1.699	1.699	2.	2.762
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	111 ##	1.699	1.941	3.74	1.699	0.259	0.509	1.699	1.699	2.	2.762
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	26	0.1	0.19	0.6	0.05	0.026	0.161	0.05	0.05	0.3	0.43
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	58	0.07	0.104	0.6	0.005	0.013	0.113	0.02	0.04	0.1	0.263

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/03/70-12/02/98	86	17.8	18.205	29.4	6.1	32.047	5.661	10.28	14.3	22.85	26.53
00070	TURBIDITY, (JACKSON CANDLE UNITS)	05/02/71-04/01/92	11	5.6	8.236	40.	0.5	128.833	11.35	0.64	1.2	9.	35.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	04/24/79-01/06/98	33	272.	263.576	429.	118.	3936.439	62.741	166.8	230.5	296.	318.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/02/98	24	262.5	255.542	323.	133.	2105.042	45.881	193.5	227.	288.25	318.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	12/04/91-12/02/98	20	9.1	9.13	11.9	6.3	2.345	1.531	7.12	7.8	10.25	11.38
00300	OXYGEN, DISSOLVED MG/L	03/03/70-04/01/92	67	9.5	9.839	15.	6.	3.307	1.819	7.76	8.5	11.1	12.4
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/03/70-12/02/98	61	1.	1.52	9.	0.5	1.389	1.178	1.	1.	2.	2.72
00340	COD, 25N K2CR2O7 MG/L	04/24/79-12/02/98	57	8.	8.789	27.	4.	16.776	4.096	5.	7.	9.	12.4
00400p	PH (STANDARD UNITS)	03/03/70-12/02/98	85	8.5	8.424	10.	6.7	0.357	0.597	7.8	8.	8.9	9.24
00400p	CONVERTED PH (STANDARD UNITS)	03/03/70-12/02/98	85	8.5	8.015	10.	6.7	0.526	0.725	7.8	8.	8.9	9.24
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	85	0.003	0.01	0.2	0.	0.001	0.023	0.001	0.001	0.01	0.016
00403p	PH, LAB, STANDARD UNITS SU	03/03/70-12/02/98	61	8.1	8.048	9.4	6.8	0.24	0.49	7.5	7.75	8.4	8.58
00403p	CONVERTED PH, LAB, STANDARD UNITS	03/03/70-12/02/98	61	8.1	7.748	9.4	6.8	0.331	0.575	7.5	7.75	8.4	8.58
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/03/70-12/02/98	61	0.008	0.018	0.158	0.	0.001	0.03	0.003	0.004	0.018	0.032
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/03/70-12/02/98	59	111.	107.305	183.	8.	887.767	29.795	67.	95.	123.	135.
00500	RESIDUE, TOTAL (MG/L)	03/03/70-08/04/92	14	158.	158.643	216.	110.	696.863	26.398	119.	142.25	173.	200.5
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/03/70-08/04/92	13	49.	80.308	500.	18.	16181.897	127.208	22.4	32.5	61.	332.4
00510	RESIDUE, TOTAL FIXED (MG/L)	03/03/70-08/04/92	13	122.	118.615	165.	74.	871.09	29.514	74.4	93.	143.5	159.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/03/70-12/02/98	58	7.	12.241	56.	0.5	163.748	12.796	1.5	2.875	17.25	32.2
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/03/70-12/02/98	58	2.5	3.276	14.	0.5	7.677	2.771	1.	1.5	5.	6.1
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/03/70-12/02/98	58	4.	9.414	50.	0.	122.835	11.083	0.95	2.5	13.	27.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-12/02/98	75 ##	0.05	0.076	1.7	0.02	0.037	0.193	0.02	0.04	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	75	0.01	0.017	0.1	0.005	0.	0.015	0.005	0.01	0.02	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-12/02/98	74	1.04	1.027	1.9	0.025	0.16	0.399	0.555	0.765	1.3	1.51
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-12/02/98	72	0.4	0.485	2.1	0.05	0.124	0.353	0.2	0.3	0.5	0.77
00665	PHOSPHORUS, TOTAL (MG/L AS P)	04/24/79-12/02/98	55	0.1	0.136	0.4	0.05	0.007	0.084	0.05	0.1	0.2	0.24
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	04/24/79-04/01/92	38	0.075	0.096	0.25	0.005	0.004	0.06	0.039	0.048	0.143	0.181
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-09/03/96	62	4.	4.871	17.	1.	7.591	2.755	2.33	3.	6.25	8.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

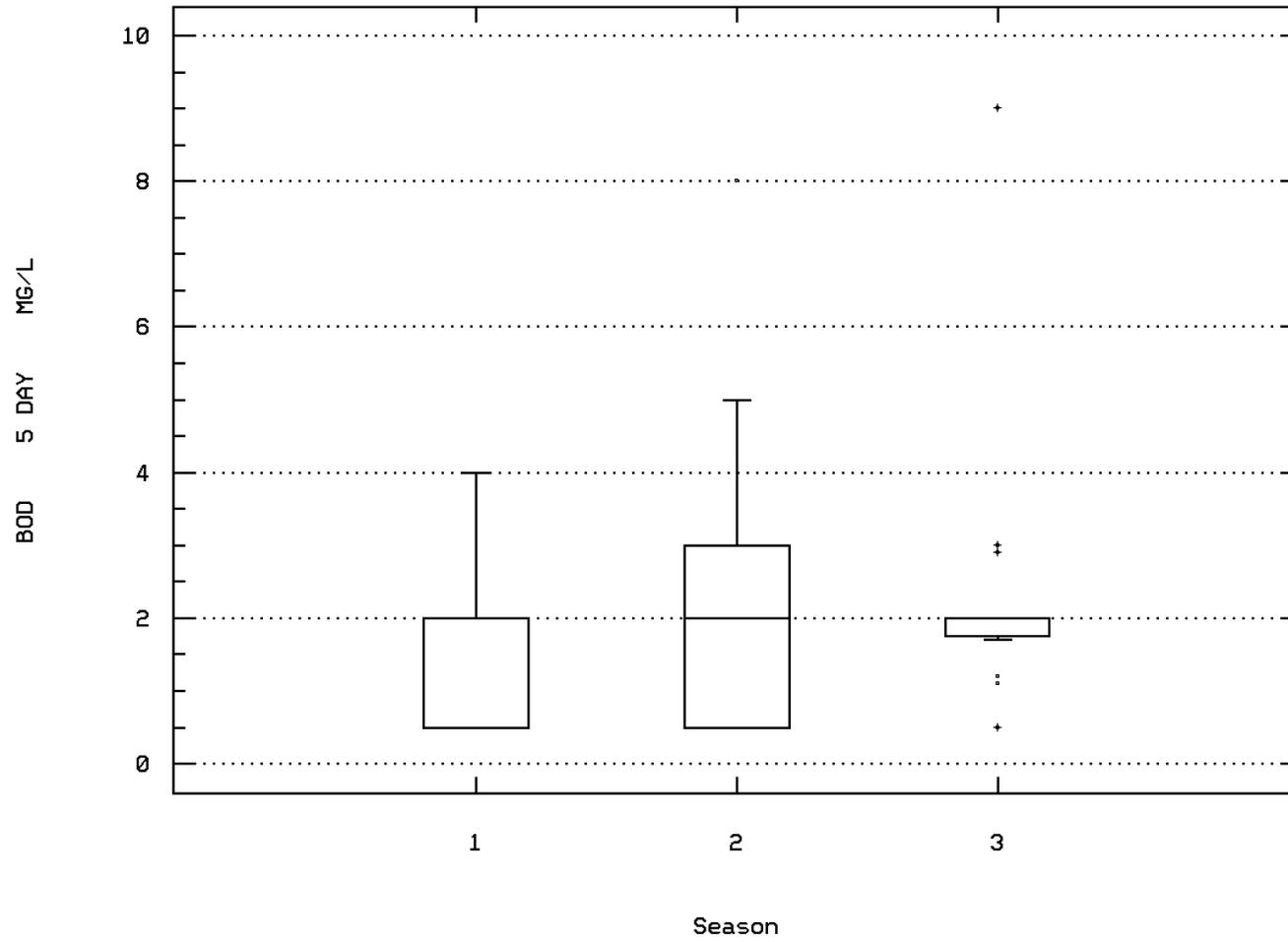
Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0755

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-12/02/98	62	122.	117.	180.	27.	856.623	29.268	77.2	103.5	134.	149.4
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-12/02/98	28	9.	8.509	13.	0.25	6.549	2.559	5.9	7.	10.	11.1
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/02/98	37	11.	11.939	19.	0.25	15.144	3.891	9.	10.	15.	16.2
01092	ZINC, TOTAL (UG/L AS ZN)	06/16/70-07/07/82	23	10.	18.261	70.	5.	278.656	16.693	5.	5.	30.	40.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	80 ##	50.	387.5	8000.	50.	1254841.772	1120.197	50.	50.	200.	970.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/02/98	80 ##	1.699	2.051	3.903	1.699	0.289	0.538	1.699	1.699	2.301	2.985
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	112.524								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	17	0.1	0.159	0.5	0.05	0.017	0.13	0.05	0.075	0.2	0.42
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-12/02/98	37	0.08	0.094	0.42	0.01	0.006	0.074	0.03	0.05	0.105	0.184

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0755 Parameter Code: 00310

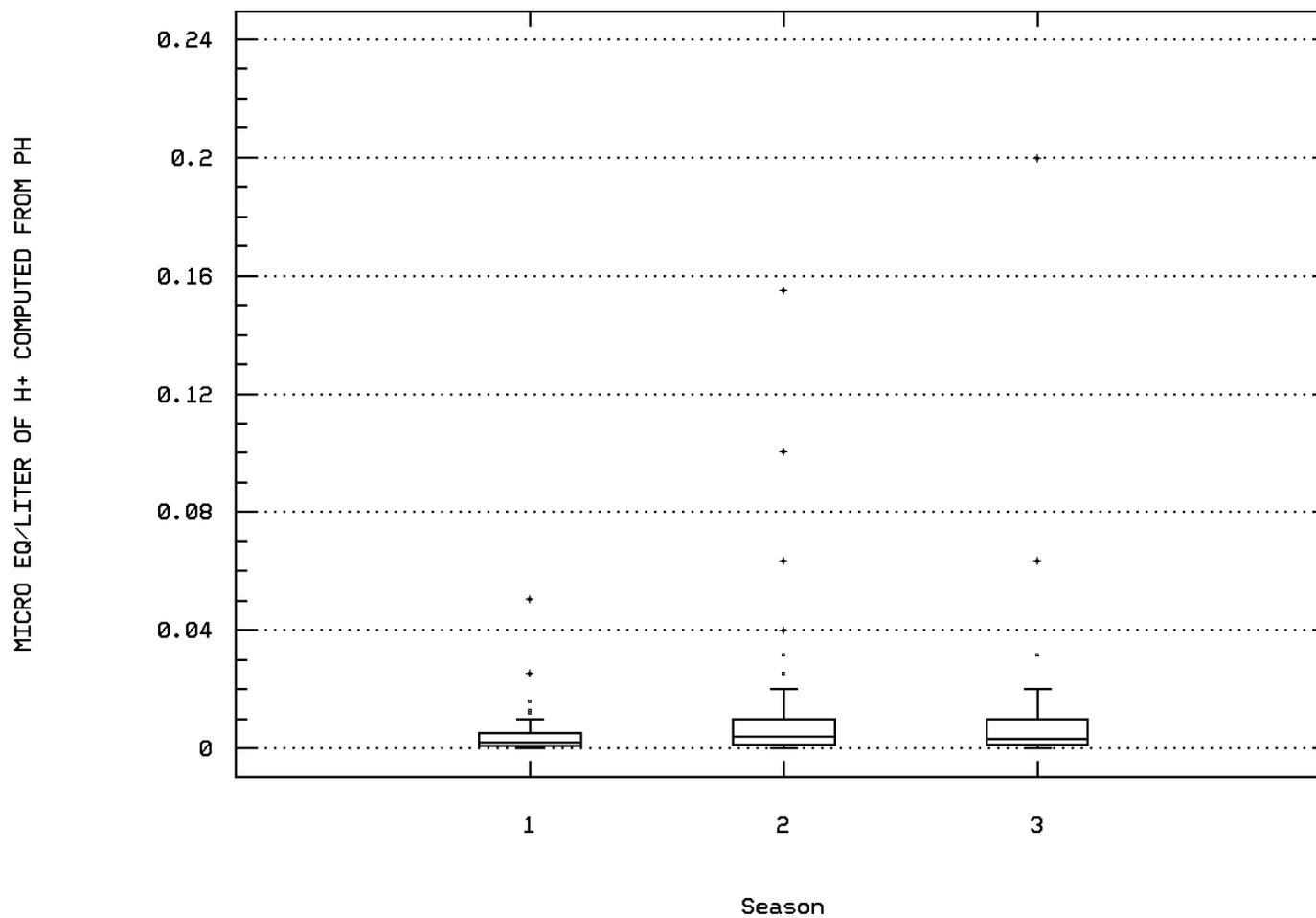
BOD, 5 DAY, 20 DEG C



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00400

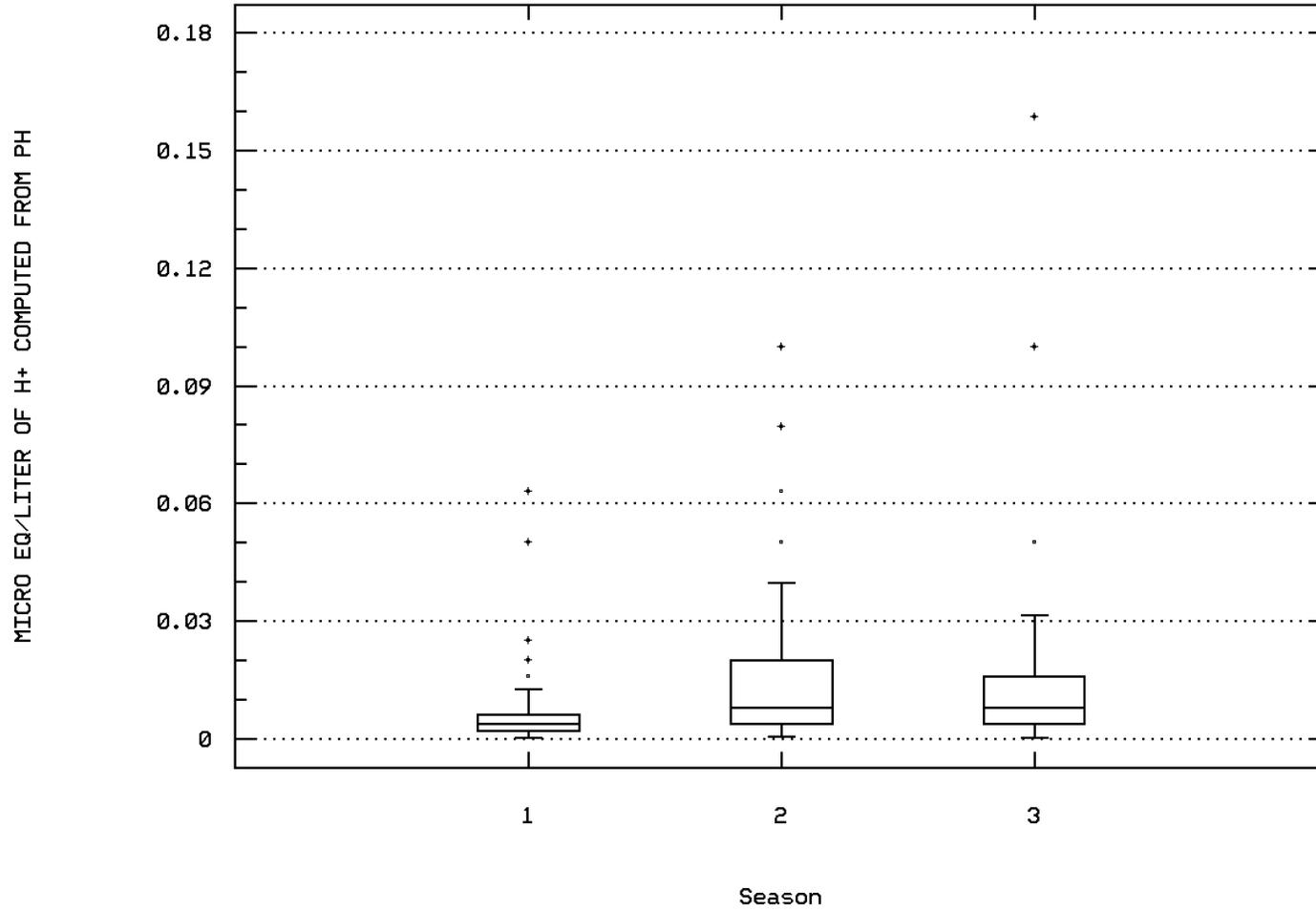
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00403

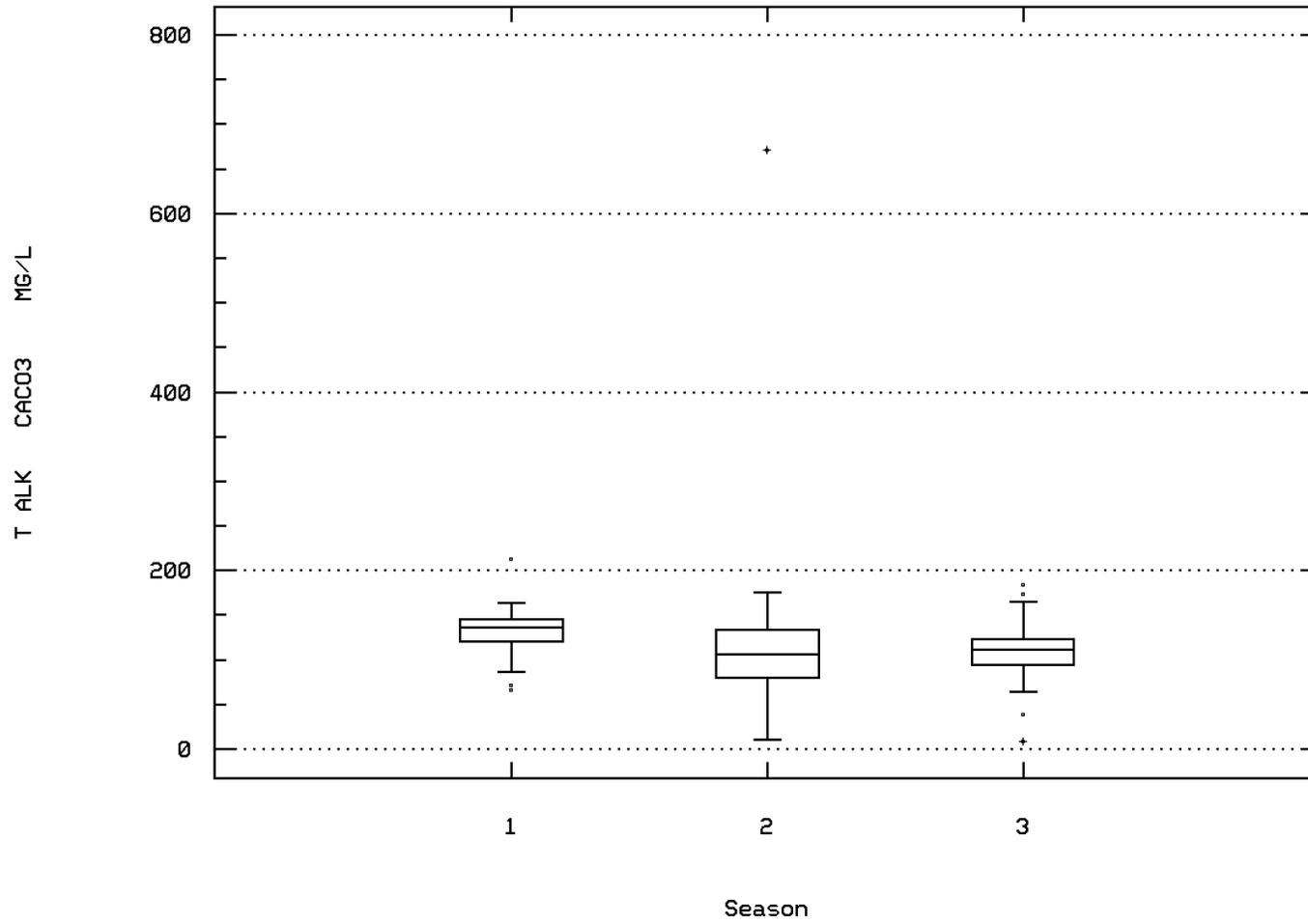
MICRO EQ/LITER OF H+ COMPUTED FROM PH



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00410

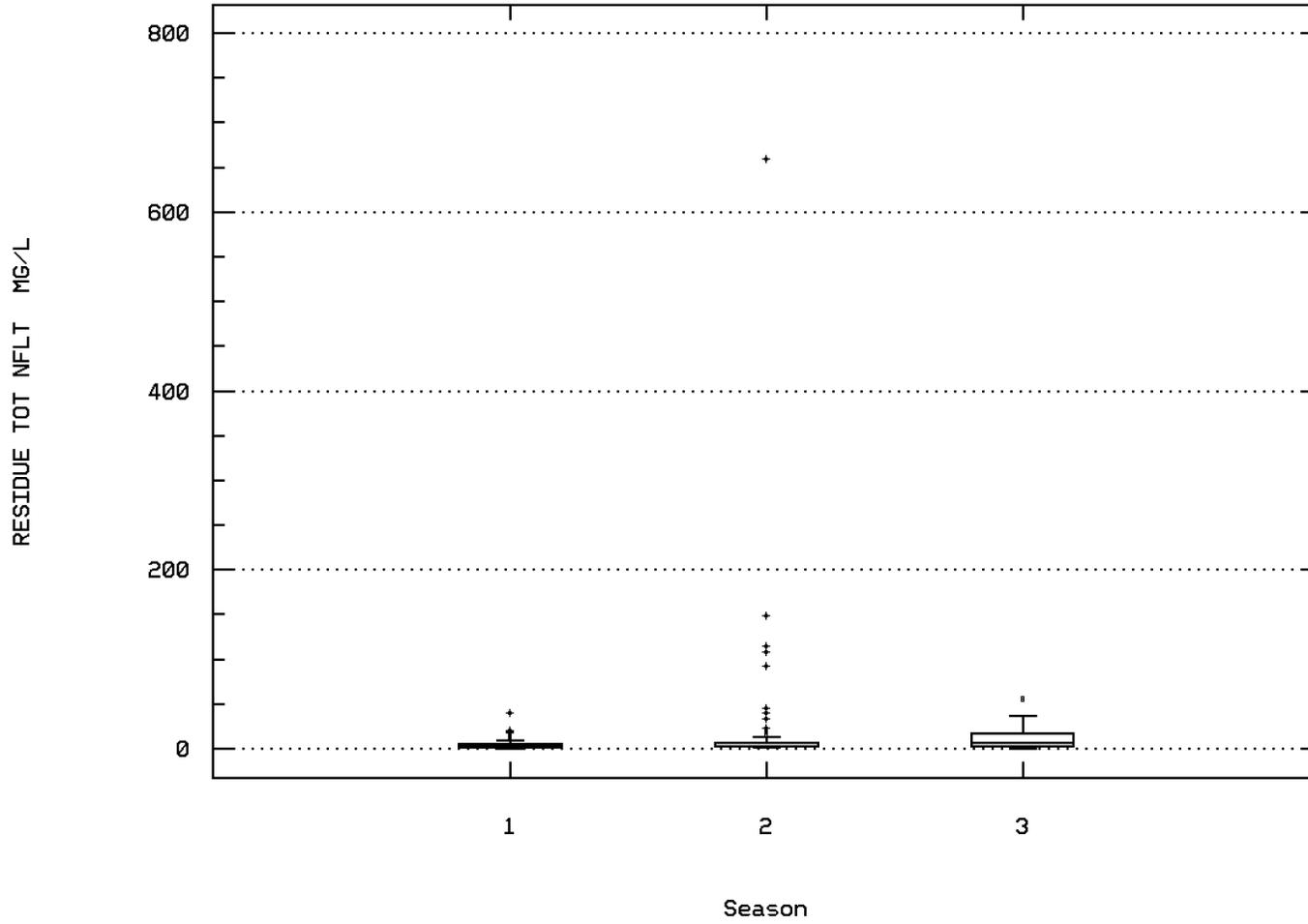
ALKALINITY, TOTAL (MG/L AS CaCO3)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00530

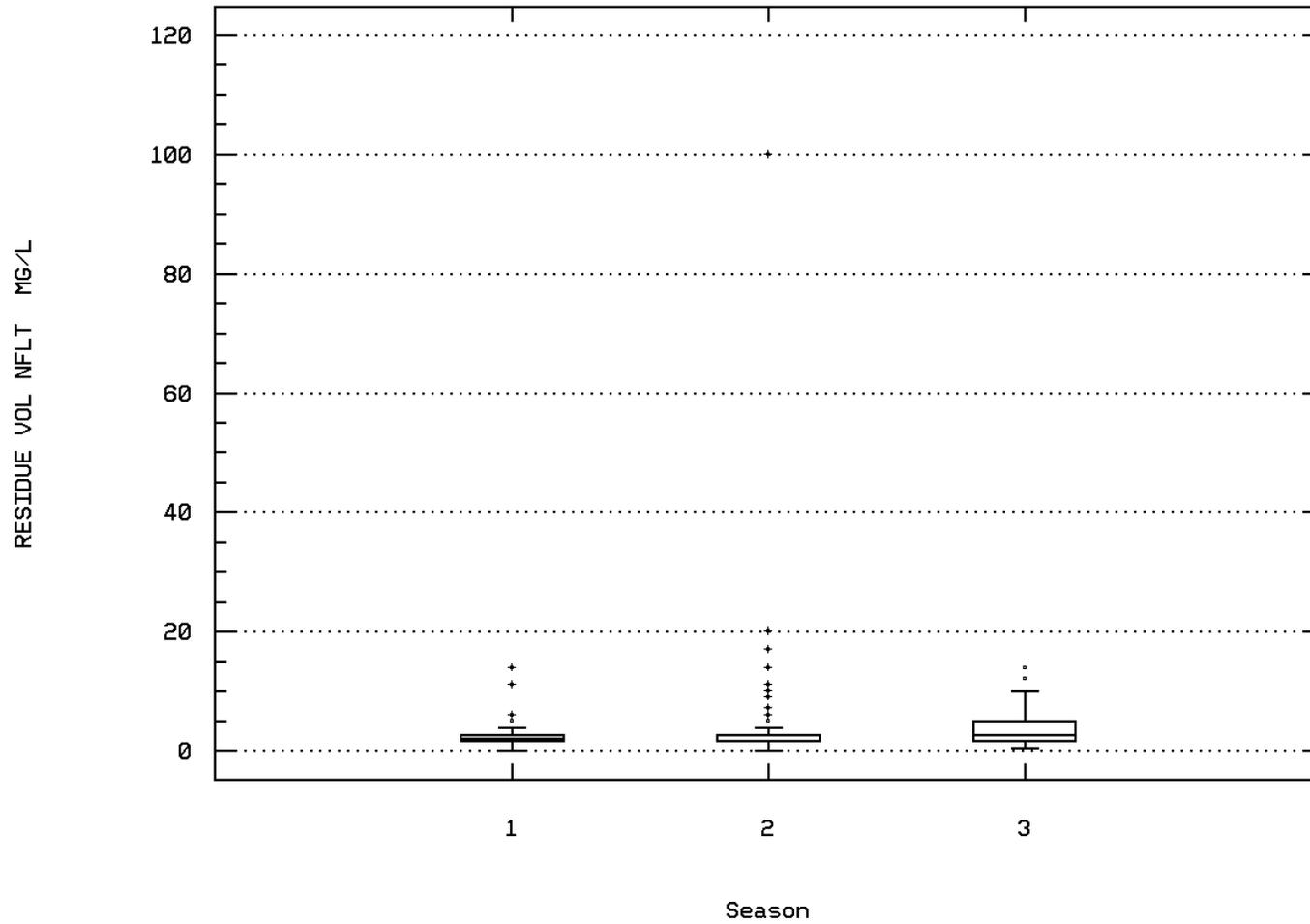
RESIDUE, TOTAL NONFILTRABLE (MG/L)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00535

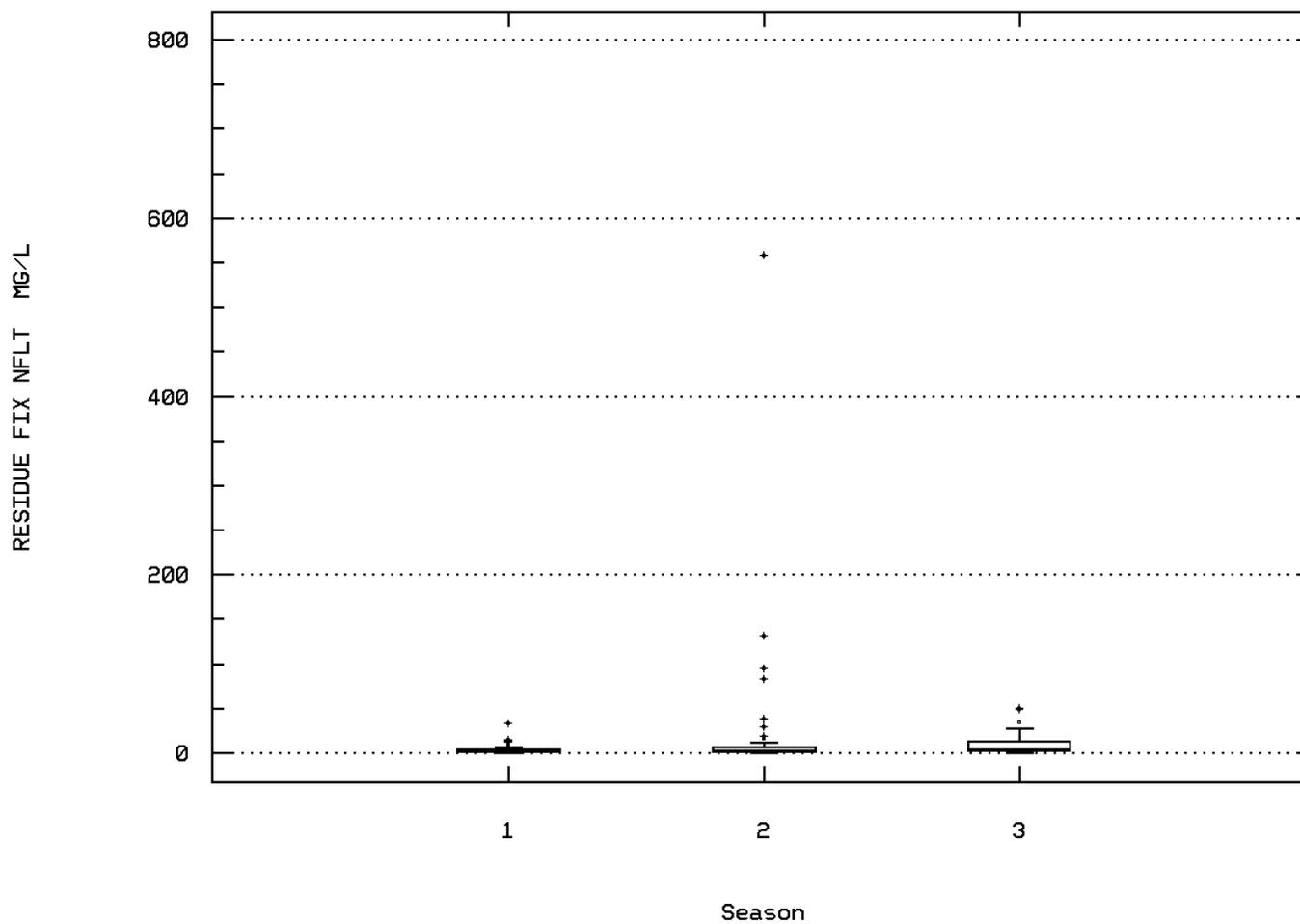
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00540

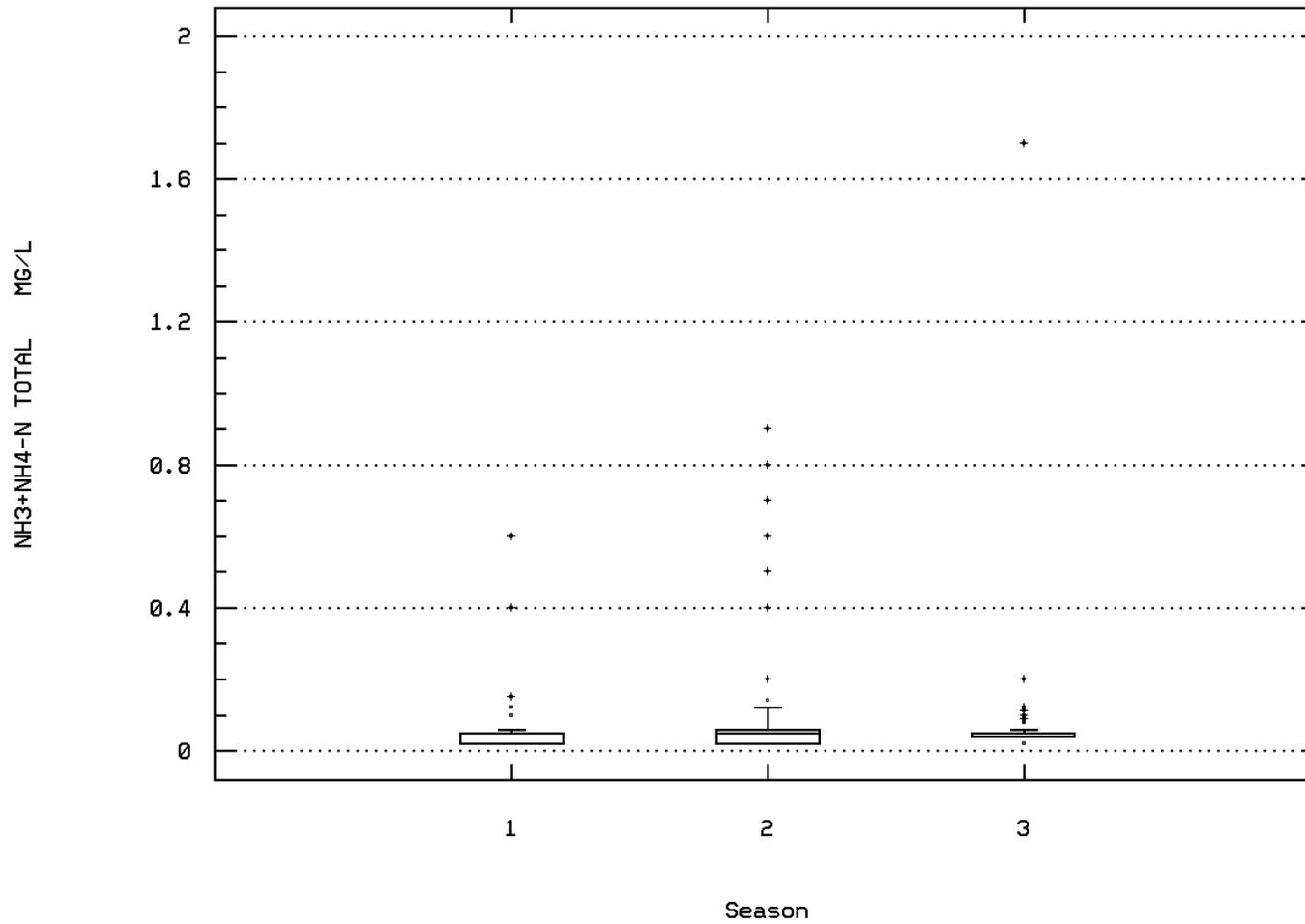
RESIDUE, FIXED NONFILTRABLE (MG/L)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00610

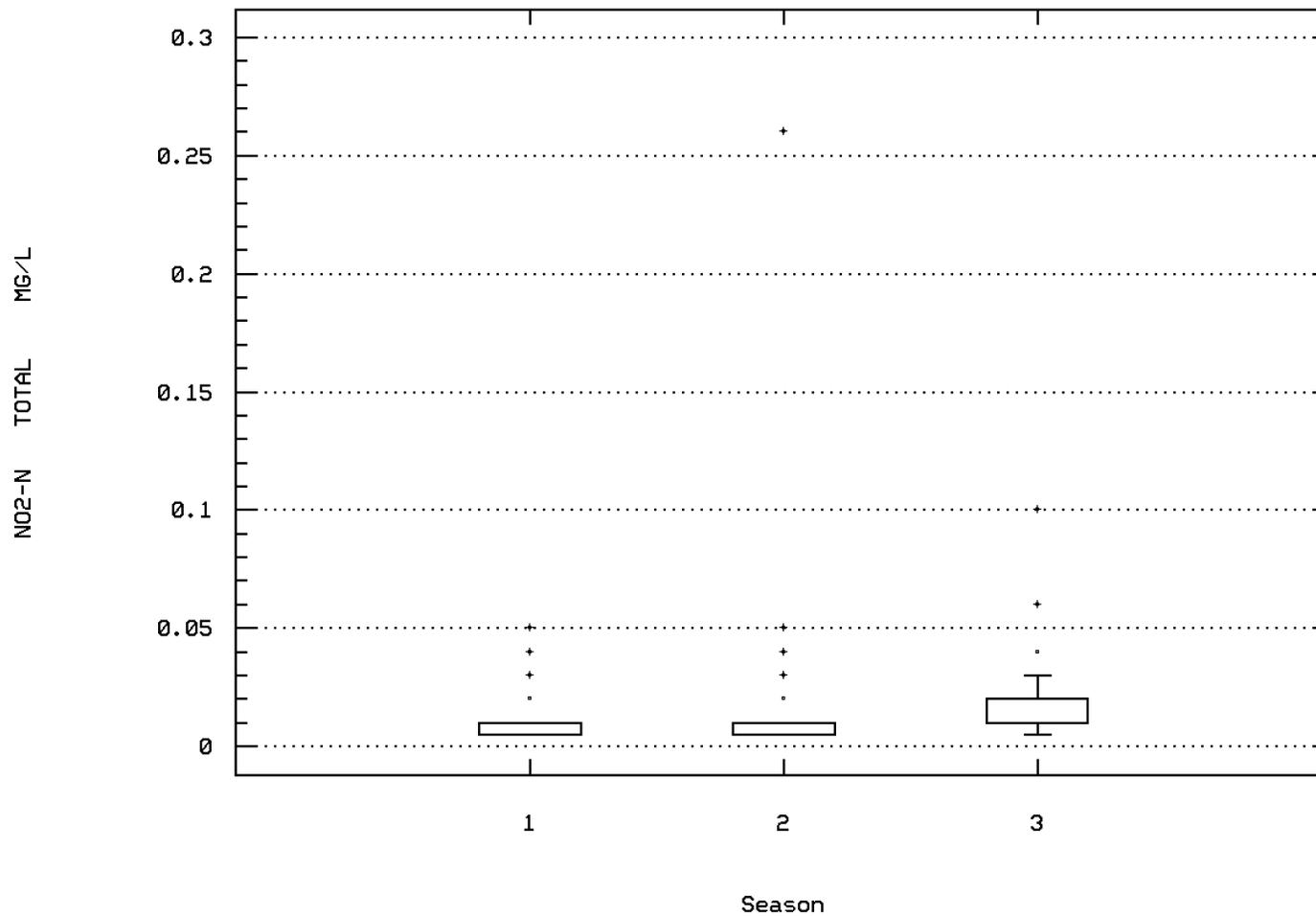
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00615

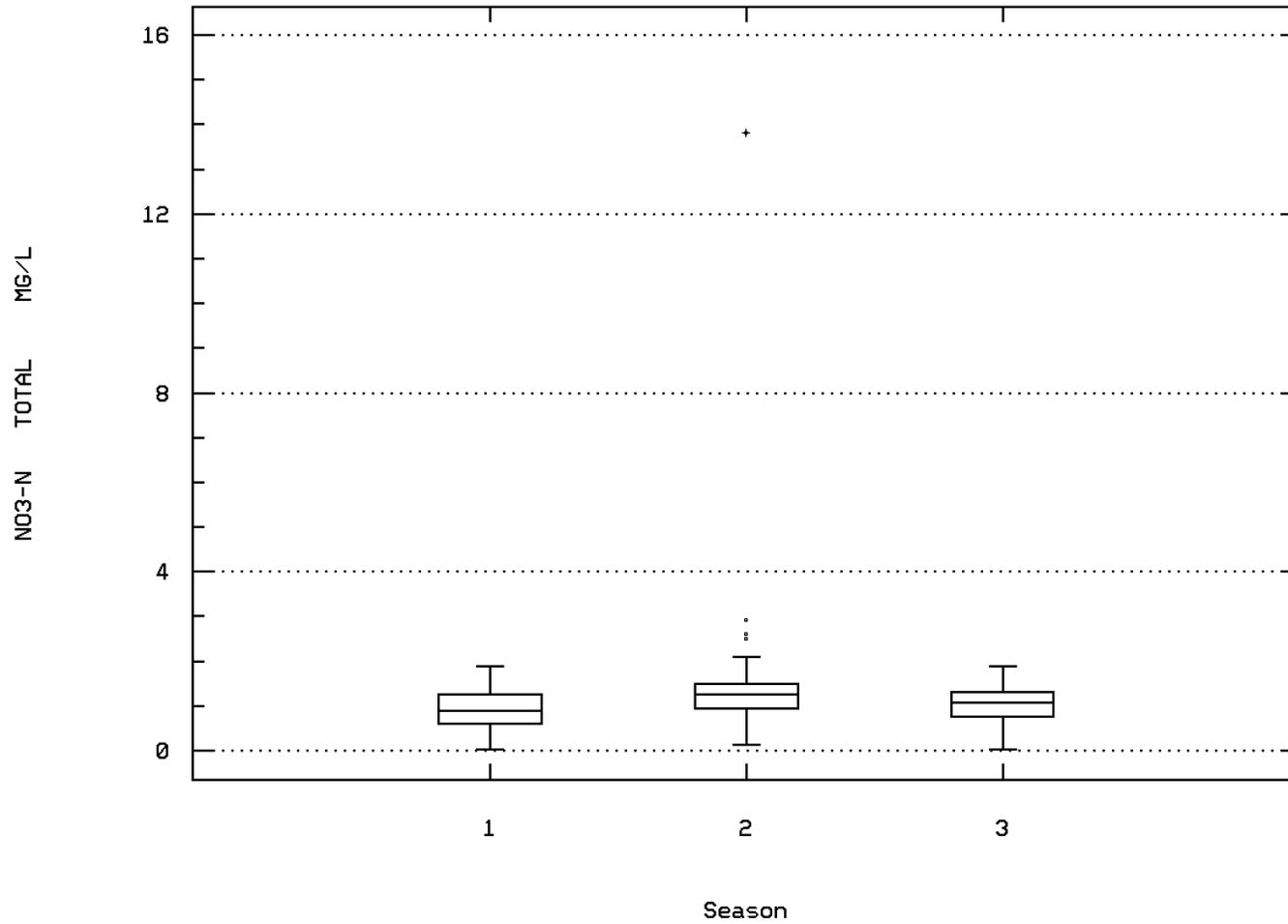
NITRITE NITROGEN, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00620

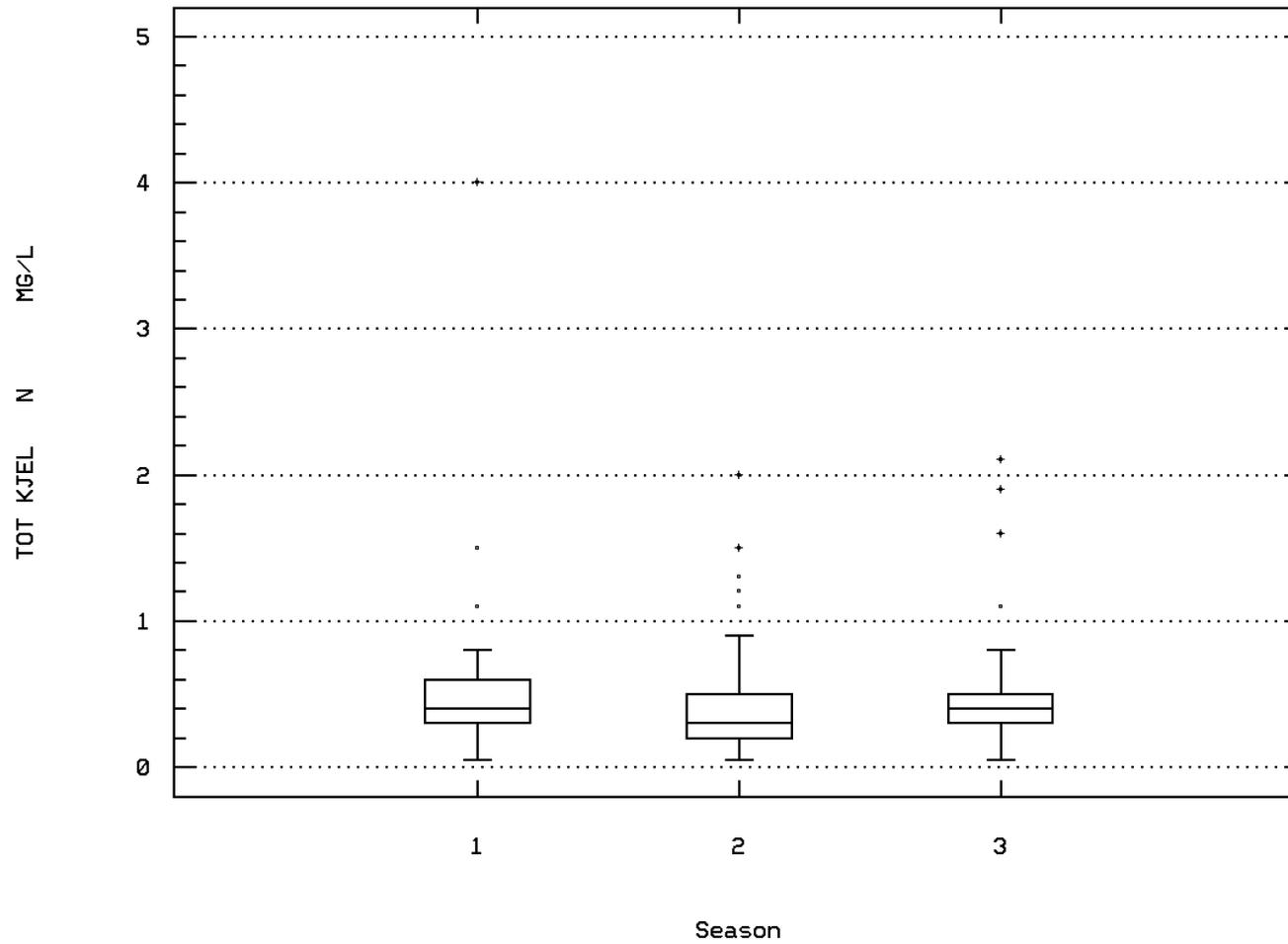
NITRATE NITROGEN, TOTAL (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00625

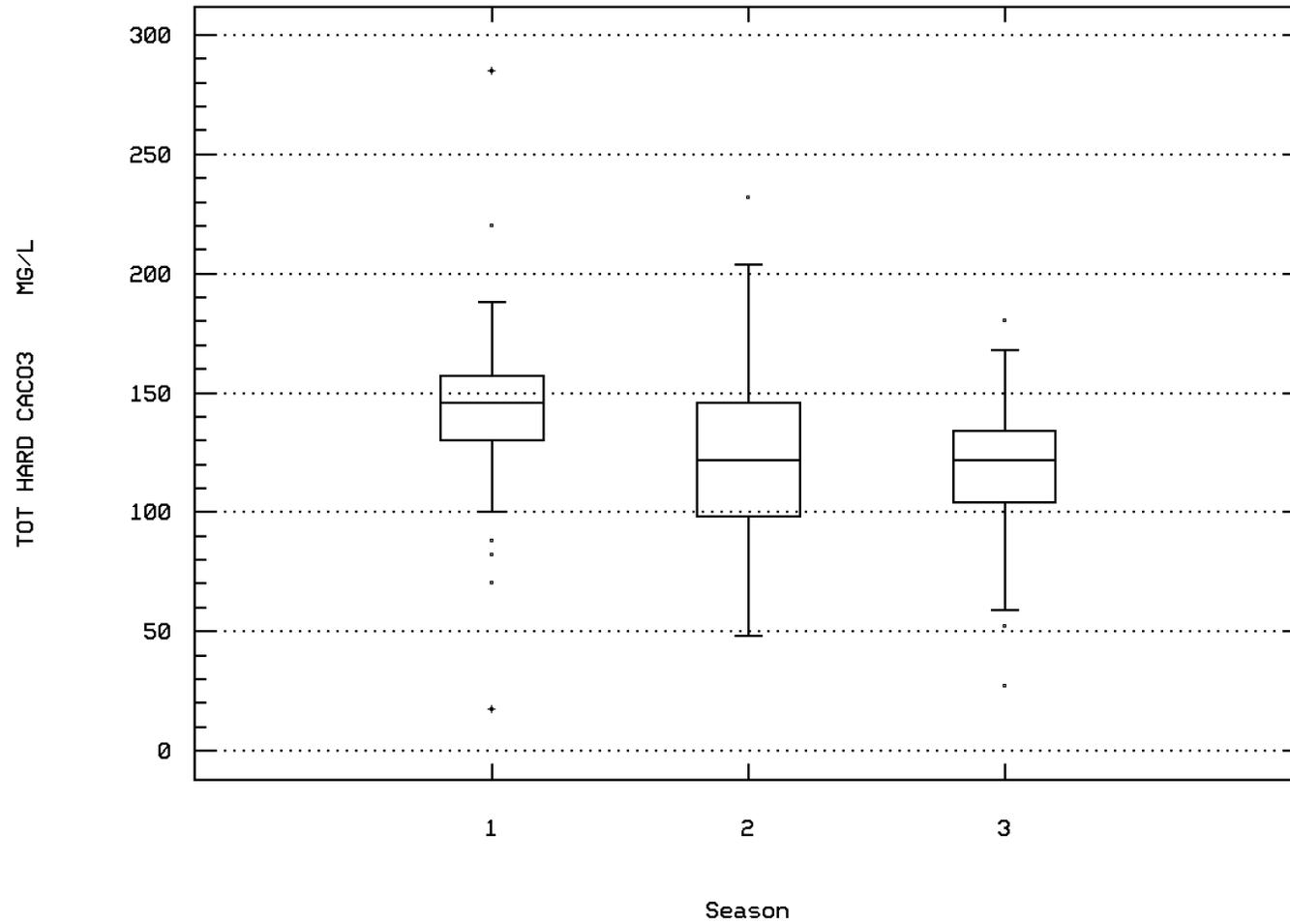
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 00900

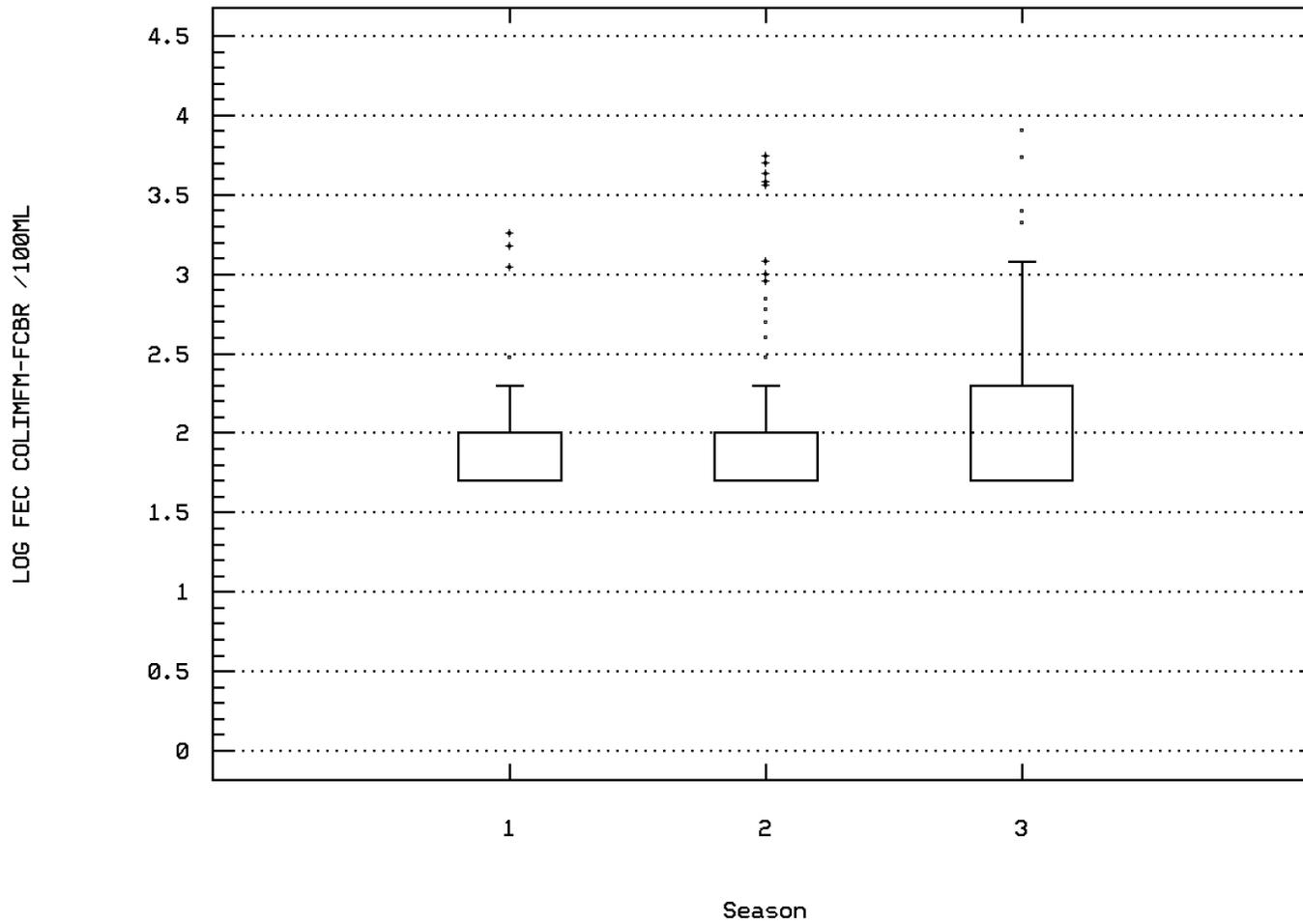
HARDNESS, TOTAL (MG/L AS CaCO3)



RT. 619 BRIDGE AT GAGING STATION

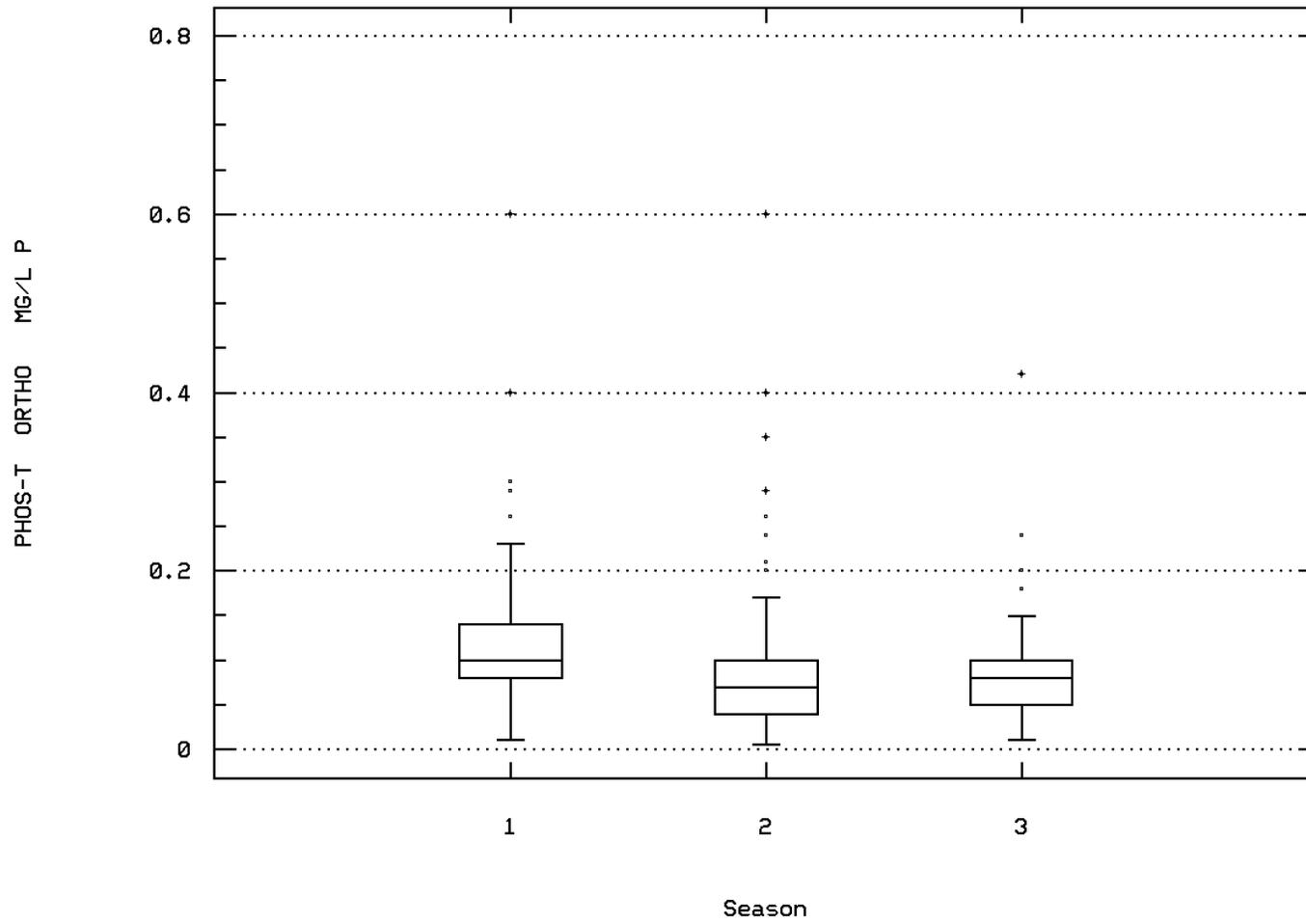
Station: SHEN0755 Parameter Code: 31616

LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



RT. 619 BRIDGE AT GAGING STATION

Station: SHEN0755 Parameter Code: 70507
PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



RT. 619 BRIDGE AT GAGING STATION

Station Inventory for Station: SHEN0756

NPS Station ID: SHEN0756 LAT/LON: 38.913892/ -78.211116
 Location: S F SHENANDOAH RIVER AT FRONT ROYAL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02080103065100.73 RF3 Mile Point: 2.62
 Description:

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01631000
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 19.70
 Distance from RF3: 0.27

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	289	14.	14.391	29.	66.459	8.152	4.	7.	22.	25.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/23/83-06/08/94	27	18.	17.056	30.	68.603	8.283	4.3	12.	25.	28.6
00025	BAROMETRIC PRESSURE (MM OF HG)	08/16/83-06/08/94	23	748.	747.87	759.	735.	28.573	5.345	740.4	746.	754.6
00060p	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	379	1120.	1631.398	16700.	238.	3015738.912	1736.588	421.	600.	3477.
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/76-06/17/86	77	906.	1733.299	20400.	243.	8421385.765	2901.962	358.8	515.5	3214.
00065	STAGE, STREAM (FEET)	05/23/83-06/08/94	4	1.39	2.133	4.45	1.3	2.392	1.547	**	**	**
00080p	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	512	7.	9.08	95.	0.	69.367	8.329	2.	5.	17.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	509	270.	269.147	441.	124.	4096.26	64.002	190.	220.	359.
00300	OXYGEN, DISSOLVED MG/L	08/16/83-06/08/94	23	10.6	10.217	14.1	6.3	5.051	2.247	7.18	8.1	13.1
00400p	PH (STANDARD UNITS)	10/06/48-06/08/94	442	7.8	7.906	9.2	6.9	0.174	0.417	7.43	7.6	8.5
00400p	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	442	7.8	7.748	9.2	6.9	0.199	0.446	7.43	7.6	8.5
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	442	0.016	0.018	0.126	0.001	0.	0.015	0.003	0.008	0.037
00403	PH, LAB, STANDARD UNITS SU	10/02/80-06/17/86	46	8.3	8.265	9.1	7.3	0.203	0.45	7.67	7.9	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	10/02/80-06/17/86	46	8.3	8.049	9.1	7.3	0.251	0.501	7.67	7.9	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/02/80-06/17/86	46	0.005	0.009	0.05	0.001	0.	0.01	0.001	0.003	0.022
00405	CARBON DIOXIDE (MG/L AS CO2)	10/01/72-08/01/79	45	3.5	4.202	26.	0.3	14.847	3.853	1.72	2.4	7.1
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	308	109.	107.052	165.	14.	760.707	27.581	69.9	86.	144.
00440p	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	457	132.	133.158	1330.	48.	4163.019	64.521	87.8	105.5	175.
00445p	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	269	0.	0.572	27.	0.	8.828	2.971	0.	0.	0.
00453	BICARBONATE, WATER, DISS, INCR TIT, FIELD, AS HCO3, MG/L	06/08/94-06/08/94	1	163.	163.	163.	163.	0.	0.	**	**	**
00603	NITROGEN TOTAL, BOTTOM DEPOSITS (MG/KG-N DRY WGT)	05/16/72-05/16/72	1	2.57	2.57	2.57	2.57	0.	0.	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	06/08/94-06/08/94	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00611	NITROGEN, AMMONIA, BOTTOM DEPOSITS (MG/KG-N)	05/16/72-05/16/72	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	121	0.01	0.016	0.17	0.005	0.	0.022	0.005	0.005	0.03
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	155	1.2	1.201	3.6	0.4	0.154	0.392	0.7	0.92	1.6
00621	NITRATE NITROGEN, BOTTOM DEPOS. (MG/KG-N DRY WGT)	05/16/72-05/16/72	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	06/08/94-06/08/94	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	06/08/94-06/08/94	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**
00626	NITROGEN, ORG. KJEL, BOT. DEPOS. (MG/KG-N DRY WGT)	05/16/72-05/16/72	1	2.56	2.56	2.56	2.56	0.	0.	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	121	1.3	1.194	2.2	0.2	0.14	0.374	0.7	0.9	1.6
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/30/67-09/25/71	164	0.35	0.408	1.1	0.08	0.042	0.206	0.18	0.25	0.745
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	112	0.43	0.495	1.4	0.	0.102	0.32	0.15	0.25	0.98
00665	PHOSPHORUS, TOTAL (MG/L AS P)	06/08/94-06/08/94	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	06/08/94-06/08/94	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**
00668	PHOSPHORUS, TOTAL, BOTTOM DEPOSIT (MG/KG-P DRY WGT)	05/16/72-05/16/72	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**
00671p	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	137	0.14	0.158	0.63	0.005	0.012	0.109	0.04	0.08	0.32
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	485	121.	122.328	190.	62.	774.878	27.837	84.	100.	160.
00902p	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	469	15.	14.657	30.	0.	30.076	5.484	8.	11.	21.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00915p	CALCIUM, DISSOLVED (MG/L AS CA)	09/05/30-06/17/86	510	33.	32.637	55.	18.	49.414	7.03	24.	27.	38.	42.
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	511	9.9	9.988	20.	1.5	10.195	3.193	6.1	7.6	12.	14.
00930p	SODIUM, DISSOLVED (MG/L AS NA)	09/05/30-06/17/86	420	7.05	8.037	22.	1.2	15.69	3.961	3.61	5.3	10.	14.
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	326	0.3	0.335	0.9	0.1	0.017	0.129	0.2	0.2	0.4	0.5
00932	SODIUM, PERCENT	10/30/67-12/17/85	326	12.	12.436	26.	7.	10.388	3.223	9.	10.	14.	17.
00933	SODIUM,PLUS POTASSIUM (MG/L)	08/01/79-02/21/80	5	9.6	9.24	13.	5.8	7.188	2.681	**	**	**	**
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	410	2.1	2.342	8.8	0.7	0.762	0.873	1.4	1.7	2.8	3.5
00940p	CHLORIDE,TOTAL IN WATER MG/L	09/05/30-06/17/86	423	9.	9.454	22.	2.	13.514	3.676	5.	7.	12.	15.
00945p	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	512	16.	16.865	92.	5.	41.162	6.416	10.	13.	20.	25.
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	420	0.1	0.112	0.3	0.	0.005	0.067	0.	0.1	0.2	0.2
00955p	SILICA, DISSOLVED (MG/L AS SI02)	09/05/30-06/17/86	421	4.5	4.301	15.	0.05	6.387	2.527	1.	2.1	6.2	7.3
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	05/16/72-05/16/72	1	5.	5.	5.	5.	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG.DRY WGT)	05/16/72-05/16/72	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG.DRY WGT)	05/16/72-05/16/72	1	85.	85.	85.	85.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	05/16/72-05/16/72	1	16.	16.	16.	16.	0.	0.	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	06/24/74-06/24/74	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	348	10.	18.106	180.	0.	521.604	22.839	0.	5.	20.	40.
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	05/16/72-05/16/72	1	20.	20.	20.	20.	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	05/16/72-05/16/72	1	490.	490.	490.	490.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG.DRY WGT)	05/16/72-05/16/72	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	05/16/72-05/16/72	1	88.	88.	88.	88.	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	05/16/72-05/16/72	1	2500.	2500.	2500.	2500.	0.	0.	**	**	**	**
39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	06/08/94-06/08/94	1	134.	134.	134.	134.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39343	GAMMA-BHC(LINDANE),SEDIMENTS,DRY WGT,UG/KG	05/16/72-05/16/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	05/16/72-05/16/72	1	10.	10.	10.	10.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	1	4.4	4.4	4.4	4.4	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	05/16/72-05/16/72	1	1.	1.	1.	1.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	05/16/72-05/16/72	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39519	PCBS IN BOTTOM DEPOSITS (UG/KG DRY SOLIDS)	05/16/72-05/16/72	1	30.	30.	30.	30.	0.	0.	**	**	**	**
70300p	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/05/30-06/17/86	421	158.	160.523	276.	87.	1380.455	37.154	116.	132.	185.	211.
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	327	155.	157.309	245.	83.	1347.815	36.713	110.8	130.	182.	209.4
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	269	491.	669.777	7600.	138.	506312.54	711.556	238.	337.5	729.5	1200.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	324	0.22	0.223	0.38	0.12	0.003	0.052	0.16	0.18	0.26	0.295
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10/01/71-05/15/74	63	0.088	0.105	0.32	0.003	0.005	0.072	0.031	0.05	0.15	0.206
71835	OXYGEN CONSUMED, FILTERED MG/L	09/05/30-04/01/31	2	1.3	1.3	1.6	1.	0.18	0.424	**	**	**	**
71840	OXYGEN CONSUMED, UNFILTERED MG/L	09/05/30-04/01/31	2	1.7	1.7	2.2	1.2	0.5	0.707	**	**	**	**
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	367	4.1	4.112	18.	0.05	4.262	2.064	1.38	2.9	5.3	6.3
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	88	0.03	0.047	0.56	0.	0.007	0.083	0.	0.	0.06	0.1
71885p	IRON (UG/L AS FE)	09/05/30-09/21/56	160	20.	26.875	220.	0.	990.173	31.467	0.	10.	37.5	60.
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	05/16/72-05/16/72	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
80154	SUSP. SEDIMENT CONCENTRATION-EVAP. AT 110C (MG/L)	01/27/75-10/21/85	3	281.	215.667	351.	15.	31425.333	177.272	**	**	**	**
82068	POTASSIUM 40, DISSOLVED, K-40 PC/LITER	03/02/81-08/26/81	5	2.	2.34	4.3	1.4	1.313	1.146	**	**	**	**
82662	DIMETHOATE, 0.7 UM FILT,TOT RECV, WATER UG/L	06/08/94-06/08/94	1	0.	0.	0.	0.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0756

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----						
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	23	0	0.00	7	0	0.00	8	0	0.00	8	0	0.00			
00400	PH	Fresh Chronic	9.	442	10	0.02	131	7	0.05	182	3	0.02	129	0	0.00			
		Other-Lo Lim.	6.5	442	0	0.00	131	0	0.00	182	0	0.00	129	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	46	3	0.07	13	2	0.15	19	0	0.00	14	1	0.07			
		Other-Lo Lim.	6.5	46	0	0.00	13	0	0.00	19	0	0.00	14	0	0.00			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	121	0	0.00	36	0	0.00	53	0	0.00	32	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0756

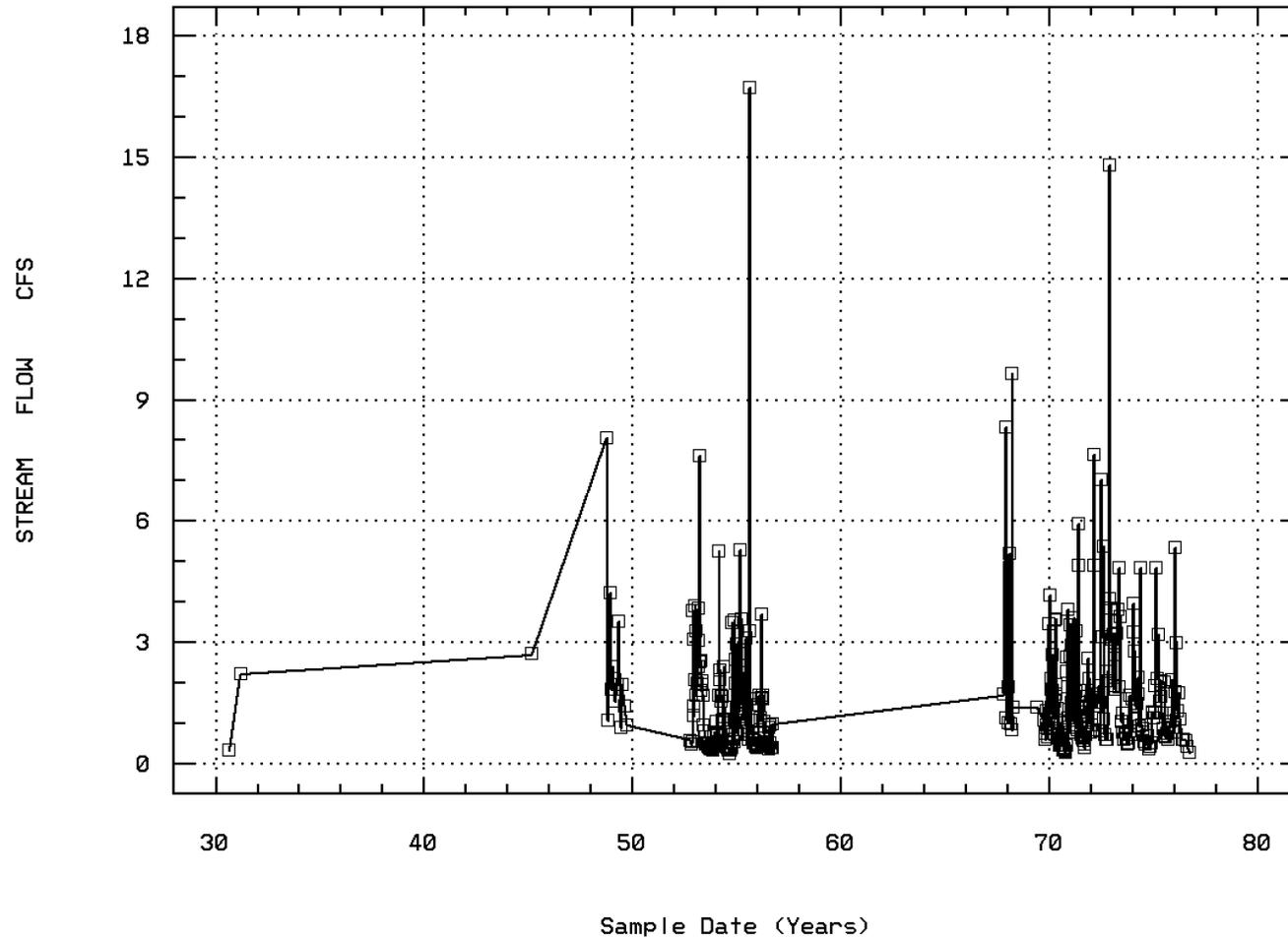
Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00618	NITRATE NITROGEN, DISSOLVED AS N	10.	155	0	0.00	39	0	0.00	77	0	0.00	39	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	10.	121	0	0.00	36	0	0.00	53	0	0.00	32	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	423	0	0.00	128	0	0.00	177	0	0.00	118	0	0.00			
	Drinking Water	250.	423	0	0.00	128	0	0.00	177	0	0.00	118	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	512	0	0.00	151	0	0.00	217	0	0.00	144	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	4.	420	0	0.00	127	0	0.00	176	0	0.00	117	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	44.	367	0	0.00	113	0	0.00	154	0	0.00	100	0	0.00			
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)	3.3	88	0	0.00	25	0	0.00	42	0	0.00	21	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station: SHEN0756 Parameter Code: 00060

FLOW, STREAM, MEAN DAILY

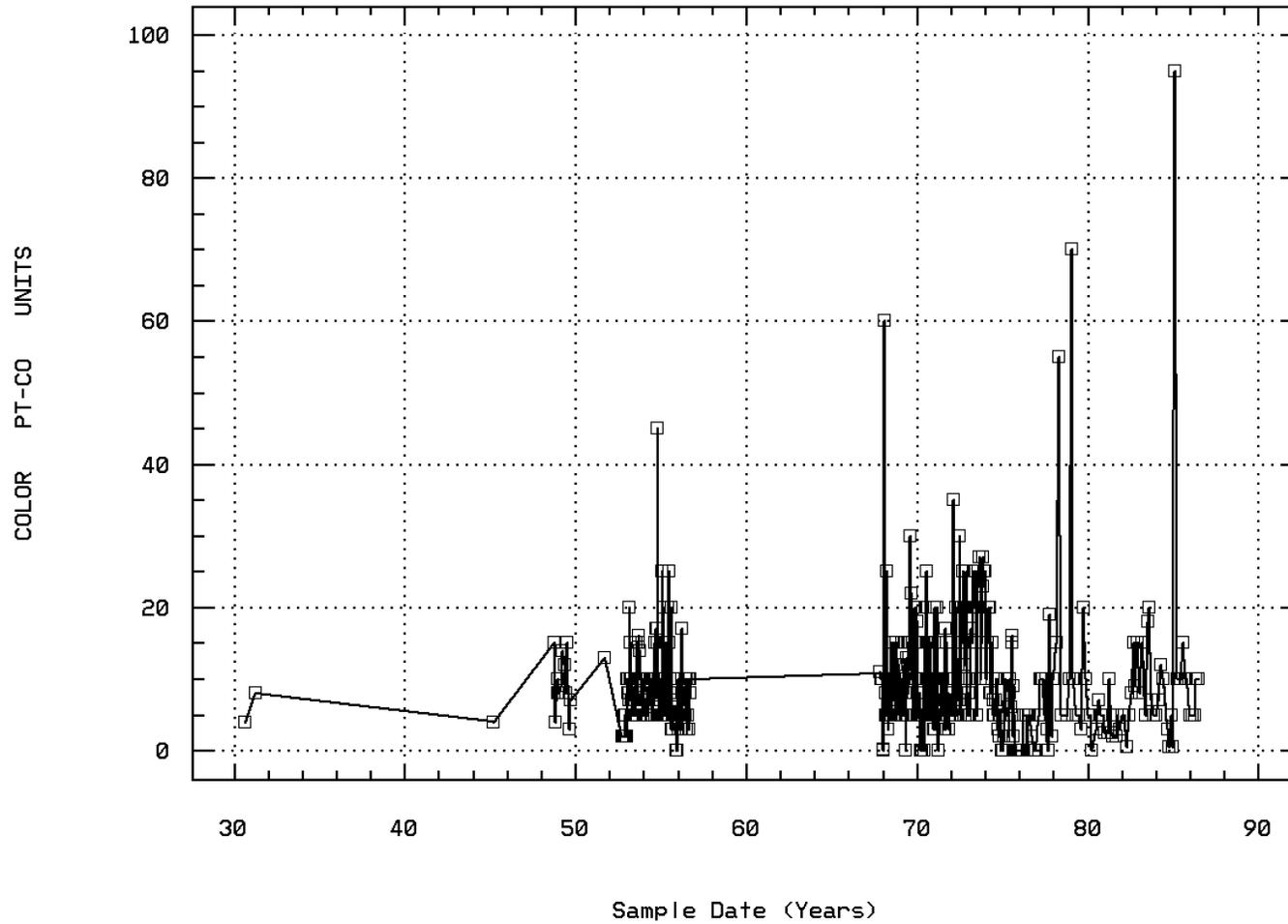
(X 1000)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00080

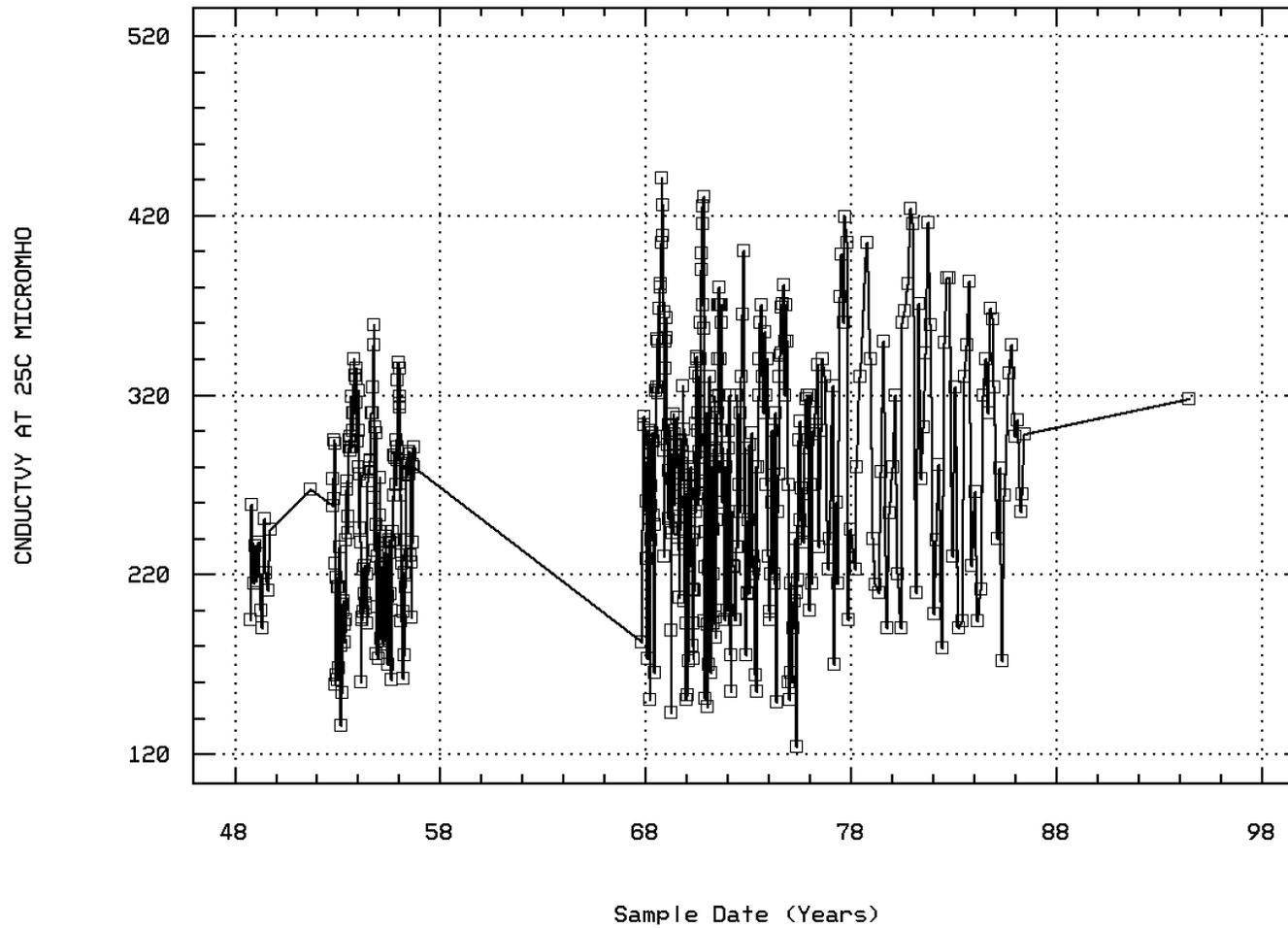
COLOR (PLATINUM-COBALT UNITS)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00095

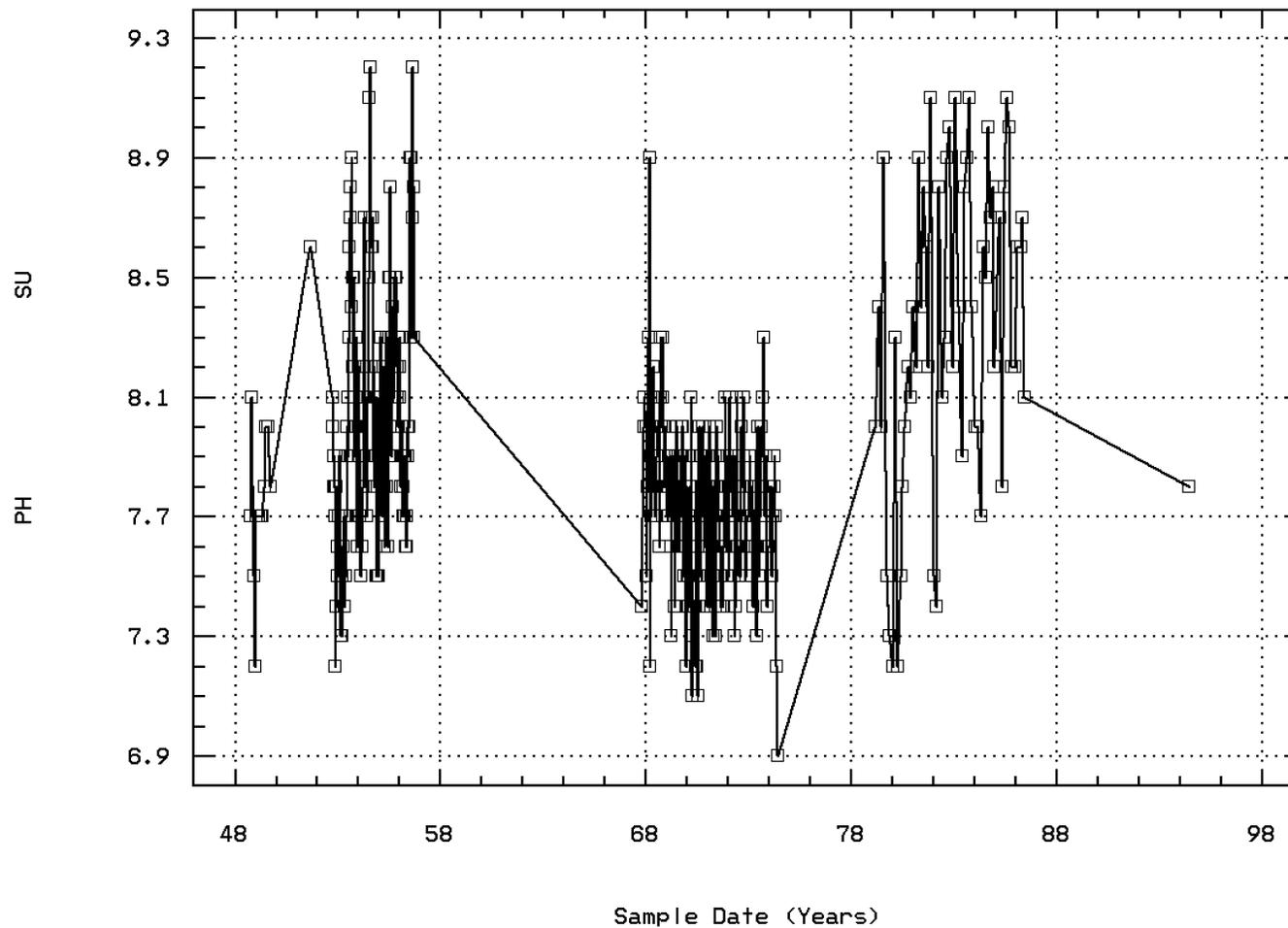
SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00400

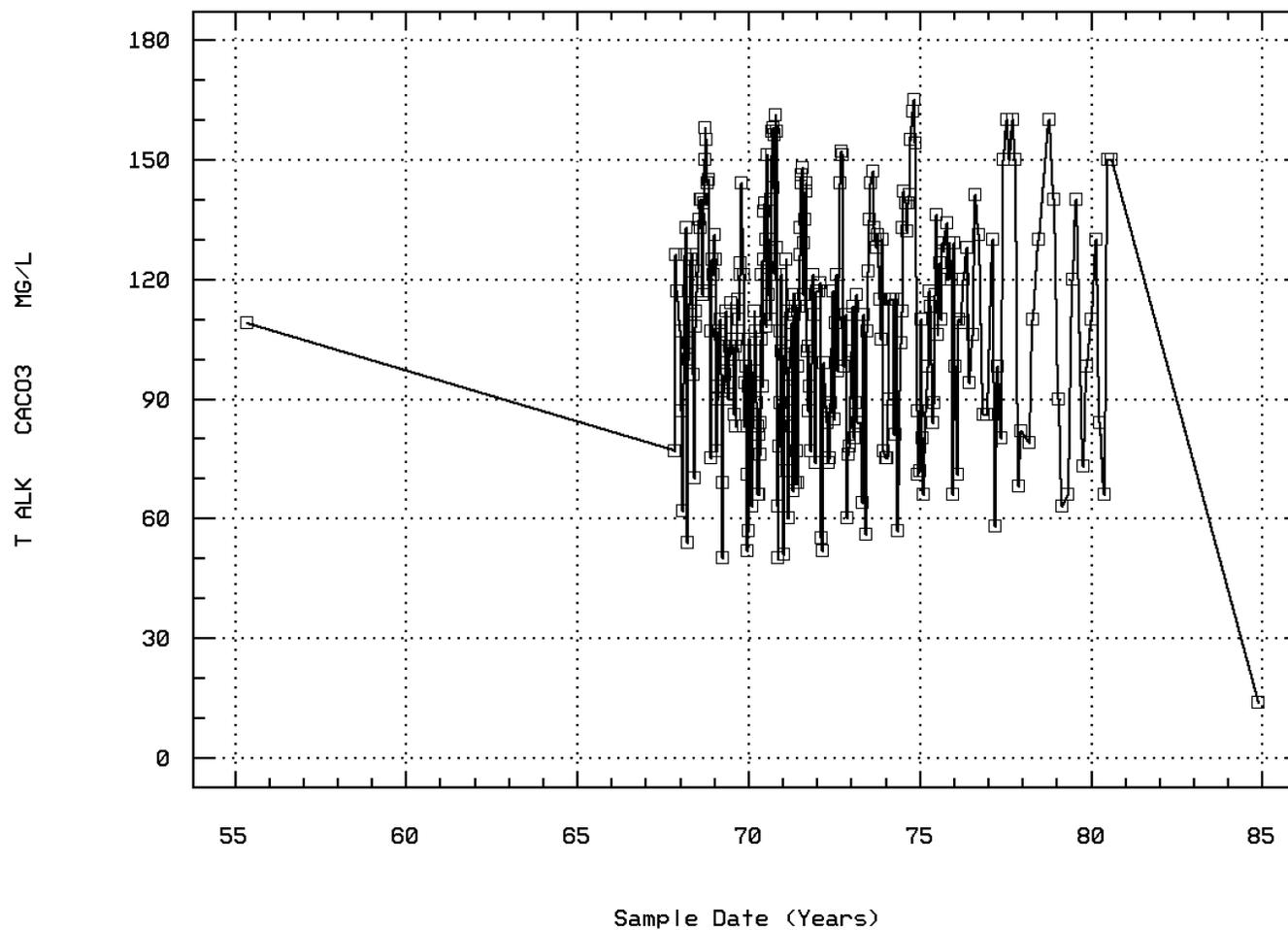
PH (STANDARD UNITS)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00410

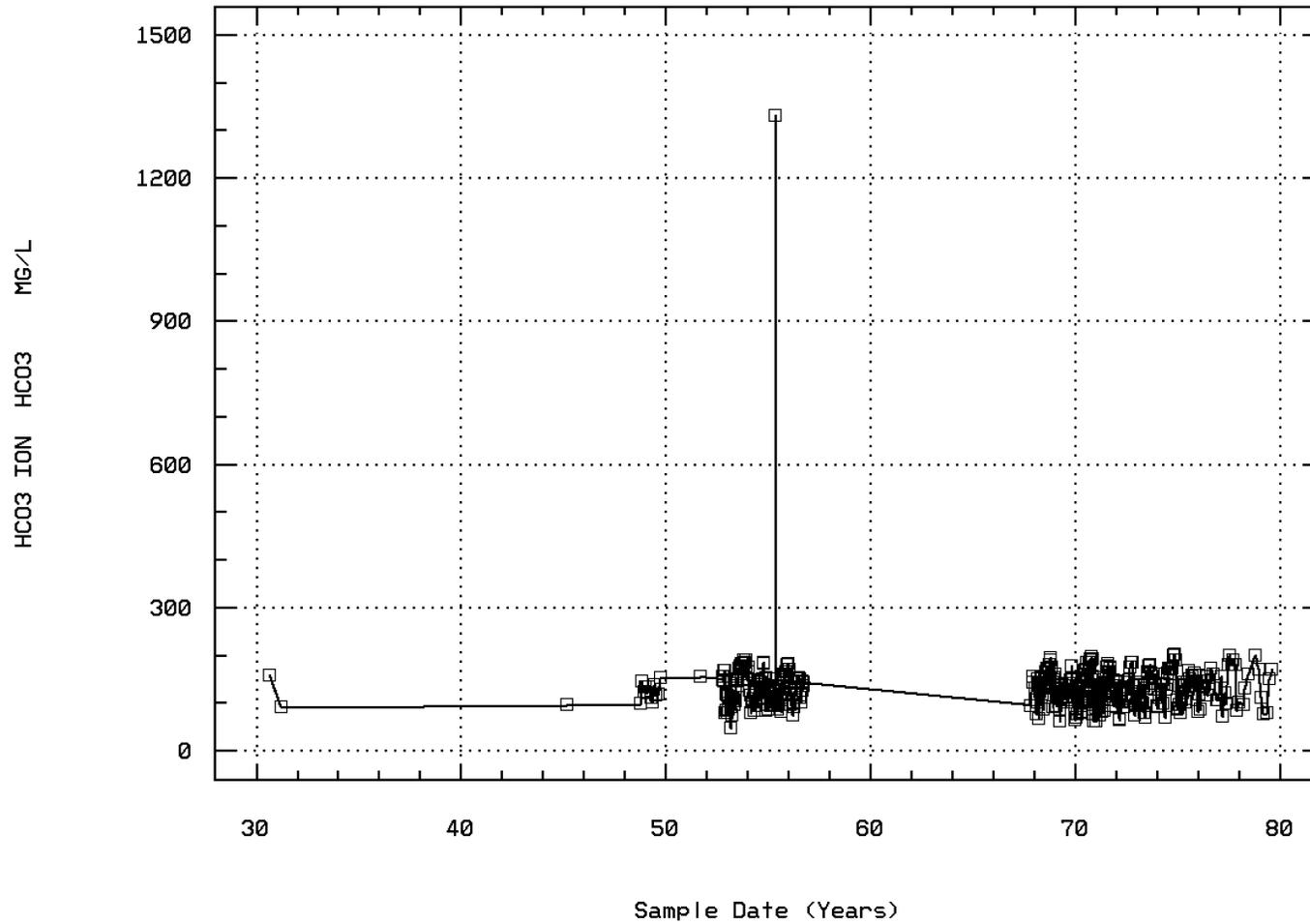
ALKALINITY, TOTAL (MG/L AS CaCO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00440

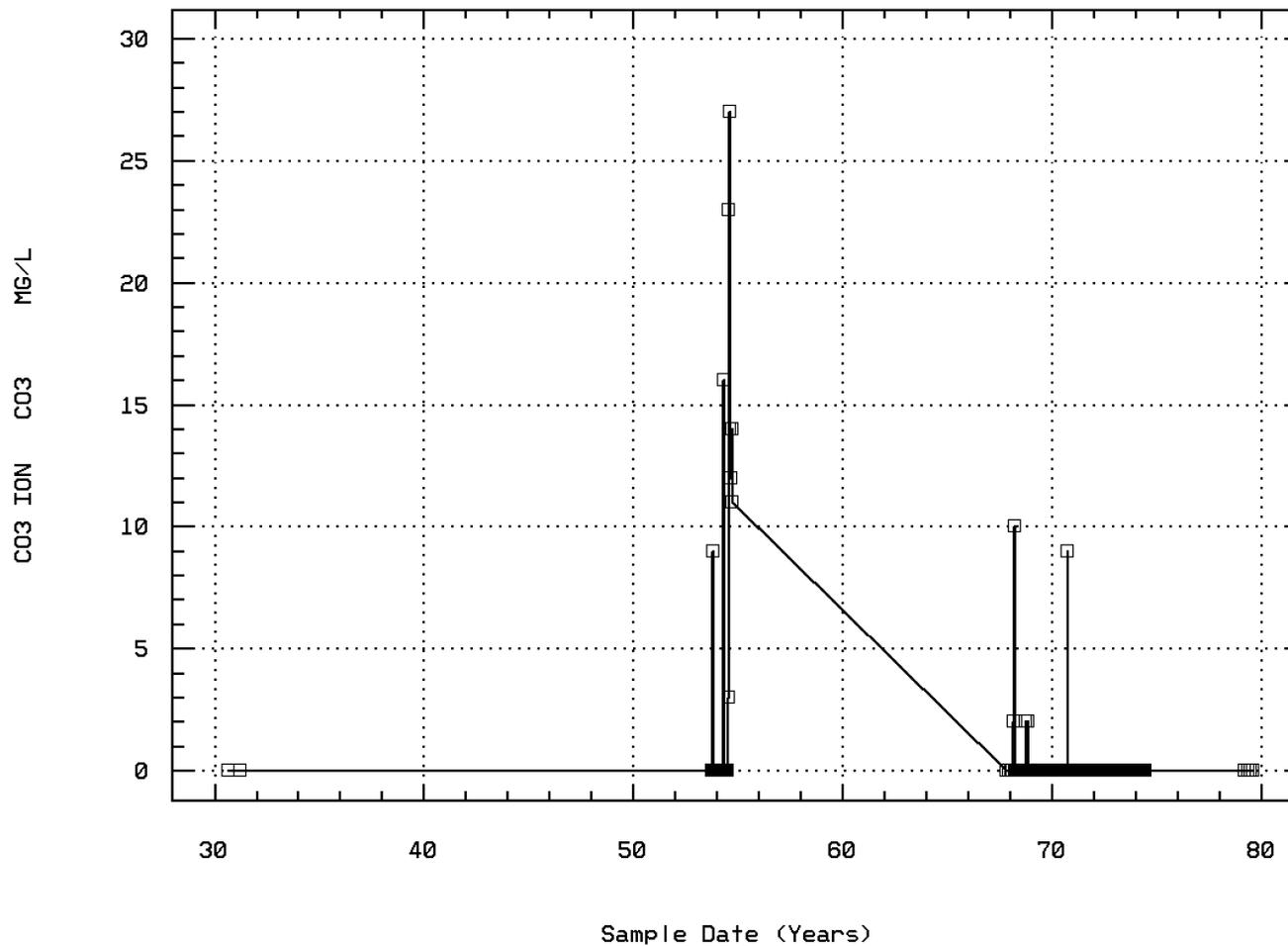
BICARBONATE ION (MG/L AS HCO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00445

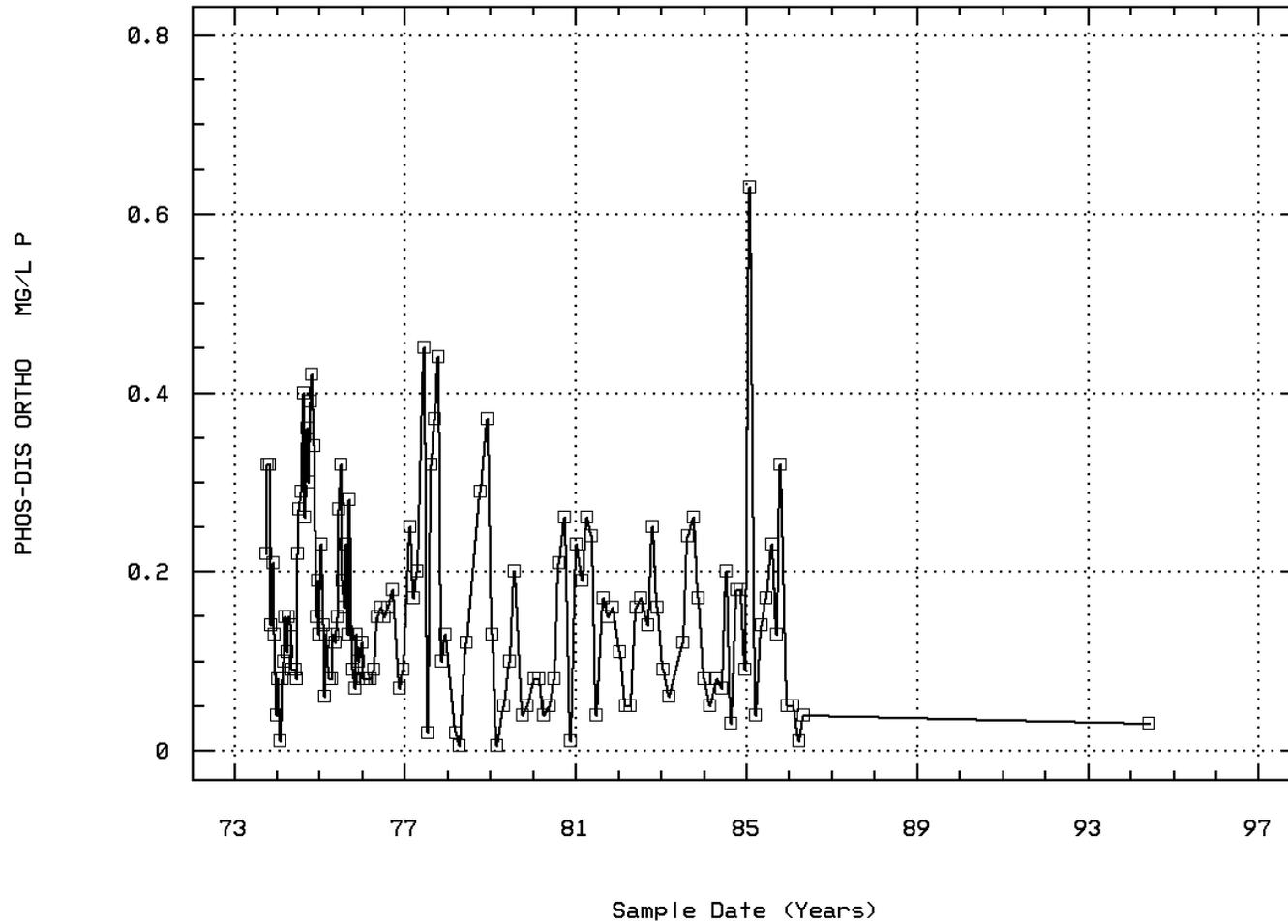
CARBONATE ION (MG/L AS CO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00671

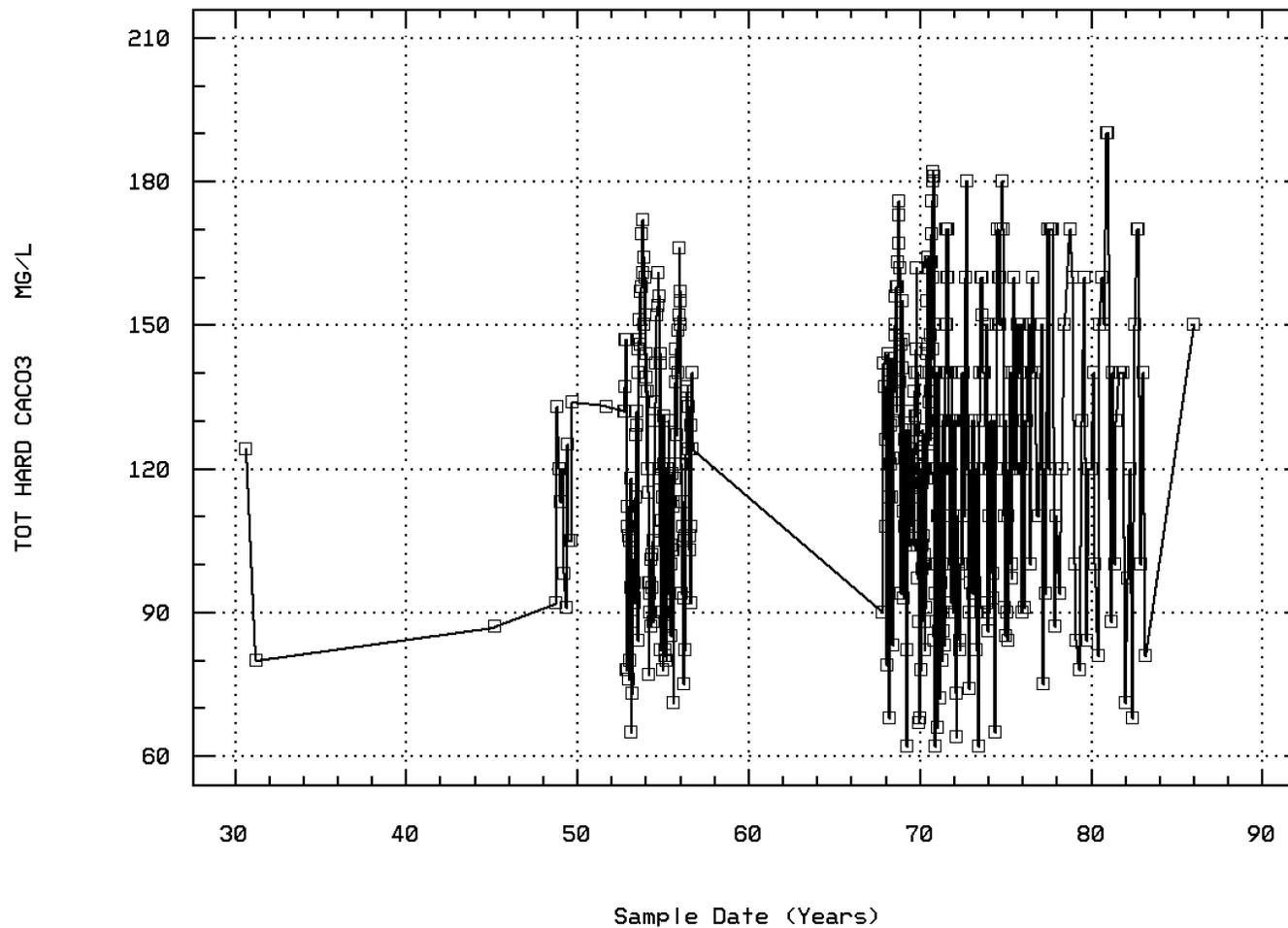
PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (M



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

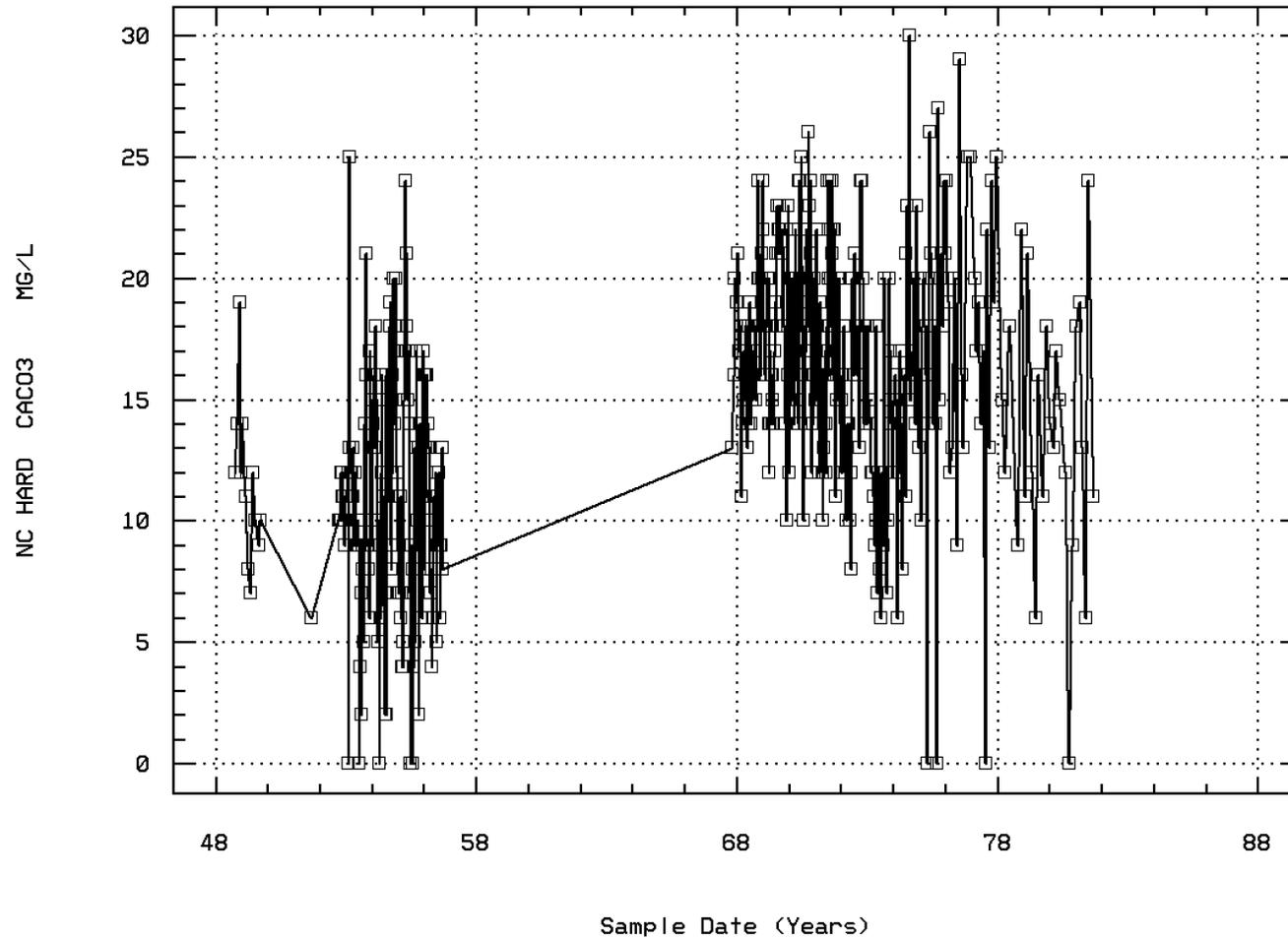
Station: SHEN0756 Parameter Code: 00900

HARDNESS, TOTAL (MG/L AS CaCO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

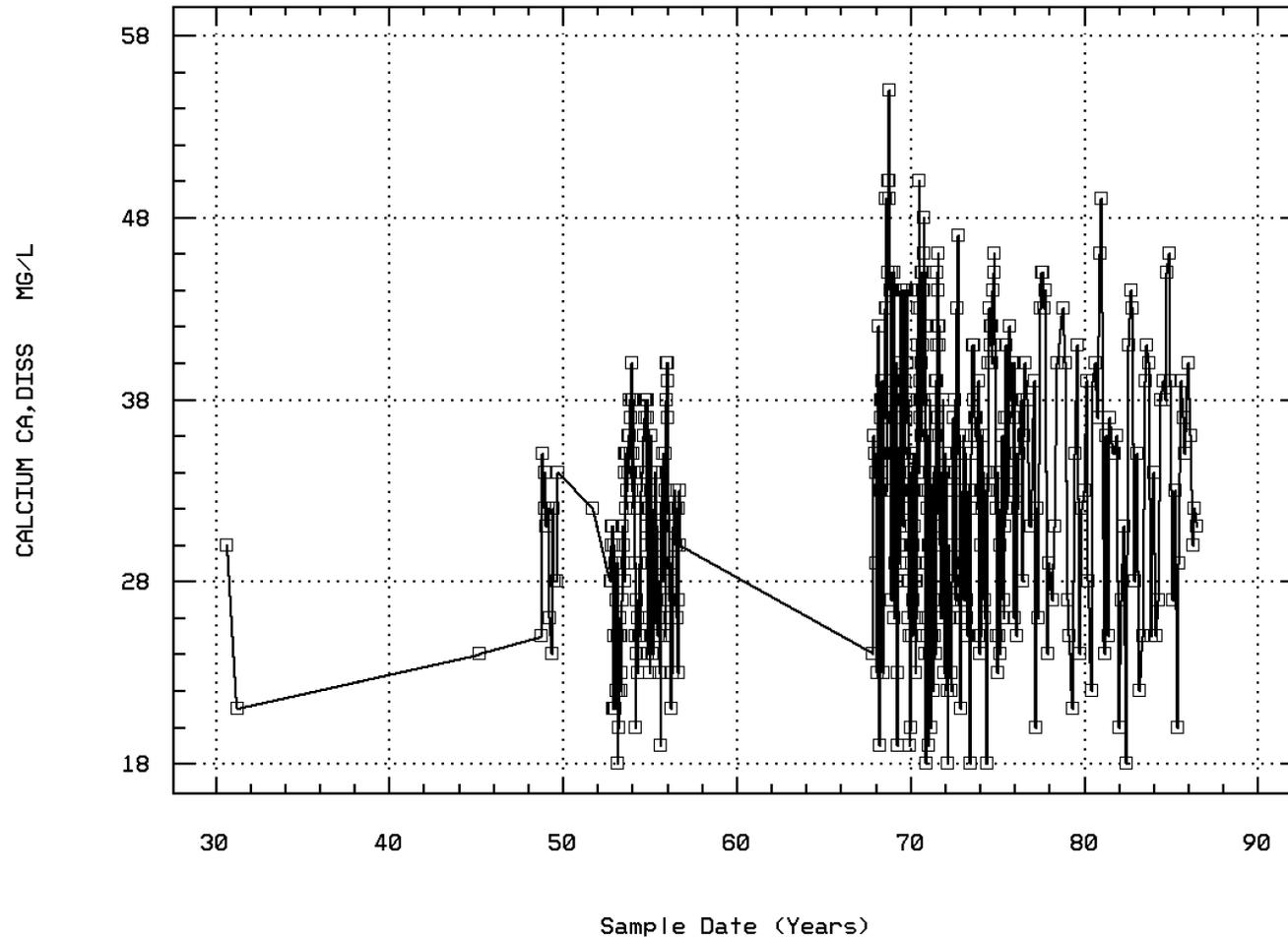
Station: SHEN0756 Parameter Code: 00902
HARDNESS, NON-CARBONATE (MG/L AS CaCO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00915

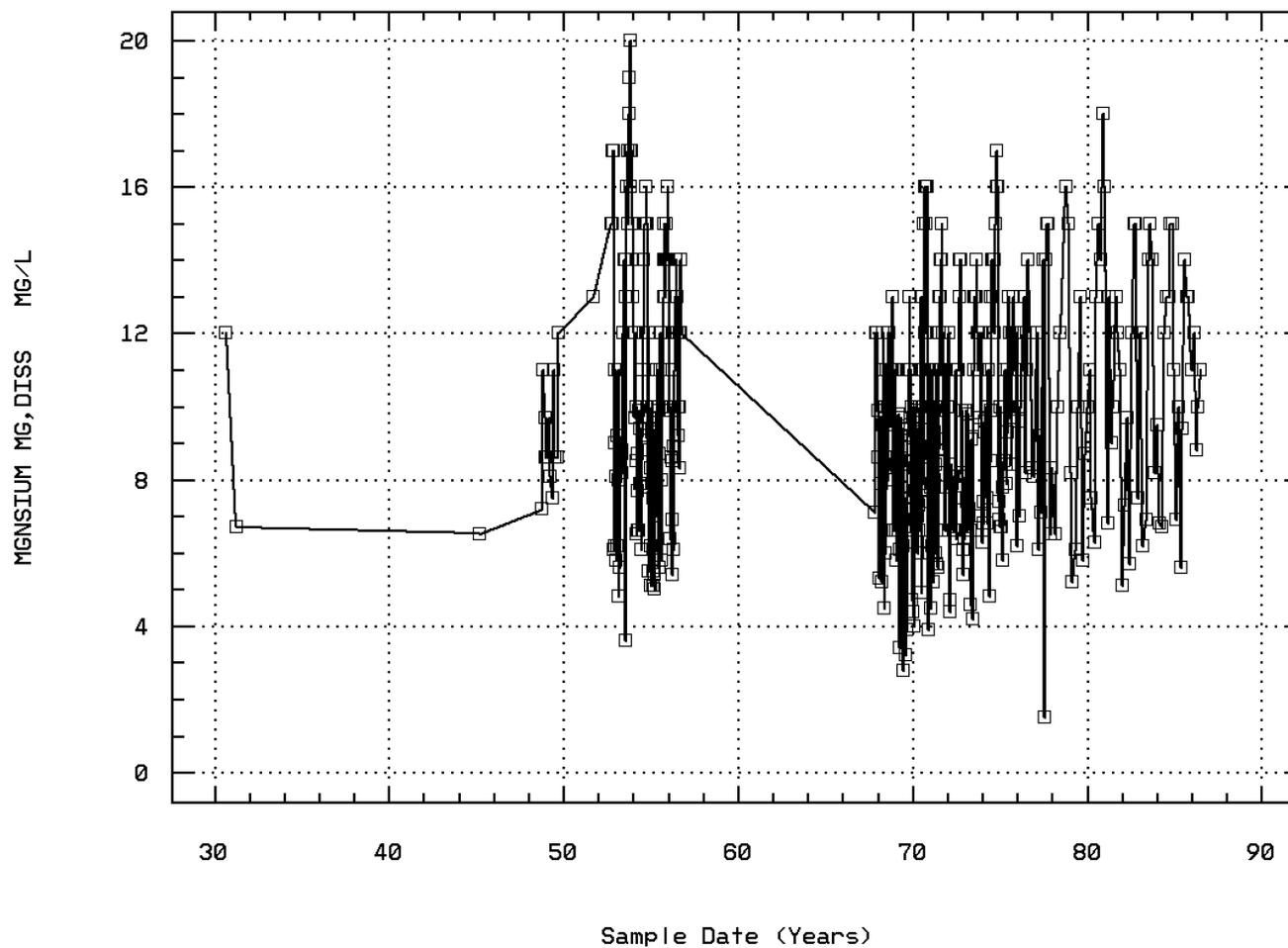
CALCIUM, DISSOLVED (MG/L AS CA)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00925

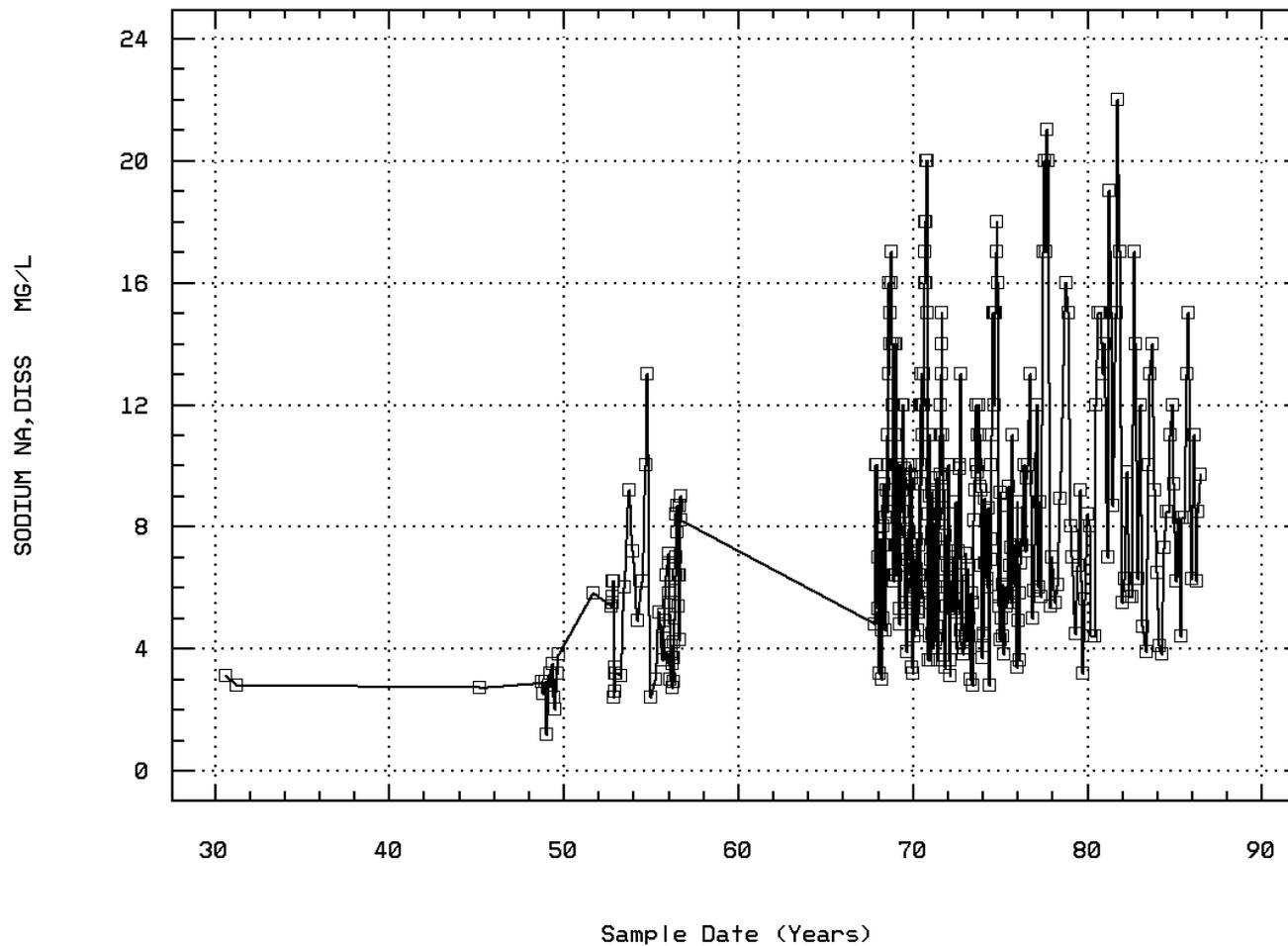
MAGNESIUM, DISSOLVED (MG/L AS MG)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00930

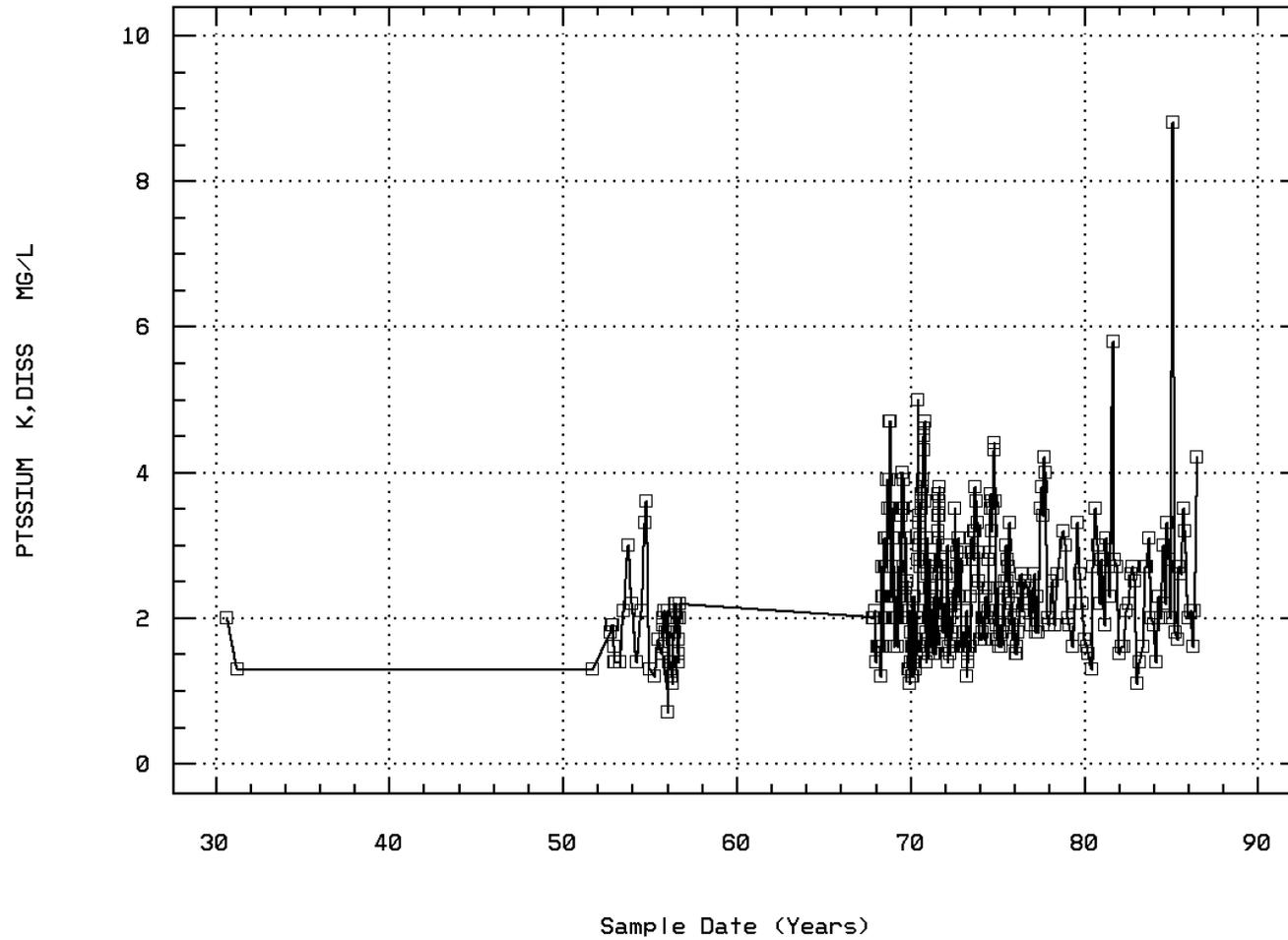
SODIUM, DISSOLVED (MG/L AS NA)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00935

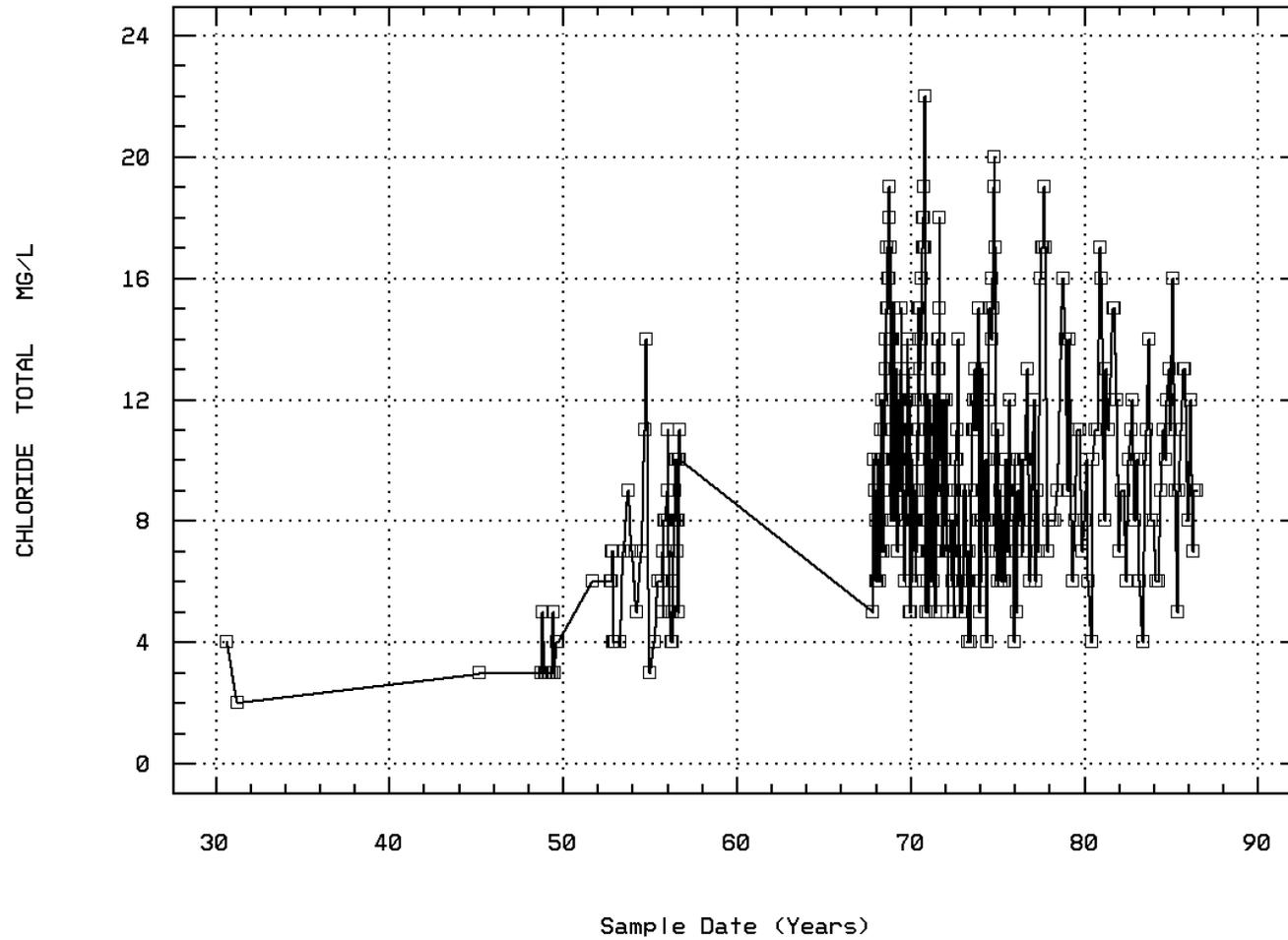
POTASSIUM, DISSOLVED (MG/L AS K)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00940

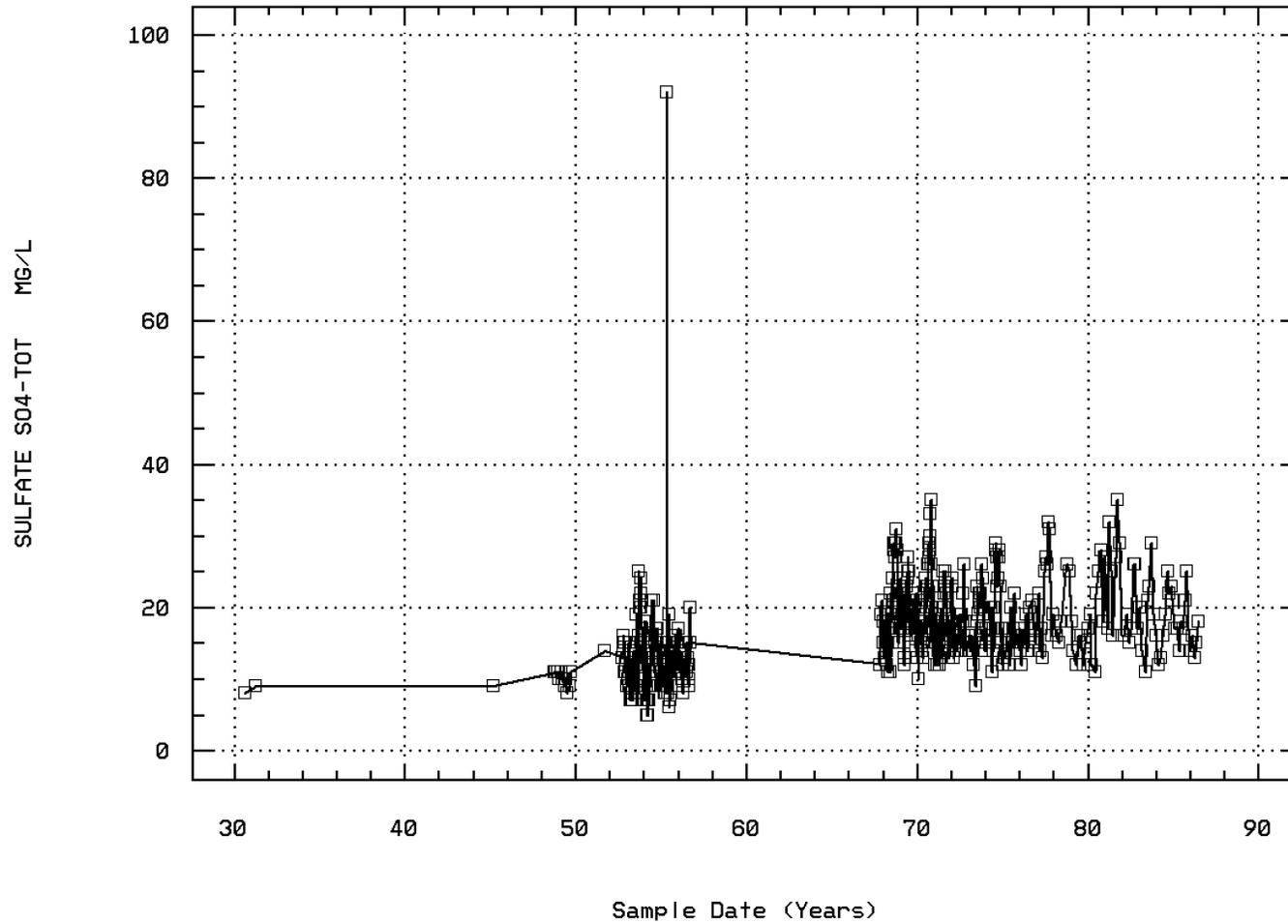
CHLORIDE, TOTAL IN WATER



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00945

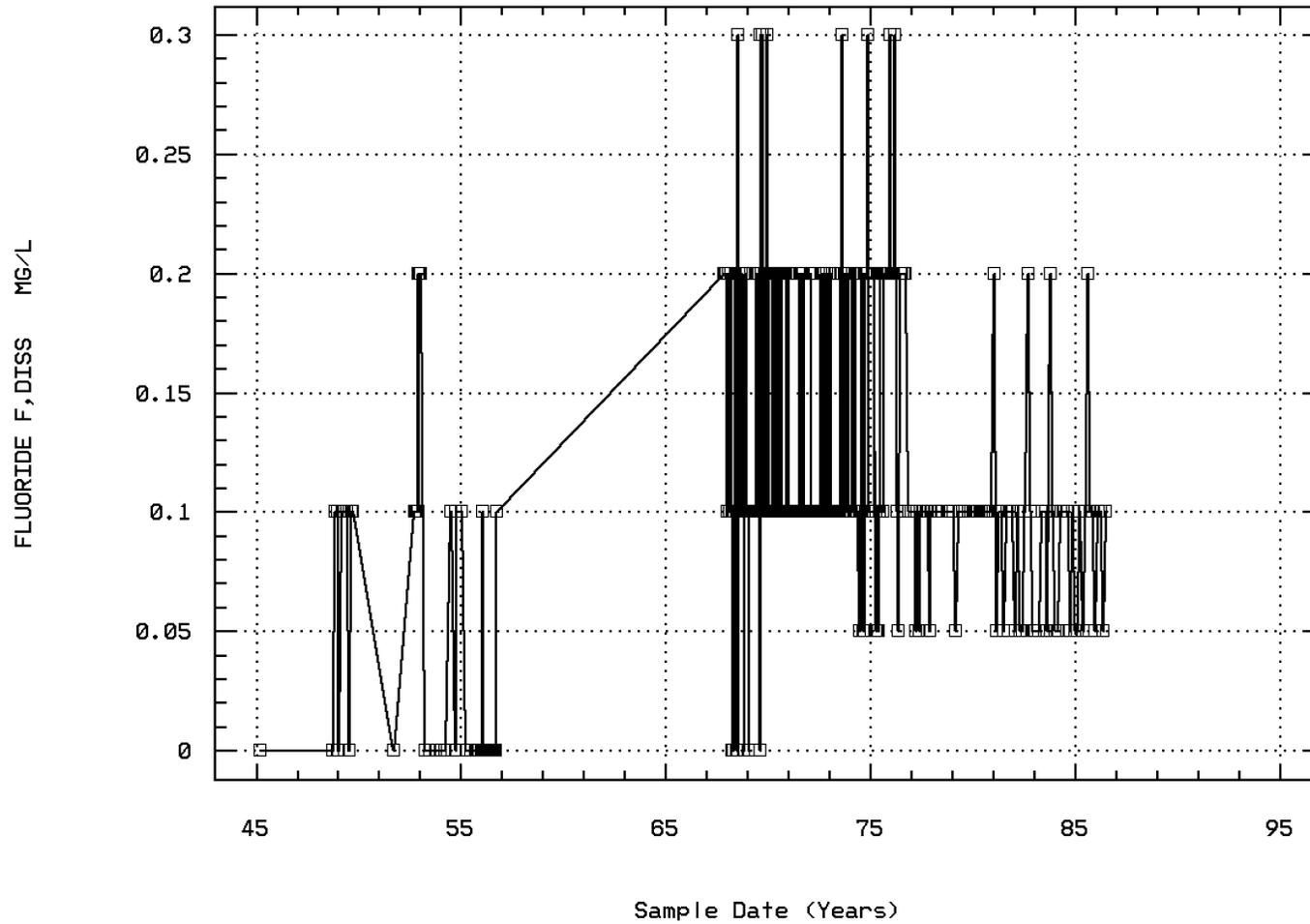
SULFATE, TOTAL (MG/L AS SO4)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00950

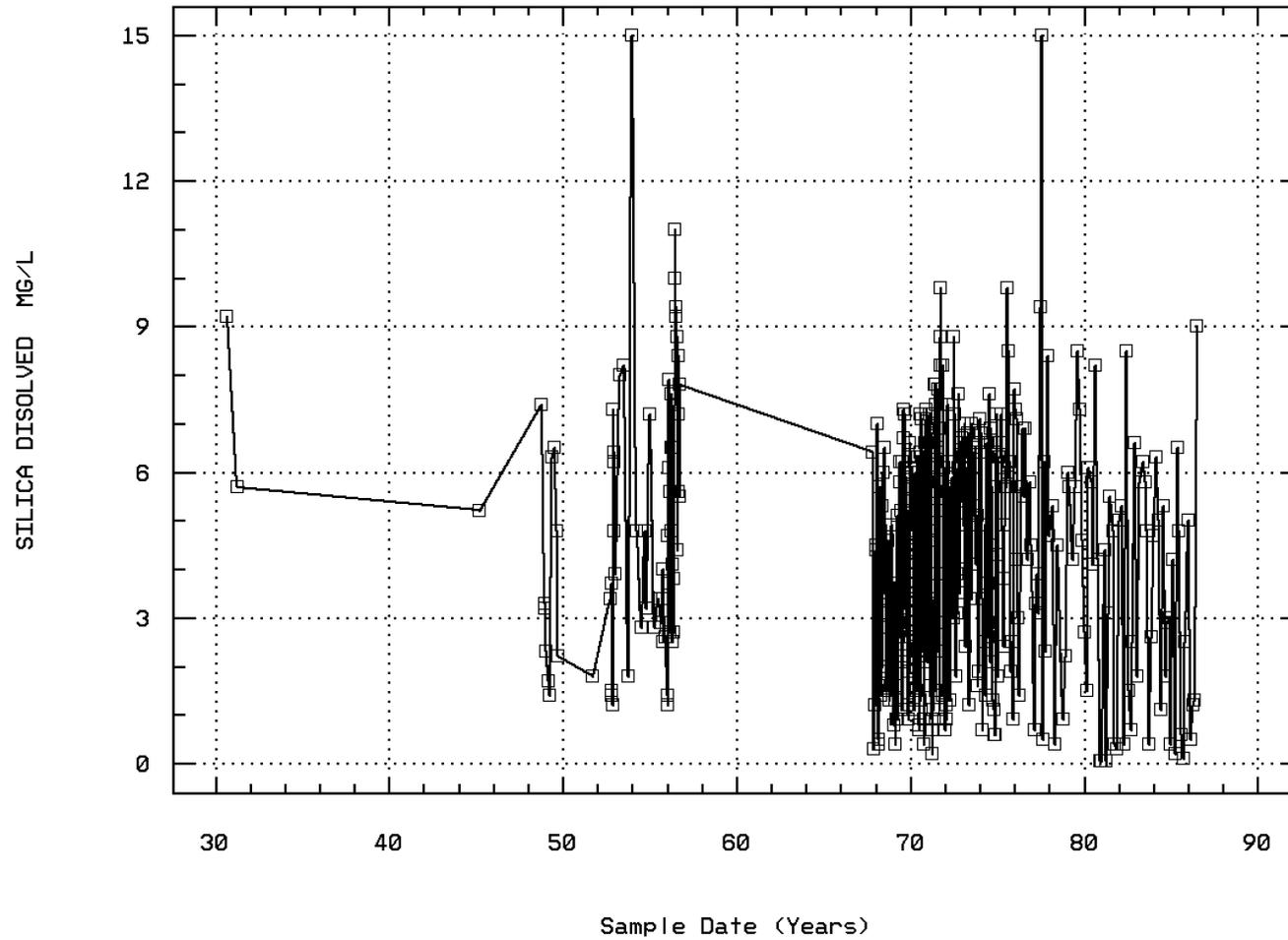
FLUORIDE, DISSOLVED (MG/L AS F)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00955

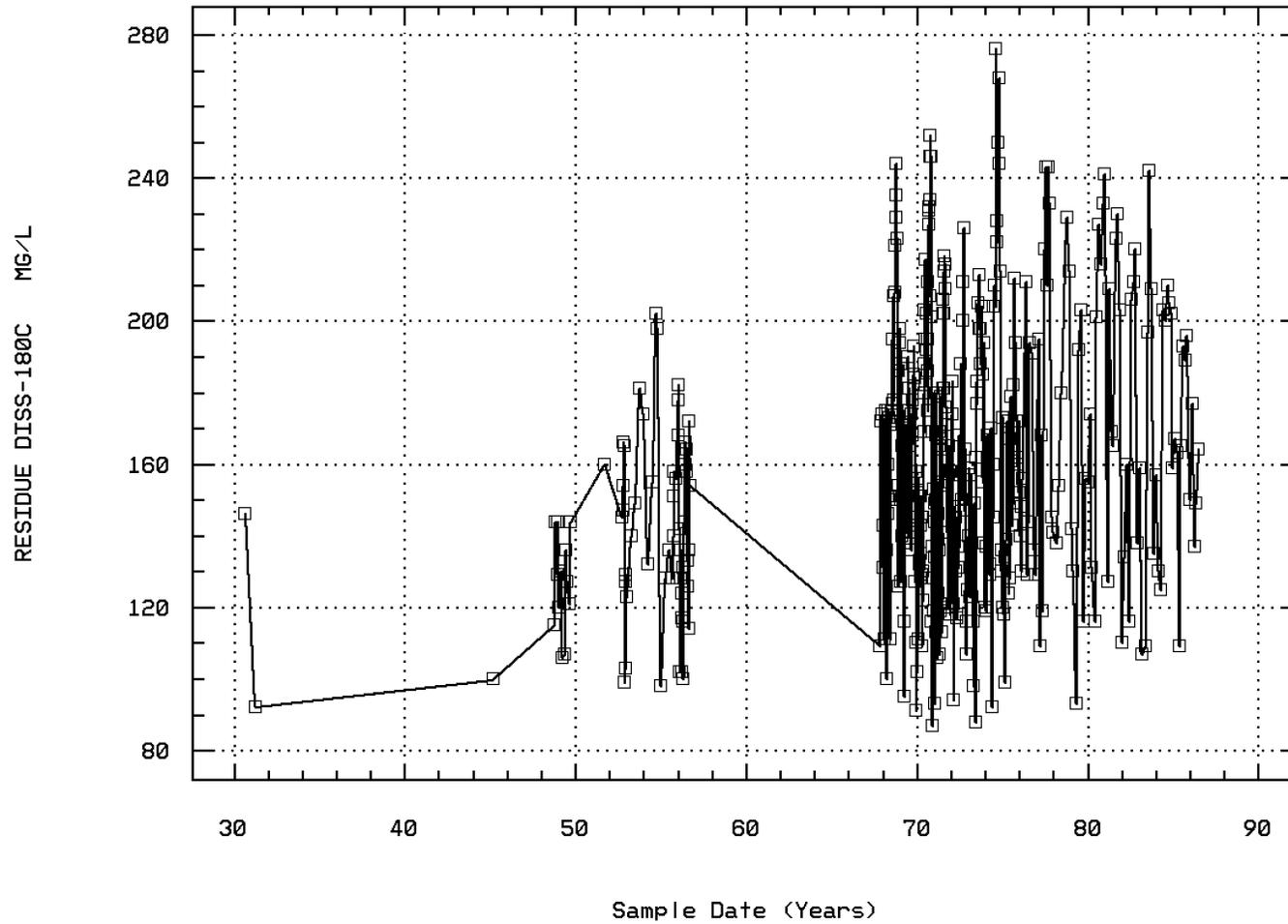
SILICA, DISSOLVED (MG/L AS SI02)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 70300

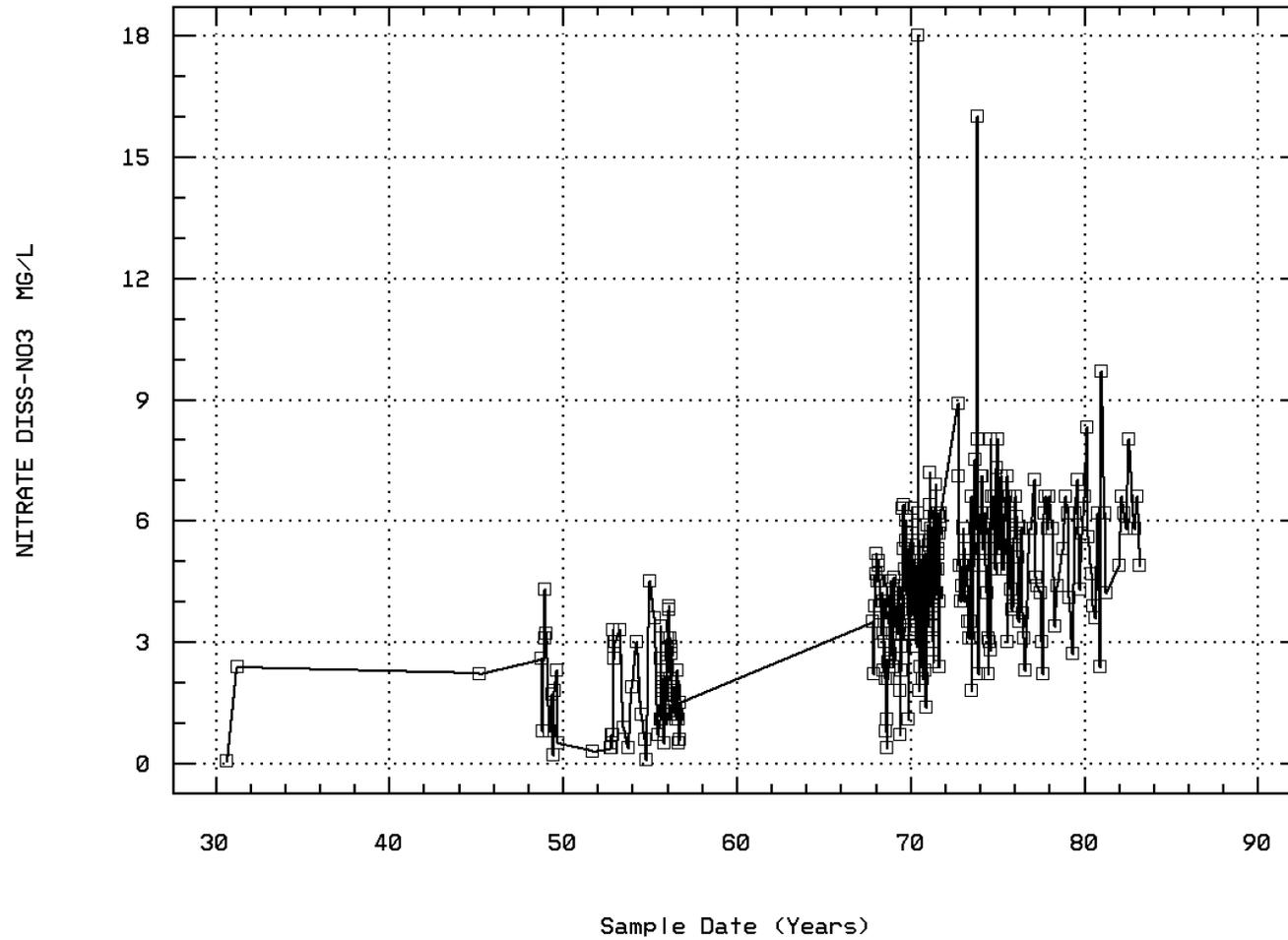
RESIDUE, TOTAL FILTRABLE (DRIED AT 180C)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 71851

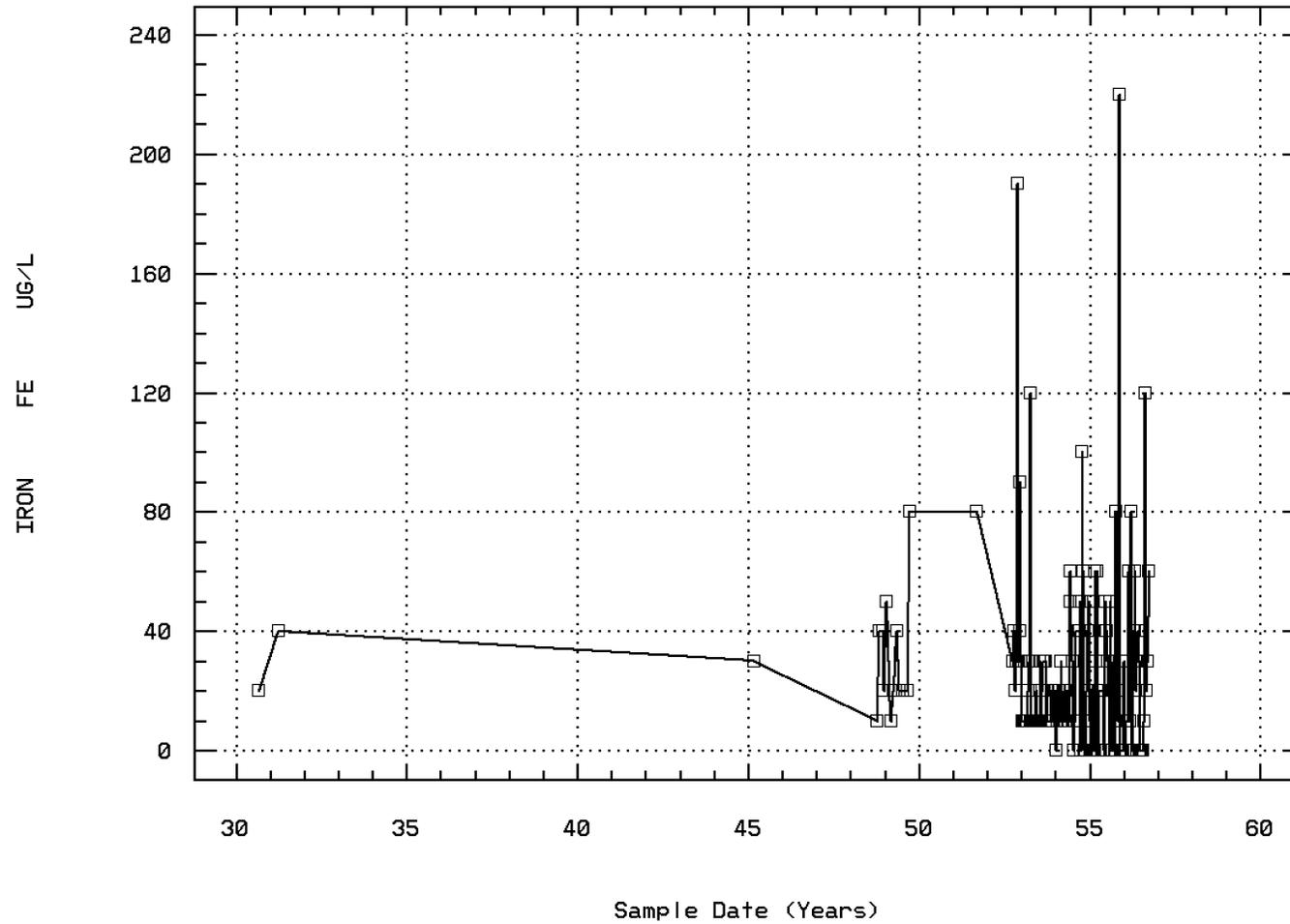
NITRATE NITROGEN, DISSOLVED (MG/L AS NO



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 71885

IRON (UG/L AS FE)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Annual Analysis for 1930 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	1	315.	315.	315.	315.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	1	157.	157.	157.	157.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	1	124.	124.	124.	124.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	1	30.	30.	30.	30.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1	12.	12.	12.	12.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	1	3.1	3.1	3.1	3.1	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	1	9.2	9.2	9.2	9.2	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	1	146.	146.	146.	146.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	1	20.	20.	20.	20.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1931 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	1	2210.	2210.	2210.	2210.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	1	92.	92.	92.	92.	0.	0.	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	1	80.	80.	80.	80.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	1	21.	21.	21.	21.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1	6.7	6.7	6.7	6.7	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	1	2.8	2.8	2.8	2.8	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	1	5.7	5.7	5.7	5.7	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	1	92.	92.	92.	92.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
71885	IRON (UG/L AS FE)	1	40.	40.	40.	40.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1945 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	1	2710.	2710.	2710.	2710.	0.	0.	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	1	95.	95.	95.	95.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	1	87.	87.	87.	87.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	1	24.	24.	24.	24.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	1	2.7	2.7	2.7	2.7	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	1	100.	100.	100.	100.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	1	2.2	2.2	2.2	2.2	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1945 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71885 IRON (UG/L AS FE)	09/05/30-09/21/56	1	30.	30.	30.	30.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1948 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060 FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	4	3010.	3780.	8030.	1070.	9808200.	3131.805	**	**	**	**
00080 COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	4	9.	9.25	15.	4.	20.917	4.573	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	4	225.5	226.25	259.	195.	756.917	27.512	**	**	**	**
00400 PH (STANDARD UNITS)	10/06/48-06/08/94	4	7.6	7.625	8.1	7.2	0.142	0.377	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	4	7.589	7.514	8.1	7.2	0.159	0.399	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	4	0.026	0.031	0.063	0.008	0.001	0.024	**	**	**	**
00440 BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	4	127.5	124.5	145.	98.	393.667	19.841	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	4	120.	116.25	133.	92.	298.917	17.289	**	**	**	**
00902 HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	4	13.	14.25	19.	12.	10.917	3.304	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	4	33.	31.5	35.	25.	20.333	4.509	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	4	9.15	9.125	11.	7.2	2.609	1.615	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	3	2.9	2.767	2.9	2.5	0.053	0.231	**	**	**	**
00940 CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	4	3.	3.5	5.	3.	1.	1.	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	4	11.	11.	11.	11.	0.	0.	**	**	**	**
00950 FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	4	0.05	0.05	0.1	0.	0.003	0.058	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	4	3.25	3.725	7.4	1.	7.129	2.67	**	**	**	**
70300 RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	4	136.5	133.	144.	115.	194.	13.928	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	4	2.85	2.7	4.3	0.8	2.113	1.454	**	**	**	**
71885 IRON (UG/L AS FE)	09/05/30-09/21/56	4	30.	27.5	40.	10.	225.	15.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1949 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060 FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	8	1740.	1823.625	3520.	888.	732082.839	855.618	**	**	**	**
00080 COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	8	8.5	9.5	15.	3.	15.714	3.964	**	**	**	**
00095 SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	8	218.5	221.5	251.	190.	470.	21.679	**	**	**	**
00400 PH (STANDARD UNITS)	10/06/48-06/08/94	8	7.75	7.8	8.	7.7	0.017	0.131	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	8	7.747	7.784	8.	7.7	0.017	0.132	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	8	0.018	0.016	0.02	0.01	0.	0.004	**	**	**	**
00440 BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	8	118.5	123.5	152.	102.	266.857	16.336	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	8	109.	111.375	134.	91.	207.125	14.392	**	**	**	**
00902 HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	8	10.	10.125	14.	7.	4.982	2.232	**	**	**	**
00915 CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	8	29.5	29.375	34.	24.	11.696	3.42	**	**	**	**
00925 MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	8	8.6	9.262	12.	7.5	2.354	1.534	**	**	**	**
00930 SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	8	3.	2.763	3.8	1.2	0.737	0.858	**	**	**	**
00940 CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	8	3.	3.5	5.	3.	0.571	0.756	**	**	**	**
00945 SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	8	10.	9.75	11.	8.	1.071	1.035	**	**	**	**
00950 FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	8	0.1	0.075	0.1	0.	0.002	0.046	**	**	**	**
00955 SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	8	2.25	3.275	6.5	1.	5.022	2.241	**	**	**	**
70300 RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	8	124.	123.875	144.	106.	175.268	13.239	**	**	**	**
71851 NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	8	1.35	1.438	3.2	0.2	1.008	1.004	**	**	**	**
71885 IRON (UG/L AS FE)	09/05/30-09/21/56	8	20.	32.5	80.	10.	535.714	23.146	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1951 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	1	267.	267.	267.	267.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	1	8.6	8.6	8.6	8.6	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	1	155.	155.	155.	155.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	1	133.	133.	133.	133.	0.	0.	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	1	32.	32.	32.	32.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/05/30-06/17/86	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	1	5.8	5.8	5.8	5.8	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	1	6.	6.	6.	6.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	1	0.	0.	0.	0.	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	1	1.8	1.8	1.8	1.8	0.	0.	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	1	160.	160.	160.	160.	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
71885	IRON (UG/L AS Fe)	09/05/30-09/21/56	1	80.	80.	80.	80.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1952 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	9	564.	1334.444	3774.	465.	1545303.528	1243.102	465.	497.	2243.5	3774.
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	9	2.	2.667	5.	2.	1.75	1.323	2.	2.	3.5	5.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	9	258.	238.667	295.	159.	2591.5	50.907	159.	191.	283.	295.
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	9	7.8	7.744	8.1	7.2	0.08	0.283	7.2	7.55	7.95	8.1
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	9	7.8	7.651	8.1	7.2	0.09	0.3	7.2	7.55	7.95	8.1
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	9	0.016	0.022	0.063	0.008	0.	0.018	0.008	0.011	0.03	0.063
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	9	146.	131.889	167.	80.	1071.861	32.739	80.	101.5	160.	167.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	9	132.	119.	147.	78.	720.25	26.837	78.	93.	142.	147.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	9	10.	10.556	12.	9.	1.028	1.014	9.	10.	11.5	12.
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	9	28.	27.222	31.	21.	15.944	3.993	21.	23.	30.5	31.
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/05/30-06/17/86	9	15.	12.367	17.	6.1	19.28	4.391	6.1	7.6	16.	17.
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	9	5.4	4.511	6.2	2.4	2.494	1.579	2.4	2.9	5.95	6.2
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	9	1.9	1.767	1.9	1.4	0.035	0.187	1.4	1.6	1.9	1.9
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	9	6.	5.333	7.	4.	1.75	1.323	4.	4.	6.5	7.
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	9	13.	13.222	16.	11.	3.444	1.856	11.	11.5	15.	16.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	9	0.1	0.133	0.2	0.1	0.003	0.05	0.1	0.1	0.2	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	9	3.7	3.989	7.3	1.2	5.429	2.33	1.2	1.45	6.3	7.3
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	9	145.	137.222	166.	99.	605.194	24.601	99.	115.	159.5	166.
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	9	0.7	1.611	3.3	0.4	1.656	1.287	0.4	0.45	2.95	3.3
71885	IRON (UG/L AS Fe)	09/05/30-09/21/56	9	30.	54.444	190.	20.	3027.778	55.025	20.	25.	65.	190.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1953 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	36	704.5	1466.194	7597.	338.	2265605.875	1505.193	366.3	430.25	2058.75	3451.4
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	36	10.	9.25	20.	2.	13.793	3.714	5.	7.	10.	15.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	36	259.5	252.194	340.	136.	3750.847	61.244	165.9	196.25	307.5	331.
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	36	7.9	7.928	8.9	7.3	0.197	0.444	7.37	7.6	8.275	8.63

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1953 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	36	7.9	7.751	8.9	7.3	0.23	0.479	7.37	7.6	8.275	8.63
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	36	0.013	0.018	0.05	0.001	0.	0.014	0.002	0.005	0.025	0.043
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	36	146.	138.417	190.	48.	1537.279	39.208	83.5	103.25	174.75	184.3
00445	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	9	0.	1.	9.	0.	9.	3.	0.	0.	0.	9.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	36	128.	123.472	172.	65.	1032.085	32.126	78.8	95.25	155.5	161.9
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	36	10.5	10.306	25.	0.	25.075	5.008	3.4	8.25	12.	16.3
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	36	29.5	29.667	40.	18.	34.4	5.865	21.7	25.	35.	36.3
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/05/30-06/17/86	36	12.5	12.017	20.	3.6	19.844	4.455	5.74	8.325	16.	17.3
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	4	4.6	5.375	9.2	3.1	8.309	2.883	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	4	1.75	1.975	3.	1.4	0.576	0.759	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	4	5.5	6.	9.	4.	6.	2.449	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	36	12.	13.	25.	7.	26.514	5.149	7.7	9.	16.	21.3
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	4	0.	0.05	0.2	0.	0.01	0.1	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	4	5.95	5.475	8.2	1.8	9.929	3.151	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	4	144.5	148.25	181.	123.	592.917	24.35	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	4	1.95	1.9	3.3	0.4	2.14	1.463	**	**	**	**
71885	IRON (UG/L AS FE)	09/05/30-09/21/56	36	10.	18.333	120.	10.	362.857	19.049	10.	10.	20.	30.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1954 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	35	867.	1272.286	5253.	238.	1267754.975	1125.946	342.4	421.	1674.	2926.8
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	35	8.	9.486	45.	5.	48.845	6.989	5.	6.	10.	15.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	35	248.	253.886	359.	160.	2630.634	51.29	194.2	204.	299.	322.8
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	35	7.9	8.06	9.2	7.5	0.209	0.457	7.5	7.7	8.2	8.7
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	35	7.9	7.885	9.2	7.5	0.241	0.491	7.5	7.7	8.2	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	35	0.013	0.013	0.032	0.001	0.	0.01	0.002	0.006	0.02	0.032
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	35	121.	125.086	185.	78.	797.375	28.238	89.4	101.	148.	168.4
00445	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	25	0.	4.8	27.	0.	66.833	8.175	0.	0.	11.5	18.8
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	35	120.	119.8	161.	77.	646.4	25.424	87.6	96.	142.	154.8
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	35	13.	12.229	20.	0.	26.476	5.145	3.8	9.	16.	18.4
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	35	32.	30.914	38.	20.	29.787	5.458	24.	25.	36.	38.
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/05/30-06/17/86	35	9.9	10.363	16.	5.5	9.241	3.04	6.38	7.9	12.	15.
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	5	7.2	8.26	13.	4.9	10.538	3.246	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	5	2.2	2.52	3.6	1.4	0.827	0.909	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	5	7.	8.8	14.	5.	13.2	3.633	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	35	13.	12.686	21.	5.	16.281	4.035	7.	11.	15.	18.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	5	0.	0.04	0.1	0.	0.003	0.055	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	5	4.8	6.12	15.	2.8	25.472	5.047	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	5	174.	172.2	202.	132.	867.2	29.448	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	5	1.2	1.36	3.	0.1	1.293	1.137	**	**	**	**
71885	IRON (UG/L AS FE)	09/05/30-09/21/56	35	20.	25.143	100.	0.	502.185	22.409	0.	10.	40.	54.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1955 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	36	1187.5	1877.611	16700.	418.	7660131.159	2767.694	495.8	610.5	1964.	3361.1
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	36	5.	8.167	25.	0.	46.2	6.797	0.	5.	10.	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	36	235.	236.583	338.	161.	1993.793	44.652	178.6	202.	273.	292.2
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	34	8.1	8.121	8.8	7.5	0.092	0.303	7.65	7.9	8.3	8.5
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	34	8.1	8.018	8.8	7.5	0.103	0.321	7.65	7.9	8.3	8.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1955 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	34	0.008	0.01	0.032	0.002	0.	0.007	0.003	0.005	0.013	0.023
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	1	109.	109.	109.	109.	0.	0.	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	35	129.	161.429	1330.	82.	42043.782	205.046	90.6	110.	151.	170.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	34	116.5	114.206	166.	71.	553.987	23.537	80.5	98.5	130.25	147.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	34	9.	10.206	24.	0.	35.684	5.974	3.	5.75	15.	17.5
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	35	29.	29.371	40.	19.	23.77	4.875	23.6	25.	33.	35.4
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	36	10.	10.081	16.	5.	10.655	3.264	5.31	7.625	13.	14.3
00930	SODIUM, DISSOLVED (MG/L AS NA)	8	4.8	4.413	6.4	2.4	1.724	1.313	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	9	1.7	1.678	2.1	1.2	0.094	0.307	1.2	1.4	1.95	2.1
00940	CHLORIDE, TOTAL IN WATER MG/L	9	6.	6.	8.	3.	3.	1.732	3.	4.5	7.5	8.
00945	SULFATE, TOTAL (MG/L AS SO4)	36	11.	13.444	92.	6.	189.454	13.764	8.	9.	13.	16.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	8	0.	0.013	0.1	0.	0.001	0.035	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	8	3.15	3.6	7.2	2.5	2.363	1.537	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	8	138.	136.875	158.	98.	384.411	19.606	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	13	1.9	2.023	4.5	0.5	1.454	1.206	0.58	1.1	3.	4.14
71885	IRON (UG/L AS FE)	36	20.	25.	220.	0.	1562.857	39.533	0.	0.	30.	60.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1956 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00060	FLOW, STREAM, MEAN DAILY CFS	28	577.	899.071	3680.	362.	502260.069	708.703	374.9	433.	1115.	1672.
00080	COLOR (PLATINUM-COBALT UNITS)	28	5.	6.429	17.	3.	10.328	3.214	3.	5.	9.5	10.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	28	269.5	254.214	335.	162.	2100.026	45.826	192.1	222.25	286.	315.4
00400	PH (STANDARD UNITS)	28	8.	8.132	9.2	7.6	0.182	0.427	7.69	7.825	8.3	8.9
00400	CONVERTED PH (STANDARD UNITS)	28	8.	7.984	9.2	7.6	0.205	0.453	7.69	7.825	8.3	8.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	28	0.01	0.01	0.025	0.001	0.	0.007	0.001	0.005	0.015	0.02
00440	BICARBONATE ION (MG/L AS HCO3)	28	133.	132.607	182.	75.	694.692	26.357	94.6	115.25	151.75	169.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	28	122.	119.571	157.	75.	490.328	22.143	91.	105.25	135.25	155.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	28	10.	10.214	16.	4.	11.36	3.37	5.9	8.	13.	16.
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	28	30.	30.214	40.	21.	22.545	4.748	23.	27.	32.	39.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	28	10.5	10.757	14.	5.4	7.291	2.7	6.37	8.675	13.	14.
00930	SODIUM, DISSOLVED (MG/L AS NA)	28	5.65	5.696	9.	2.7	3.761	1.939	2.99	3.875	7.075	8.7
00935	POTASSIUM, DISSOLVED (MG/L AS K)	28	1.75	1.671	2.2	0.7	0.15	0.387	1.19	1.4	2.	2.2
00940	CHLORIDE, TOTAL IN WATER MG/L	28	8.	7.393	11.	4.	5.433	2.331	4.	5.	9.75	10.1
00945	SULFATE, TOTAL (MG/L AS SO4)	28	12.	12.429	20.	8.	7.217	2.686	9.	10.25	14.75	15.2
00950	FLUORIDE, DISSOLVED (MG/L AS F)	28	0.	0.007	0.1	0.	0.001	0.026	0.	0.	0.	0.01
00955	SILICA, DISSOLVED (MG/L AS SiO2)	28	5.85	5.946	11.	1.2	6.958	2.638	2.39	3.875	7.875	9.46
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	27	142.	142.63	182.	100.	618.627	24.872	102.	124.	166.	173.2
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	28	1.65	1.896	3.9	0.5	0.852	0.923	0.59	1.225	2.625	3.17
71885	IRON (UG/L AS FE)	28	20.	29.643	120.	0.	1151.72	33.937	0.	0.	40.	84.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1967 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3	8.	7.	9.	4.	7.	2.646	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	3	1710.	3716.667	8320.	1120.	15980033.333	3997.503	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	3	10.	10.333	11.	10.	0.333	0.577	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	3	303.	264.333	308.	182.	5090.333	71.347	**	**	**	**
00400	PH (STANDARD UNITS)	3	8.	7.833	8.1	7.4	0.143	0.379	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	3	8.	7.716	8.1	7.4	0.164	0.405	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.01	0.019	0.04	0.008	0.	0.018	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1967 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	3	117.	106.667	126.	77.	680.333	26.083	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	3	143.	130.333	154.	94.	1020.333	31.943	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	3	0.	0.	0.	0.	0.	0.	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/30/67-09/25/71	3	0.3	0.297	0.32	0.27	0.001	0.025	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	3	137.	123.	142.	90.	823.	28.688	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	3	16.	16.333	20.	13.	12.333	3.512	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	3	35.	31.667	36.	24.	44.333	6.658	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	3	12.	10.367	12.	7.1	8.003	2.829	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	3	10.	8.267	10.	4.8	9.013	3.002	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	3	0.4	0.333	0.4	0.2	0.013	0.115	**	**	**	**
00932	SODIUM, PERCENT	10/30/67-12/17/85	3	13.	12.	13.	10.	3.	1.732	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	3	2.	2.033	2.1	2.	0.003	0.058	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	3	9.	8.	10.	5.	7.	2.646	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	3	19.	17.333	21.	12.	22.333	4.726	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	3	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	3	1.2	2.633	6.4	0.3	10.843	3.293	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	3	60.	46.667	60.	20.	533.333	23.094	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	3	172.	151.667	174.	109.	1366.333	36.964	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	3	161.	146.	165.	112.	871.	29.513	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	3	526.	1629.67	3860.01	503.	3730944.637	1931.565	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	3	0.23	0.207	0.24	0.15	0.002	0.049	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	3	3.5	3.2	3.9	2.2	0.79	0.889	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	7	6.	5.286	15.	0.	26.571	5.155	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	7	1380.	2983.429	9620.	831.	10892551.286	3300.387	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	34	7.	9.738	60.	0.	103.839	10.19	4.	5.	10.5	15.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	34	299.5	305.824	441.	150.	5163.907	71.86	201.	256.75	354.75	407.
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	34	7.95	7.944	8.9	7.2	0.081	0.284	7.65	7.8	8.1	8.3
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	34	7.947	7.857	8.9	7.2	0.088	0.297	7.65	7.8	8.1	8.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	34	0.011	0.014	0.063	0.001	0.	0.011	0.005	0.008	0.016	0.023
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	34	121.5	117.206	158.	54.	652.775	25.549	72.5	106.25	136.	147.5
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	34	145.5	142.147	193.	66.	939.16	30.646	88.5	130.	166.25	177.
00445	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	34	0.	0.471	10.	0.	3.166	1.779	0.	0.	0.	2.
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/30/67-09/25/71	34	0.315	0.336	0.63	0.14	0.018	0.133	0.16	0.238	0.43	0.525
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	34	138.	134.235	176.	68.	676.246	26.005	88.5	121.75	151.5	165.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	34	17.	17.088	24.	11.	6.931	2.633	14.	15.	18.25	20.5
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	33	38.	37.97	55.	19.	68.343	8.267	24.6	33.5	43.5	49.6
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	33	9.9	9.555	13.	4.5	4.657	2.158	5.58	8.35	11.	12.
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	33	8.3	9.494	17.	3.	17.047	4.129	4.6	6.4	13.5	16.
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	33	0.3	0.355	0.6	0.2	0.016	0.128	0.2	0.3	0.5	0.56
00932	SODIUM, PERCENT	10/30/67-12/17/85	33	12.	12.485	18.	8.	10.508	3.242	8.	10.	16.	17.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	34	2.5	2.571	4.7	1.2	0.942	0.97	1.4	1.6	3.2	3.9
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	34	11.	11.559	19.	6.	13.709	3.703	6.5	8.75	14.25	17.
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	34	19.	20.265	31.	11.	34.322	5.858	12.5	16.5	24.75	29.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	34	0.1	0.118	0.3	0.	0.006	0.076	0.	0.1	0.2	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	33	3.1	3.13	7.	0.4	3.417	1.849	1.	1.5	4.55	5.88
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	33	20.	23.636	120.	0.	842.614	29.028	0.	0.	40.	56.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	34	174.	172.382	244.	100.	1303.455	36.103	118.5	149.	195.	226.
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	34	170.	168.382	235.	89.	1291.637	35.939	111.5	146.5	192.	218.
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	7	544.	946.717	2600.01	357.	704081.46	839.096	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	34	0.24	0.234	0.33	0.14	0.002	0.049	0.16	0.2	0.27	0.305
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	34	3.7	3.341	5.2	0.4	1.438	1.199	1.6	2.475	4.225	4.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	6.	8.	23.	2.	50.333	7.095	**	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	11	976.	1197.727	3450.	599.	620440.218	787.68	612.	748.	1300.	3036.
00080	COLOR (PLATINUM-COBALT UNITS)	39	10.	11.385	30.	0.	29.453	5.427	5.	8.	15.	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	39	278.	266.59	363.	143.	2220.827	47.126	193.	245.	295.	309.
00400	PH (STANDARD UNITS)	39	7.8	7.751	8.	7.2	0.035	0.188	7.5	7.6	7.9	7.9
00400	CONVERTED PH (STANDARD UNITS)	39	7.8	7.706	8.	7.2	0.037	0.193	7.5	7.6	7.9	7.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	39	0.016	0.02	0.063	0.01	0.	0.011	0.013	0.013	0.025	0.032
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	39	101.	99.128	144.	50.	375.536	19.379	71.	90.	110.	124.
00440	BICARBONATE ION (MG/L AS HCO3)	39	123.	120.872	176.	61.	565.536	23.781	86.	110.	134.	151.
00445	CARBONATE ION (MG/L AS CO3)	39	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	39	0.4	0.412	0.86	0.23	0.016	0.127	0.25	0.32	0.48	0.57
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	39	120.	117.308	162.	62.	454.745	21.325	88.	106.	128.	145.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	39	18.	18.282	24.	10.	11.576	3.402	14.	16.	21.	23.
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	39	35.	34.205	45.	19.	47.325	6.879	25.	29.	39.	44.
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	39	8.1	7.756	13.	2.8	5.731	2.394	3.9	6.2	9.4	11.
00930	SODIUM, DISSOLVED (MG/L AS Na)	39	8.5	8.426	14.	3.4	5.917	2.432	5.3	6.7	10.	12.
00931	SODIUM ADSORPTION RATIO	39	0.3	0.351	0.5	0.2	0.007	0.085	0.2	0.3	0.4	0.5
00932	SODIUM, PERCENT	39	13.	13.077	18.	7.	6.494	2.548	10.	11.	15.	17.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	39	2.3	2.426	4.	1.1	0.497	0.705	1.6	2.	3.1	3.5
00940	CHLORIDE, TOTAL IN WATER MG/L	39	11.	10.487	15.	5.	6.099	2.47	7.	9.	12.	14.
00945	SULFATE, TOTAL (MG/L AS SO4)	39	19.	19.41	27.	12.	12.564	3.545	14.	17.	22.	25.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	39	0.1	0.141	0.3	0.	0.005	0.072	0.1	0.1	0.2	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	39	3.2	3.567	7.3	0.4	4.576	2.139	0.9	1.6	5.8	6.6
01046	IRON, DISSOLVED (UG/L AS FE)	39	10.	12.051	60.	0.	211.471	14.542	0.	0.	20.	40.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	39	160.	155.923	198.	91.	666.547	25.818	116.	141.	175.	188.
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	39	153.	150.077	196.	86.	638.073	25.26	112.	136.	166.	177.
70302	SOLIDS, DISSOLVED-TONS PER DAY	11	374.	452.364	848.	283.	32616.655	180.601	288.8	325.	615.	807.6
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	39	0.22	0.211	0.27	0.12	0.001	0.036	0.16	0.19	0.24	0.26
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	39	3.8	3.805	6.4	0.7	1.505	1.227	2.3	3.2	4.4	5.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	47	14.	14.489	28.	2.	72.429	8.511	4.	6.	23.	25.2
00060	FLOW, STREAM, MEAN DAILY CFS	50	1055.	1304.5	4160.	281.	988554.296	994.261	315.5	528.25	1805.	2678.
00080	COLOR (PLATINUM-COBALT UNITS)	50	5.	8.08	25.	0.	27.463	5.241	3.2	5.	10.	15.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	50	273.5	279.28	430.	151.	5267.104	72.575	181.2	224.75	334.	390.
00400	PH (STANDARD UNITS)	50	7.6	7.606	8.1	7.1	0.061	0.246	7.3	7.4	7.8	7.9
00400	CONVERTED PH (STANDARD UNITS)	50	7.6	7.539	8.1	7.1	0.065	0.255	7.3	7.4	7.8	7.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	50	0.025	0.029	0.079	0.008	0.	0.017	0.013	0.016	0.04	0.05
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	50	107.	108.32	161.	50.	897.487	29.958	66.	84.	130.	155.5
00440	BICARBONATE ION (MG/L AS HCO3)	50	131.	131.78	196.	61.	1297.522	36.021	80.1	102.75	158.25	184.
00445	CARBONATE ION (MG/L AS CO3)	50	0.	0.18	9.	0.	1.62	1.273	0.	0.	0.	0.
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	50	0.375	0.468	1.1	0.08	0.069	0.263	0.191	0.248	0.692	0.799
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	50	122.5	125.9	182.	62.	967.888	31.111	84.4	100.	148.5	168.5
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	50	18.	17.96	26.	10.	12.366	3.516	14.	16.	20.	23.9
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	50	34.	34.78	50.	18.	62.175	7.885	25.	28.75	42.25	45.
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	50	9.1	9.452	16.	3.9	10.14	3.184	6.	7.225	11.	15.
00930	SODIUM, DISSOLVED (MG/L AS Na)	50	8.	9.582	20.	3.2	21.644	4.652	4.66	6.	12.25	17.9
00931	SODIUM ADSORPTION RATIO	50	0.3	0.364	0.7	0.2	0.02	0.141	0.2	0.3	0.425	0.6
00932	SODIUM, PERCENT	50	12.	13.32	21.	9.	9.079	3.013	10.	11.	16.	17.9
00935	POTASSIUM, DISSOLVED (MG/L AS K)	50	2.35	2.578	5.	1.2	1.308	1.144	1.3	1.6	3.6	4.48
00940	CHLORIDE, TOTAL IN WATER MG/L	50	10.5	11.52	22.	5.	18.867	4.344	6.1	8.	15.	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	50	18.5	20.22	35.	10.	29.563	5.437	15.	16.	23.	28.9
00950	FLUORIDE, DISSOLVED (MG/L AS F)	50	0.1	0.144	0.2	0.1	0.003	0.05	0.1	0.1	0.2	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/05/30-06/17/86	50	5.	4.318	7.3	0.4	4.335	2.082	1.1	2.3	6.	6.6
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	50	20.	23.4	70.	0.	414.735	20.365	0.	10.	32.5	60.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	50	162.5	168.18	252.	87.	1802.232	42.453	116.3	132.	201.25	231.9
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	50	155.5	162.42	245.	86.	1751.473	41.851	112.2	127.	199.25	223.6
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	50	417.	503.24	1420.	157.	84258.798	290.274	196.3	293.5	630.	954.8
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	50	0.22	0.229	0.34	0.12	0.003	0.057	0.16	0.18	0.27	0.319
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	50	4.45	4.498	18.	1.4	4.93	2.22	2.45	3.675	5.	5.68

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	44	16.	14.932	25.	2.	61.925	7.869	3.	8.	22.75	25.
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	44	1270.	1635.455	5920.	399.	1418546.021	1191.027	592.	835.	2015.	3350.
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	44	5.	7.	20.	0.	21.349	4.62	3.	5.	10.	15.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	44	280.	270.932	380.	146.	3969.042	63.	189.	220.	316.75	370.
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	44	7.7	7.675	8.1	7.3	0.041	0.202	7.4	7.5	7.8	7.95
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	44	7.7	7.63	8.1	7.3	0.043	0.208	7.4	7.5	7.8	7.95
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	44	0.02	0.023	0.05	0.008	0.	0.011	0.011	0.016	0.032	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	44	103.	103.841	148.	51.	620.369	24.907	69.	84.75	119.75	143.
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	44	125.5	126.614	181.	62.	921.824	30.362	84.	103.75	145.75	174.
00445	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	44	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	6	1.15	1.15	1.4	0.9	0.035	0.187	**	**	**	**
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	10/30/67-09/25/71	38	0.31	0.399	0.85	0.14	0.052	0.229	0.159	0.21	0.573	0.783
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	44	120.	121.159	170.	66.	760.509	27.577	84.5	100.	140.	160.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	44	16.	17.182	24.	10.	15.082	3.884	12.	14.	20.	23.
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	44	33.	32.523	46.	19.	48.999	7.	23.5	26.25	38.	42.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	44	9.9	9.673	15.	4.5	6.886	2.624	5.85	7.85	11.	14.
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	44	7.6	7.789	15.	3.4	9.296	3.049	4.15	5.4	9.475	12.5
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	44	0.3	0.305	0.5	0.2	0.009	0.096	0.2	0.2	0.4	0.45
00932	SODIUM, PERCENT	10/30/67-12/17/85	44	11.	11.773	17.	7.	6.087	2.467	9.	10.	13.	16.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	44	2.1	2.33	3.8	1.5	0.433	0.658	1.55	1.825	2.775	3.45
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	44	9.5	9.75	18.	5.	7.913	2.813	6.5	8.	12.	13.5
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	44	17.	17.773	25.	12.	14.645	3.827	13.	15.25	19.75	24.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	44	0.1	0.123	0.2	0.1	0.002	0.042	0.1	0.1	0.1	0.2
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/05/30-06/17/86	44	5.7	4.8	9.8	0.2	7.192	2.682	1.05	2.3	6.975	8.
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	44	10.	21.364	180.	0.	1295.772	35.997	0.	0.	20.	65.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	44	156.5	158.023	218.	93.	1114.813	33.389	113.	134.5	179.75	209.
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	44	152.	152.227	213.	86.	1113.156	33.364	109.	125.	172.75	207.
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	44	511.5	623.205	1930.	233.	118798.166	344.671	321.	380.75	790.	1080.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	44	0.21	0.214	0.3	0.13	0.002	0.045	0.15	0.18	0.24	0.28
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	38	5.15	4.916	7.2	2.4	1.337	1.156	3.36	4.1	5.8	6.22

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	24	15.	15.375	27.	4.	51.462	7.174	5.5	10.	22.75	26.
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	24	1705.	2967.083	14800.	600.	10405978.08	3225.83	660.	870.	4005.	7320.
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	24	10.	13.417	35.	5.	78.862	8.88	5.	5.5	20.	27.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	24	255.	258.042	400.	155.	3978.476	63.075	175.	209.25	307.5	347.5
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	24	7.7	7.733	8.1	7.3	0.049	0.222	7.45	7.525	7.9	8.1
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	24	7.7	7.68	8.1	7.3	0.052	0.229	7.45	7.525	7.9	8.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	24	0.02	0.021	0.05	0.008	0.	0.011	0.008	0.013	0.03	0.036
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	24	97.5	98.667	152.	52.	787.797	28.068	57.5	76.5	117.	147.5
00440	BICARBONATE ION (MG/L AS HCO3)	24	118.5	120.25	185.	64.	1168.804	34.188	70.	93.5	143.	179.5
00445	CARBONATE ION (MG/L AS CO3)	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	24	1.05	1.113	2.	0.6	0.127	0.357	0.75	0.825	1.35	1.65
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	24	110.	113.792	180.	64.	901.563	30.026	73.5	91.5	130.	160.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	24	15.5	15.708	24.	8.	17.781	4.217	10.	12.25	18.	22.5
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	24	30.	30.958	47.	18.	56.737	7.532	21.5	26.	35.75	43.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	24	8.3	8.983	14.	4.4	8.397	2.898	5.05	6.45	11.	13.5
00930	SODIUM, DISSOLVED (MG/L AS Na)	24	5.75	6.492	13.	3.1	6.519	2.553	3.7	4.65	8.4	10.
00931	SODIUM ADSORPTION RATIO	24	0.3	0.267	0.4	0.2	0.005	0.07	0.2	0.2	0.3	0.4
00932	SODIUM, PERCENT	24	11.	10.583	14.	7.	4.688	2.165	8.	8.25	12.	14.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	24	2.2	2.213	3.5	1.4	0.328	0.573	1.55	1.7	2.675	3.05
00940	CHLORIDE, TOTAL IN WATER MG/L	24	7.	7.875	14.	5.	5.592	2.365	5.	6.	9.75	11.5
00945	SULFATE, TOTAL (MG/L AS SO4)	24	16.	17.25	26.	13.	12.109	3.48	14.	15.	19.	23.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	24	0.1	0.125	0.2	0.1	0.002	0.044	0.1	0.1	0.175	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	24	5.	4.671	8.8	0.7	5.396	2.323	1.05	3.025	6.5	7.5
01046	IRON, DISSOLVED (UG/L AS FE)	24	10.	13.75	80.	0.	307.065	17.523	0.	1.25	20.	35.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	24	147.5	150.625	226.	94.	1148.592	33.891	111.5	122.	172.5	205.5
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	24	140.	142.75	223.	86.	1172.022	34.235	101.5	115.	165.5	198.
70302	SOLIDS, DISSOLVED-TONS PER DAY	24	625.	1066.542	4280.	328.	992720.694	996.354	352.5	421.5	1292.5	2660.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	23	0.2	0.204	0.31	0.13	0.002	0.047	0.154	0.16	0.23	0.282
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	6	4.65	5.55	8.9	4.	4.035	2.009	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	23	16.	17.609	29.	4.	79.067	8.892	6.	9.	28.	29.
00060	FLOW, STREAM, MEAN DAILY CFS	24	1635.	1850.083	4820.	480.	1591993.21	1261.742	556.	725.	3017.5	3715.
00080	COLOR (PLATINUM-COBALT UNITS)	24	20.	17.625	27.	5.	61.636	7.851	5.	10.	25.	26.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	24	286.	279.375	370.	155.	3763.114	61.344	187.	226.25	330.	357.5
00400	PH (STANDARD UNITS)	24	7.7	7.75	8.3	7.3	0.054	0.232	7.4	7.6	7.9	8.05
00400	CONVERTED PH (STANDARD UNITS)	24	7.7	7.692	8.3	7.3	0.057	0.24	7.4	7.6	7.9	8.05
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	24	0.02	0.02	0.05	0.005	0.	0.011	0.009	0.013	0.025	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	24	112.	107.625	147.	56.	658.071	25.653	70.5	84.	130.	139.5
00440	BICARBONATE ION (MG/L AS HCO3)	24	136.5	131.292	179.	68.	980.911	31.32	86.	102.25	159.	170.
00445	CARBONATE ION (MG/L AS CO3)	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	24	1.1	1.179	3.6	0.4	0.377	0.614	0.6	0.825	1.3	1.75
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	6	0.655	0.683	0.98	0.4	0.065	0.254	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	6	0.215	0.223	0.32	0.13	0.007	0.083	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	24	125.	120.5	160.	62.	692.957	26.324	86.	94.5	140.	156.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	24	12.	12.583	20.	6.	16.341	4.042	7.	9.25	15.	19.
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	24	34.	32.417	41.	18.	35.123	5.926	25.	27.	36.75	40.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	24	9.75	9.529	14.	4.2	7.653	2.766	5.6	7.05	12.	13.
00930	SODIUM, DISSOLVED (MG/L AS Na)	24	6.9	7.25	12.	2.8	8.384	2.896	3.5	4.425	9.675	11.5
00931	SODIUM ADSORPTION RATIO	24	0.3	0.283	0.4	0.1	0.008	0.092	0.2	0.2	0.4	0.4
00932	SODIUM, PERCENT	24	10.5	10.958	15.	7.	5.694	2.386	8.	9.	13.	14.5
00935	POTASSIUM, DISSOLVED (MG/L AS K)	24	2.35	2.354	3.8	1.2	0.626	0.791	1.45	1.6	3.05	3.45
00940	CHLORIDE, TOTAL IN WATER MG/L	24	9.	8.958	15.	4.	8.216	2.866	5.	7.	11.	12.5
00945	SULFATE, TOTAL (MG/L AS SO4)	24	16.5	17.583	26.	9.	16.775	4.096	13.	15.	20.75	23.5
00950	FLUORIDE, DISSOLVED (MG/L AS F)	24	0.1	0.133	0.3	0.1	0.003	0.056	0.1	0.1	0.2	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	24	5.2	5.008	7.	1.2	3.13	1.769	1.75	4.025	6.4	6.9
01046	IRON, DISSOLVED (UG/L AS FE)	24	20.	16.458	70.	5.	224.955	14.998	5.	5.	20.	35.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	24	158.	158.875	213.	88.	1289.332	35.907	107.	126.5	192.5	204.5
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	24	155.5	153.25	201.	83.	1115.5	33.399	107.	123.5	183.25	193.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	24	682.	687.833	1280.	244.	110618.754	332.594	306.5	368.5	1016.75	1175.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	24	0.215	0.217	0.29	0.12	0.002	0.049	0.145	0.175	0.26	0.28
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	24	4.9	5.225	16.	1.8	7.465	2.732	2.65	3.625	5.8	7.75

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	23	15.	14.239	24.	5.	53.406	7.308	5.4	7.	22.	23.
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	24	935.	1395.042	4820.	346.	1417222.042	1190.471	408.5	525.	1645.	3600.
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	24	8.	9.167	25.	0.	41.188	6.418	1.	5.	13.75	20.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	24	288.	284.583	381.	149.	4997.819	70.695	177.5	220.	348.25	370.5
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	11	7.7	7.582	7.9	6.9	0.09	0.299	6.96	7.5	7.8	7.88
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	11	7.7	7.465	7.9	6.9	0.105	0.324	6.96	7.5	7.8	7.88
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	11	0.02	0.034	0.126	0.013	0.001	0.033	0.013	0.016	0.032	0.113
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	24	115.	114.792	165.	57.	1015.216	31.862	73.	82.5	140.5	158.5
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	24	140.	140.042	201.	70.	1510.65	38.867	88.5	100.75	171.5	193.5
00445	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	13	0.01	0.024	0.17	0.005	0.002	0.046	0.005	0.005	0.01	0.126
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	24	1.3	1.244	1.8	0.5	0.116	0.34	0.655	1.1	1.5	1.6
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	13	1.3	1.277	1.8	0.7	0.129	0.359	0.7	0.95	1.5	1.76
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	24	0.46	0.6	1.3	0.03	0.142	0.377	0.185	0.28	0.913	1.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	24	0.15	0.196	0.42	0.01	0.015	0.124	0.06	0.09	0.298	0.395
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	24	130.	130.958	180.	65.	1132.737	33.656	88.	101.	160.	175.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	24	16.	16.042	30.	6.	26.129	5.112	9.5	12.5	19.25	23.
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	24	34.	34.75	46.	18.	60.37	7.77	24.5	27.75	41.75	44.5
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	24	9.95	10.675	17.	4.8	13.025	3.609	6.55	7.4	14.	16.
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	24	8.1	9.517	18.	2.8	22.169	4.708	4.05	5.775	15.	16.5
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	24	0.3	0.354	0.6	0.2	0.015	0.122	0.2	0.3	0.5	0.5
00932	SODIUM, PERCENT	10/30/67-12/17/85	24	12.	12.583	17.	8.	9.471	3.078	8.	10.25	16.	17.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	24	2.2	2.608	4.4	1.7	0.797	0.893	1.7	1.825	3.5	4.
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	24	10.	11.208	20.	4.	20.694	4.549	5.5	8.	15.	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	24	17.	19.542	29.	11.	28.085	5.3	14.	16.	23.75	28.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	24	0.1	0.129	0.3	0.05	0.004	0.066	0.05	0.1	0.2	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	24	3.55	3.917	7.6	0.6	6.351	2.52	0.65	1.325	6.55	7.15
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	21 ##	5.	25.476	90.	5.	872.262	29.534	5.	5.	45.	88.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	24	164.5	178.208	276.	92.	2701.042	51.972	119.5	133.	220.	259.
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	24	157.5	167.542	239.	88.	1939.998	44.045	116.	126.75	211.	227.5
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	24	427.5	546.958	1280.	250.	92102.129	303.483	272.5	309.25	643.75	1120.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	24	0.225	0.243	0.38	0.13	0.005	0.07	0.16	0.183	0.298	0.35
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	24	5.8	5.521	8.	2.2	2.303	1.517	2.9	4.825	6.6	7.2
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	13	0.03	0.07	0.56	0.	0.025	0.157	0.	0.	0.03	0.416

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	22	13.5	14.455	27.	1.	62.831	7.927	4.3	8.	22.25	26.4
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	22	1245.	1505.455	4820.	590.	976425.974	988.143	669.	772.5	2022.5	2857.
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	22	3.5	4.636	16.	0.	24.433	4.943	0.	0.	8.25	13.5
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	22	239.	234.682	320.	124.	3196.132	56.534	153.	197.5	291.25	314.1
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	22	111.5	106.045	136.	66.	496.712	22.287	67.8	86.25	124.75	132.5
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	22	136.	129.273	166.	80.	736.874	27.145	83.1	105.	152.	161.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	21	0.01	0.017	0.12	0.005	0.001	0.028	0.005	0.001	0.062
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	21	1.2	1.266	1.8	0.68	0.077	0.277	0.862	1.1	1.45
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	21	1.3	1.281	1.8	0.7	0.071	0.266	0.9	1.15	1.45
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	21	0.4	0.471	0.98	0.18	0.051	0.225	0.218	0.295	0.645
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	21	0.13	0.153	0.32	0.06	0.005	0.073	0.072	0.095	0.21
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	22	120.	122.545	160.	84.	552.736	23.51	86.5	99.25	140.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	22	18.	16.5	27.	0.	45.881	6.774	3.	14.	20.25
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	22	33.5	32.864	42.	23.	33.171	5.759	24.3	26.75	37.25
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/05/30-06/17/86	22	9.85	9.609	13.	5.8	4.843	2.201	6.35	7.875	11.25
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	22	6.05	6.414	11.	3.4	3.6	1.897	3.95	5.3	7.325
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	22	0.2	0.255	0.4	0.2	0.005	0.067	0.2	0.3	0.37
00932	SODIUM, PERCENT	10/30/67-12/17/85	22	10.	10.091	13.	7.	2.468	1.571	7.6	9.	11.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	22	2.15	2.209	3.3	1.6	0.223	0.472	1.63	1.8	2.5
00940	CHLORIDE, TOTAL IN WATER (MG/L)	09/05/30-06/17/86	22	8.	7.909	12.	4.	3.325	1.823	6.	6.75	9.
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	22	15.	15.318	22.	12.	5.942	2.438	12.	13.75	16.25
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	22	0.2	0.152	0.3	0.05	0.005	0.068	0.05	0.1	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	22	5.8	4.923	9.8	0.9	6.288	2.507	1.24	2.475	6.375
01046	IRON, DISSOLVED (UG/L AS Fe)	10/30/67-06/17/86	22 ##	5.	8.864	40.	5.	102.219	10.11	5.	5.	30.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	22	160.5	155.091	212.	99.	753.61	27.452	118.6	132.5	172.25
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	22	155.5	148.955	193.	106.	654.331	25.58	108.3	129.	166.75
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	22	560.	585.818	1290.	287.	79301.775	281.606	301.8	356.75	756.25
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	22	0.22	0.21	0.29	0.13	0.001	0.038	0.16	0.178	0.233
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	21	5.4	5.6	8.	3.	1.516	1.231	3.82	4.8	6.4
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	21	0.03	0.046	0.39	0.	0.009	0.094	0.	0.	0.03

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	13	12.	13.462	25.	0.	85.144	9.227	1.6	5.5	24.
00060	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	11	1100.	1514.364	5330.	282.	2242113.255	1497.369	308.2	557.	1770.
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	13	0.	1.692	5.	0.	5.564	2.359	0.	0.	5.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	13	300.	286.	340.	215.	1975.333	44.445	218.2	237.5	325.
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	13	109.	108.385	141.	71.	436.923	20.903	77.	90.	128.5
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	13	133.	132.154	172.	87.	644.641	25.39	94.2	110.	156.5
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	13 ##	0.005	0.013	0.05	0.005	0.	0.014	0.005	0.005	0.02
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	12	1.3	1.112	1.5	0.52	0.101	0.318	0.574	0.795	1.3
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	13	1.3	1.077	1.5	0.5	0.117	0.342	0.54	0.75	1.3
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	13	0.28	0.353	0.55	0.21	0.014	0.12	0.226	0.25	0.475
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	13	0.09	0.115	0.18	0.07	0.002	0.04	0.074	0.08	0.155
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	13	130.	127.	160.	91.	433.667	20.825	94.6	110.	145.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	13	20.	18.923	29.	9.	36.077	6.006	10.2	13.	24.5
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	13	35.	34.	40.	25.	20.833	4.564	26.2	31.	38.
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/05/30-06/17/86	13	10.	10.323	14.	7.	4.379	2.093	7.44	8.25	12.
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	13	7.2	7.538	13.	3.6	6.924	2.631	4.12	5.4	9.8
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	13	0.3	0.292	0.5	0.2	0.009	0.095	0.2	0.2	0.35
00932	SODIUM, PERCENT	10/30/67-12/17/85	13	11.	11.077	16.	8.	5.41	2.326	8.	9.	13.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	13	2.	2.038	2.6	1.5	0.139	0.373	1.5	1.7	2.4
00940	CHLORIDE, TOTAL IN WATER (MG/L)	09/05/30-06/17/86	13	8.	8.462	13.	5.	4.603	2.145	5.4	7.	10.
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	13	16.	16.231	21.	12.	6.526	2.555	12.8	14.5	18.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	13	0.2	0.173	0.3	0.05	0.004	0.067	0.07	0.1	0.2
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	13	5.5	4.885	7.3	1.	4.385	2.094	1.16	3.6	6.9
01046	IRON, DISSOLVED (UG/L AS Fe)	10/30/67-06/17/86	13 ##	5.	5.	5.	5.	0.	0.	5.	5.	5.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	13	148.	157.846	211.	129.	763.308	27.628	129.	133.	181.5
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	13	152.	153.923	191.	110.	571.41	23.904	119.2	134.	177.5
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	13	511.	631.923	2480.	145.	377688.077	614.563	171.	216.5	725.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	13	0.2	0.215	0.29	0.18	0.001	0.036	0.18	0.185	0.245	0.278
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	12	5.65	4.925	6.6	2.3	1.938	1.392	2.54	3.55	5.8	6.45
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	13	0.	0.033	0.16	0.	0.003	0.052	0.	0.	0.07	0.136

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	11	13.5	15.318	27.5	5.	66.164	8.134	5.2	7.	24.	27.2
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	11	10.	7.636	19.	0.	28.255	5.316	0.4	3.	10.	17.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	11	325.	306.091	419.	170.	8400.691	91.655	175.	215.	398.	416.2
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	11	130.	116.909	160.	58.	1597.091	39.964	60.	80.	150.	160.
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	11	154.	141.455	200.	71.	2284.673	47.798	73.4	98.	180.	198.
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	10 ##	0.005	0.012	0.06	0.005	0.	0.017	0.005	0.005	0.01	0.055
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	10	1.15	1.142	1.6	0.49	0.141	0.376	0.509	0.883	1.5	1.59
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	10	1.2	1.16	1.6	0.5	0.134	0.366	0.52	0.925	1.5	1.59
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	10	0.69	0.755	1.4	0.06	0.209	0.458	0.085	0.378	1.175	1.4
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	10	0.225	0.245	0.45	0.02	0.022	0.147	0.028	0.123	0.388	0.449
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	11	120.	130.545	170.	75.	1356.673	36.833	77.4	94.	170.	170.
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	11	19.	17.273	25.	0.	46.818	6.842	2.6	14.	22.	24.8
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	11	39.	35.455	45.	20.	89.473	9.459	20.8	26.	44.	45.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	11	9.2	9.882	15.	1.5	19.75	4.444	2.42	6.5	14.	15.
00930	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	11	12.	12.718	21.	5.4	40.782	6.386	5.46	6.	20.	20.8
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	11	0.4	0.491	0.8	0.3	0.037	0.192	0.3	0.3	0.7	0.78
00932	SODIUM, PERCENT	10/30/67-12/17/85	11	15.	16.455	26.	11.	21.273	4.612	11.2	12.	20.	25.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	11	2.6	2.845	4.2	1.8	0.897	0.947	1.8	1.9	3.8	4.16
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	11	12.	12.273	19.	6.	25.018	5.002	6.2	7.	17.	18.6
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	11	22.	22.	32.	13.	44.6	6.678	13.2	16.	27.	31.8
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	11	0.1	0.086	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
00955	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	11	3.9	5.227	15.	0.5	18.562	4.308	0.54	2.3	8.4	13.88
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	11 ##	5.	7.727	20.	5.	36.818	6.068	5.	5.	5.	20.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/05/30-06/17/86	11	195.	184.182	243.	109.	2493.164	49.932	111.	141.	233.	243.
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	11	184.	175.364	241.	98.	3030.655	55.051	100.8	116.	230.	239.
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	11	236.	460.364	1710.	138.	215247.855	463.948	146.8	194.	676.	1519.2
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	11	0.27	0.252	0.33	0.15	0.005	0.068	0.152	0.19	0.32	0.33
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	10	5.2	5.06	7.	2.2	2.685	1.639	2.28	3.9	6.6	6.96
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	10	0.	0.029	0.2	0.	0.004	0.062	0.	0.	0.03	0.183

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	5	10.	12.3	22.5	6.	40.7	6.38	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	5	10.	18.	55.	5.	445.	21.095	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	5	330.	315.6	405.	223.	4659.3	68.259	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	5	130.	123.8	160.	79.	952.2	30.858	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	5	160.	151.2	200.	96.	1577.2	39.714	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	5 ##	0.005	0.006	0.01	0.005	0.	0.002	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	5	1.2	1.154	1.5	0.77	0.079	0.28	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	5	1.2	1.16	1.5	0.8	0.073	0.27	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	5	0.37	0.484	1.1	0.	0.243	0.493	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	5	0.12	0.161	0.37	0.005	0.027	0.163	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	5	150.	138.8	170.	94.	977.2	31.26	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	5	15.	15.2	22.	9.	25.7	5.07	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	5	40.	36.2	43.	27.	46.7	6.834	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	5	12.	11.9	16.	6.5	14.8	3.847	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	5	8.9	10.3	16.	5.5	24.305	4.93	**	**	**	**
00931	SODIUM ADSORPTION RATIO	5	0.3	0.34	0.5	0.2	0.023	0.152	**	**	**	**
00932	SODIUM, PERCENT	5	11.	12.8	16.	10.	8.7	2.95	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	5	2.6	2.64	3.2	1.9	0.253	0.503	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	5	9.	11.	16.	8.	14.	3.742	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	5	18.	20.	26.	15.	26.5	5.148	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	5	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	5	2.2	2.66	5.3	0.4	4.693	2.166	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS Fe)	5##	5.	17.	40.	5.	282.5	16.808	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	5	180.	183.	229.	138.	1488.	38.575	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	5	179.	175.	226.	124.	1851.	43.023	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	5	397.	1835.2	7600.	254.	10402975.7	3225.364	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	5	0.24	0.248	0.31	0.19	0.003	0.051	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	5	5.3	5.1	6.6	3.4	1.54	1.241	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	5	0.	0.006	0.03	0.	0.	0.013	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	16.	13.786	26.5	2.	86.655	9.309	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	7	10.	17.571	70.	3.	566.286	23.797	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	7	240.	247.857	350.	190.	2884.81	53.71	**	**	**	**
00400	PH (STANDARD UNITS)	6	8.	8.017	8.9	7.3	0.342	0.585	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	6	8.	7.749	8.9	7.3	0.428	0.654	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	6	0.01	0.018	0.05	0.001	0.	0.019	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	7	90.	92.857	140.	63.	833.476	28.87	**	**	**	**
00440	BICARBONATE ION (MG/L AS HCO3)	5	110.	117.4	170.	77.	1728.8	41.579	**	**	**	**
00445	CARBONATE ION (MG/L AS CO3)	4	0.	0.	0.	0.	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	7	0.01	0.013	0.03	0.005	0.	0.009	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	7	1.3	1.17	1.6	0.6	0.123	0.35	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	7	1.3	1.171	1.6	0.6	0.122	0.35	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	7	0.15	0.249	0.61	0.	0.043	0.206	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	7	0.05	0.082	0.2	0.005	0.004	0.066	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	7	100.	108.	160.	78.	908.	30.133	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	7	12.	13.571	21.	6.	25.619	5.062	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	7	27.	29.286	41.	21.	49.571	7.041	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS Mg)	7	8.2	8.143	13.	5.2	7.613	2.759	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	7	6.7	6.314	9.2	3.2	4.215	2.053	**	**	**	**
00931	SODIUM ADSORPTION RATIO	7	0.3	0.257	0.3	0.2	0.003	0.053	**	**	**	**
00932	SODIUM, PERCENT	7	11.	11.429	15.	9.	4.952	2.225	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	7	2.2	2.257	3.3	1.6	0.306	0.553	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	7	9.	9.429	14.	6.	7.619	2.76	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	7	15.	14.714	18.	12.	4.905	2.215	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	7	0.1	0.093	0.1	0.05	0.	0.019	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	7	5.7	6.	8.5	4.2	2.22	1.49	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS Fe)	7	20.	17.857	50.	5.	257.143	16.036	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	7	142.	147.429	203.	93.	1571.952	39.648	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	7	139.	137.571	193.	98.	1068.286	32.685	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	7	700.	1472.286	3970.	380.	2118807.238	1455.612	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	7	0.19	0.201	0.28	0.13	0.003	0.053	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	7	5.7	5.171	7.	2.7	2.292	1.514	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	7	0.03	0.041	0.1	0.	0.001	0.033	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	8	16.	14.75	27.5	2.	87.357	9.347	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	8	5.	3.875	7.	0.	5.554	2.357	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	8	340.	317.875	424.	190.	6704.696	81.882	**	**	**	**
00400	PH (STANDARD UNITS)	8	7.9	7.788	8.3	7.2	0.193	0.439	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	8	7.889	7.596	8.3	7.2	0.235	0.484	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	8	0.013	0.025	0.063	0.005	0.001	0.025	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	6	120.	115.	150.	66.	1212.4	34.82	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	8	0.015	0.019	0.03	0.01	0.	0.01	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	8	1.2	1.181	1.9	0.54	0.188	0.433	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	8	1.2	1.188	1.9	0.6	0.178	0.422	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	8	0.25	0.311	0.8	0.03	0.071	0.267	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	8	0.08	0.101	0.26	0.01	0.008	0.087	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	8	145.	136.375	190.	81.	1210.839	34.797	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	8	12.5	10.125	17.	0.	40.696	6.379	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	8	38.	35.5	46.	22.	57.429	7.578	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	8	12.	11.85	18.	6.3	15.366	3.92	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	8	10.2	10.025	15.	4.4	18.896	4.347	**	**	**	**
00931	SODIUM ADSORPTION RATIO	8	0.35	0.35	0.5	0.2	0.014	0.12	**	**	**	**
00932	SODIUM, PERCENT	8	13.5	13.625	18.	9.	12.268	3.503	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	8	1.95	2.188	3.5	1.3	0.641	0.801	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	8	10.	9.625	17.	4.	15.125	3.889	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	8	18.5	19.	28.	11.	34.857	5.904	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	8	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	8	4.15	4.081	8.2	0.05	6.976	2.641	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	8	10.	20.625	90.	0.	831.696	28.839	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	8	187.5	181.625	233.	116.	1984.554	44.548	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	8	186.5	174.125	223.	100.	2026.125	45.012	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	8	483.	555.125	1330.	237.	112355.839	335.195	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	8	0.255	0.248	0.32	0.16	0.004	0.06	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	8	5.15	5.163	8.3	2.4	3.58	1.892	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	8	0.05	0.061	0.1	0.03	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	8	15.5	14.25	24.	0.	66.786	8.172	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	8	2.5	3.688	10.	2.	7.424	2.725	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	8	351.	336.125	416.	210.	5063.554	71.159	**	**	**	**
00400	PH (STANDARD UNITS)	8	8.5	8.575	9.1	8.2	0.111	0.333	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	8	8.489	8.476	9.1	8.2	0.122	0.349	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	8	0.003	0.003	0.006	0.001	0.	0.002	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	8 ##	0.005	0.009	0.03	0.005	0.	0.009	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	3	1.4	1.517	2.2	0.95	0.401	0.633	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	8	0.85	1.	2.2	0.5	0.326	0.571	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	8	0.55	0.553	0.8	0.12	0.046	0.215	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	8	0.18	0.18	0.26	0.04	0.005	0.069	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	8	140.	133.5	190.	88.	938.	30.627	**	**	**	**
00902	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	6	15.5	15.167	24.	6.	41.367	6.432	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	8	35.5	34.625	49.	24.	60.268	7.763	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	8	11.5	11.35	16.	6.8	7.951	2.82	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS Na)	8	15.	14.713	22.	7.	24.718	4.972	**	**	**	**
00931	SODIUM ADSORPTION RATIO	8	0.65	0.575	0.9	0.3	0.048	0.219	**	**	**	**
00932	SODIUM, PERCENT	8	19.5	18.75	25.	12.	24.786	4.979	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	8	2.75	3.013	5.8	1.9	1.401	1.184	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	8	12.5	12.75	16.	8.	6.786	2.605	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	8	27.	26.	35.	16.	44.286	6.655	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	8	0.1	0.1	0.2	0.05	0.002	0.046	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/05/30-06/17/86	8	1.75	2.325	5.5	0.05	5.61	2.369	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	8	6.	13.375	40.	5.	159.696	12.637	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	8	206.	195.875	241.	127.	1511.268	38.875	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	8	190.	178.	227.	110.	1405.143	37.485	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	8	207.5	247.375	408.	166.	8387.696	91.584	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	8	0.28	0.265	0.33	0.17	0.003	0.054	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	3	6.2	6.7	9.7	4.2	7.75	2.784	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	3	0.03	0.053	0.1	0.03	0.002	0.04	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	8	14.25	14.938	26.	1.5	68.96	8.304	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	8	6.5	7.813	15.	0.5	25.996	5.099	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	8	260.	280.75	385.	179.	6844.786	82.733	**	**	**	**
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	8	8.25	8.275	9.	7.4	0.371	0.609	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	8	8.247	7.927	9.	7.4	0.509	0.713	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	8	0.006	0.012	0.04	0.001	0.	0.015	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	8	0.02	0.02	0.05	0.005	0.	0.015	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	6	1.35	1.4	1.8	1.1	0.056	0.237	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	8	1.3	1.35	1.8	1.1	0.051	0.227	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	8	0.46	0.418	0.77	0.15	0.042	0.205	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	8	0.15	0.136	0.25	0.05	0.004	0.066	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	8	110.	118.25	170.	68.	1701.357	41.248	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/05/30-06/17/86	8	29.5	31.5	44.	18.	103.714	10.184	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	8	8.6	9.663	15.	5.1	15.603	3.95	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/05/30-06/17/86	8	6.3	8.788	17.	5.5	19.698	4.438	**	**	**	**
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	8	0.3	0.363	0.6	0.2	0.017	0.13	**	**	**	**
00932	SODIUM, PERCENT	10/30/67-12/17/85	8	14.5	13.375	17.	7.	9.411	3.068	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	8	2.15	2.1	2.7	1.5	0.234	0.484	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	8	9.	9.	12.	6.	4.	2.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	8	17.	19.	26.	15.	20.	4.472	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	8 ##	0.075	0.087	0.2	0.05	0.003	0.052	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/05/30-06/17/86	8	3.75	3.813	8.5	0.4	8.824	2.971	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	8	16.	24.813	84.	1.5	709.996	26.646	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	8	149.	161.875	220.	110.	1983.554	44.537	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	8	137.5	148.75	213.	97.	2174.786	46.635	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	7	529.	501.429	669.	274.	23469.952	153.199	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	8	0.205	0.221	0.3	0.15	0.004	0.061	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	6	6.	6.217	8.	4.9	1.082	1.04	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	6	0.07	0.083	0.16	0.03	0.002	0.044	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	7	18.5	14.857	25.5	0.	87.559	9.357	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	7	8.	11.143	20.	5.	40.476	6.362	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	7	324.	284.857	383.	190.	6337.476	79.608	**	**	**	**
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	7	8.8	8.657	9.1	7.9	0.196	0.443	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00400	CONVERTED PH (STANDARD UNITS)	7	8.8	8.447	9.1	7.9	0.247	0.497	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.002	0.004	0.013	0.001	0.	0.004	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	7	0.01	0.014	0.03	0.005	0.	0.011	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	4	1.15	1.178	1.5	0.91	0.061	0.246	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	7	1.1	1.143	1.6	0.8	0.096	0.31	**	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	2	0.23	0.23	0.28	0.18	0.005	0.071	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	6	0.145	0.157	0.26	0.06	0.007	0.081	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	2	110.5	110.5	140.	81.	1740.5	41.719	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	7	35.	32.429	41.	22.	66.619	8.162	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	7	12.	10.9	15.	6.2	13.77	3.711	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	7	10.	9.543	14.	3.9	15.58	3.947	**	**	**	**
00931	SODIUM ADSORPTION RATIO	2	0.35	0.35	0.5	0.2	0.045	0.212	**	**	**	**
00932	SODIUM, PERCENT	2	13.5	13.5	16.	11.	12.5	3.536	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	7	2.	2.086	3.1	1.1	0.578	0.76	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	7	10.	9.	14.	4.	11.	3.317	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	7	20.	19.571	29.	11.	34.619	5.884	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	7	0.1	0.093	0.2	0.05	0.003	0.053	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	7	4.8	3.914	6.2	0.4	5.278	2.297	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	7	16.	17.071	37.	1.5	137.369	11.72	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	7	159.	165.429	242.	107.	2720.619	52.16	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	2	134.5	134.5	166.	103.	1984.5	44.548	**	**	**	**
70302	SOLIDS, DISSOLVED-TONS PER DAY	1	284.	284.	284.	284.	0.	0.	**	**	**	**
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	1	0.22	0.22	0.22	0.22	0.	0.	**	**	**	**
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	2	5.75	5.75	6.6	4.9	1.445	1.202	**	**	**	**
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	2	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	10.	14.167	25.5	3.	67.938	8.242	3.	8.	23.	25.5
00080	COLOR (PLATINUM-COBALT UNITS)	9	5.	4.889	12.	0.5	17.299	4.159	0.5	0.75	8.5	12.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	9	320.	299.556	368.	194.	3909.778	62.528	194.	239.	351.	368.
00400	PH (STANDARD UNITS)	9	8.5	8.389	9.	7.7	0.189	0.434	7.7	8.	8.75	9.
00400	CONVERTED PH (STANDARD UNITS)	9	8.5	8.202	9.	7.7	0.228	0.477	7.7	8.	8.75	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.003	0.006	0.02	0.001	0.	0.006	0.001	0.002	0.01	0.02
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	1	14.	14.	14.	14.	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	9##	0.005	0.011	0.02	0.005	0.	0.007	0.005	0.005	0.02	0.02
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	9	1.4	1.394	1.9	0.55	0.178	0.422	0.55	1.15	1.8	1.9
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	9	0.08	0.107	0.2	0.03	0.004	0.063	0.03	0.06	0.18	0.2
00915	CALCIUM, DISSOLVED (MG/L AS CA)	9	38.	36.778	46.	25.	50.944	7.138	25.	30.5	42.	46.
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	9	12.	11.333	15.	6.7	9.798	3.13	6.7	8.15	14.	15.
00930	SODIUM, DISSOLVED (MG/L AS NA)	9	8.5	7.9	12.	3.8	7.87	2.805	3.8	5.3	10.2	12.
00935	POTASSIUM, DISSOLVED (MG/L AS K)	9	2.2	2.322	3.3	1.4	0.362	0.602	1.4	1.95	2.9	3.3
00940	CHLORIDE, TOTAL IN WATER MG/L	9	10.	9.556	13.	6.	6.278	2.506	6.	7.	11.5	13.
00945	SULFATE, TOTAL (MG/L AS SO4)	9	19.	18.556	25.	12.	20.778	4.558	12.	14.5	22.5	25.
00950	FLUORIDE, DISSOLVED (MG/L AS F)	9	0.1	0.078	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00955	SILICA, DISSOLVED (MG/L AS SiO2)	9	3.	3.389	6.3	0.4	4.191	2.047	0.4	1.45	5.15	6.3
01046	IRON, DISSOLVED (UG/L AS FE)	9	9.	15.778	53.	7.	215.694	14.687	7.	8.	18.5	53.
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	9	200.	176.778	210.	125.	1167.444	34.168	125.	143.5	204.	210.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	8	15.75	14.25	25.	2.	72.071	8.489	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	8	10.	20.625	95.	5.	910.268	30.171	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	7	279.	276.	348.	172.	3504.333	59.197	**	**	**	**
00400	PH (STANDARD UNITS)	7	8.7	8.543	9.1	7.8	0.233	0.483	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	8.7	8.316	9.1	7.8	0.293	0.541	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.002	0.005	0.016	0.001	0.	0.005	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	8##	0.005	0.022	0.09	0.005	0.001	0.03	**	**	**	**
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	8	1.	1.025	2.	0.2	0.311	0.557	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	8	0.155	0.214	0.63	0.04	0.037	0.191	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	1	150.	150.	150.	150.	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	8	34.	32.5	40.	20.	46.286	6.803	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	8	10.5	10.363	14.	5.6	9.04	3.007	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	8	8.3	8.725	15.	4.4	12.736	3.569	**	**	**	**
00931	SODIUM ADSORPTION RATIO	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00932	SODIUM, PERCENT	1	9.	9.	9.	9.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	8	2.65	3.288	8.8	1.7	5.378	2.319	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	8	10.	10.5	16.	5.	12.	3.464	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	8	17.	17.875	25.	14.	13.268	3.643	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	8	0.1	0.094	0.2	0.05	0.002	0.05	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	8	3.35	2.988	6.5	0.1	6.17	2.484	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	8	14.5	24.	85.	6.	693.714	26.338	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	8	166.	166.5	196.	109.	810.286	28.466	**	**	**	**
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	1	159.	159.	159.	159.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	4	15.75	15.875	27.	5.	87.729	9.366	**	**	**	**
00080	COLOR (PLATINUM-COBALT UNITS)	4	7.5	7.5	10.	5.	8.333	2.887	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	4	281.5	281.	306.	255.	615.333	24.806	**	**	**	**
00400	PH (STANDARD UNITS)	4	8.6	8.5	8.7	8.1	0.073	0.271	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	4	8.6	8.427	8.7	8.1	0.08	0.284	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.003	0.004	0.008	0.002	0.	0.003	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	3	0.02	0.015	0.02	0.005	0.	0.009	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	3	1.	1.	1.5	0.5	0.25	0.5	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	3	0.04	0.033	0.05	0.01	0.	0.021	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	4	31.5	32.25	36.	30.	6.917	2.63	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	4	10.5	10.45	12.	8.8	1.877	1.37	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	4	9.1	8.85	11.	6.2	4.163	2.04	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	4	2.1	2.5	4.2	1.6	1.34	1.158	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	4	9.	9.25	12.	7.	4.25	2.062	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	4	15.5	15.5	18.	13.	4.333	2.082	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	4	0.1	0.087	0.1	0.05	0.001	0.025	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SiO2)	4	1.25	3.	9.	0.5	16.127	4.016	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	4	15.	15.5	20.	12.	11.667	3.416	**	**	**	**
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	4	156.5	156.75	177.	137.	304.25	17.443	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	1	25.5	25.5	25.5	25.5	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	1	318.	318.	318.	318.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10/06/48-06/08/94	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	1	1.3	1.3	1.3	1.3	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	77	24.	23.442	29.	15.	11.921	3.453	18.	21.5	25.75	27.6
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/23/83-06/08/94	8	22.25	21.75	29.	14.	36.	6.	**	**	**	**
00060p	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	110	595.	1018.618	16700.	238.	3587162.403	1893.981	346.4	412.75	780.	1392.
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/76-06/17/86	20	515.5	988.5	9870.	243.	4416319.737	2101.504	276.4	319.25	698.25	1062.
00080p	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	151	10.	10.275	45.	0.	47.212	6.871	3.	5.	15.	20.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	149	310.	308.732	441.	161.	3102.211	55.697	238.	269.	350.	381.
00400p	PH (STANDARD UNITS)	10/06/48-06/08/94	131	8.	8.103	9.2	7.1	0.227	0.522	7.5	7.7	8.5	8.88
00400p	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	131	8.	7.892	9.2	7.1	0.272	0.522	7.5	7.7	8.5	8.88
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	131	0.01	0.013	0.079	0.001	0.	0.012	0.001	0.003	0.02	0.032
00405	CARBON DIOXIDE (MG/L AS CO2)	10/01/72-08/01/79	9	2.9	3.267	7.5	0.3	4.948	2.224	0.3	1.65	4.9	7.5
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	88	131.5	128.727	160.	73.	397.051	19.926	102.9	116.	144.	152.3
00440p	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	135	152.	151.519	200.	82.	595.744	24.408	116.	134.	171.	182.4
00445p	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	77	0.	1.61	27.	0.	24.873	4.987	0.	0.	0.	9.
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	36###	0.005	0.013	0.17	0.005	0.001	0.028	0.005	0.005	0.01	0.02
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	39	1.3	1.191	2.	0.4	0.174	0.417	0.64	0.8	1.5	1.7
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	36	1.05	1.079	1.8	0.2	0.195	0.442	0.535	0.7	1.475	1.66
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	29	0.64	0.658	1.2	0.06	0.08	0.284	0.25	0.475	0.875	1.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	37	0.2	0.206	0.4	0.02	0.008	0.091	0.072	0.15	0.265	0.328
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	143	140.	139.909	182.	71.	485.027	22.023	105.4	126.	160.	169.
00902p	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	139	16.	14.345	30.	0.	45.184	6.722	5.	9.	19.	22.
00915p	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	150	37.	36.813	55.	19.	40.394	6.356	28.	33.	41.	44.9
00925p	MAGNESIUM, DISSOLVED (MG/L AS Mg)	09/05/30-06/17/86	150	12.	11.837	19.	1.5	9.031	3.005	8.	10.	14.	15.
00930p	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	127	9.9	10.202	22.	2.	17.926	4.234	5.06	6.9	13.	16.
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	92	0.4	0.411	0.9	0.2	0.02	0.142	0.2	0.3	0.5	0.6
00932	SODIUM, PERCENT	10/30/67-12/17/85	92	14.	13.891	26.	7.	13.175	3.63	9.	11.	16.75	18.
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	124	3.	2.953	5.8	1.3	0.547	0.74	2.	2.425	3.5	3.85
00940p	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	128	11.	11.32	19.	3.	14.093	3.754	6.	9.	14.	17.
00945p	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	151	20.	19.358	35.	6.	37.218	6.101	11.	15.	24.	27.8
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	127	0.1	0.122	0.3	0.	0.006	0.078	0.	0.1	0.2	0.2
00955p	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	127	5.1	4.867	15.	0.1	6.94	2.634	1.26	2.9	6.5	8.24
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	98	10.	17.184	90.	0.	398.188	19.955	0.	5.	20.	41.
70300p	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	127	191.	186.646	276.	114.	1101.85	33.194	139.4	160.	209.	228.4
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	93	192.	188.022	241.	114.	669.673	25.878	154.8	171.5	207.	219.2
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	72	335.5	446.833	3090.	138.	274702.592	524.121	194.6	237.25	398.75	598.7
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	93	0.27	0.266	0.38	0.16	0.002	0.04	0.21	0.24	0.29	0.316
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	113	3.2	3.584	8.9	0.05	4.675	2.162	0.64	1.85	5.4	6.36
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	25	0.	0.04	0.56	0.	0.012	0.111	0.	0.	0.03	0.082
71885p	IRON (UG/L AS FE)	09/05/30-09/21/56	50	25.	30.4	120.	0.	889.633	29.827	0.	10.	40.	80.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	131	7.	7.252	20.	0.	17.009	4.124	2.	4.	9.	14.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/23/83-06/08/94	9	7.	8.056	14.5	0.5	22.903	4.786	0.5	4.	12.75	14.5
00060p	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	168	1430.	1950.875	14800.	287.	3246461.703	1801.794	463.5	800.25	2615.	3840.2
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/76-06/17/86	34	1125.	2233.5	20400.	309.	14350376.379	3788.189	397.5	659.	1970.	4440.
00080p	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	217	7.	8.901	95.	0.	101.819	10.091	0.	5.	10.	18.2
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	216	260.	260.458	430.	136.	4248.612	65.181	172.7	210.75	301.75	342.4
00400p	PH (STANDARD UNITS)	10/06/48-06/08/94	182	7.8	7.838	9.1	7.2	0.119	0.346	7.43	7.6	8.	8.3
00400p	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	182	7.8	7.726	9.1	7.2	0.132	0.364	7.43	7.6	8.	8.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	182	0.016	0.019	0.063	0.001	0.	0.013	0.005	0.01	0.025	0.037
00405	CARBON DIOXIDE (MG/L AS CO2)	10/01/72-08/01/79	23	3.7	4.091	10.	1.2	3.927	1.982	2.12	2.8	4.5	7.1
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	132	98.	99.28	165.	14.	788.524	28.081	63.	77.25	118.5	132.4
00440p	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	193	123.	124.518	201.	48.	1157.761	34.026	80.	95.5	148.	174.2
00445p	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	112	0.	0.125	10.	0.	0.957	0.978	0.	0.	0.	0.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	53	0.01	0.016	0.07	0.005	0.	0.016	0.005	0.005	0.02	0.036
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	77	1.3	1.293	3.6	0.5	0.165	0.406	0.9	1.1	1.5	1.6
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	53	1.3	1.349	2.2	0.6	0.097	0.311	0.9	1.2	1.5	1.8
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	55	0.4	0.456	1.4	0.	0.108	0.329	0.138	0.25	0.58	0.988
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	64	0.125	0.153	0.63	0.005	0.015	0.121	0.05	0.08	0.19	0.33
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	207	120.	118.319	190.	62.	850.024	29.155	79.8	94.	140.	157.6
00902p	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	198	16.	15.404	25.	0.	22.272	4.719	9.	12.	19.	21.
00915p	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	216	32.	31.676	49.	18.	48.183	6.941	23.	26.	36.	40.
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	217	9.2	9.591	20.	3.9	10.794	3.285	5.8	6.9	11.5	15.
00930p	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	175	6.4	7.35	20.	1.2	14.354	3.789	3.4	4.8	9.1	13.4
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	142	0.3	0.311	0.7	0.2	0.013	0.113	0.2	0.2	0.4	0.5
00932	SODIUM, PERCENT	10/30/67-12/17/85	142	11.	11.923	21.	7.	8.214	2.866	8.3	10.	14.	16.
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	171	1.9	2.127	8.8	0.7	0.796	0.892	1.4	1.6	2.3	3.08
00940p	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	177	8.	9.011	22.	3.	13.614	3.69	5.	7.	11.	14.
00945p	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	217	16.	16.341	35.	5.	24.494	4.949	11.	13.	18.	23.
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	176	0.1	0.117	0.3	0.	0.004	0.065	0.05	0.1	0.2	0.2
00955p	SILICA, DISSOLVED (MG/L AS SiO2)	09/05/30-06/17/86	176	4.25	4.022	15.	0.05	6.123	2.474	0.9	1.625	6.175	7.1
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	150	10.	18.26	130.	0.	478.1	21.865	0.	5.	20.	40.
70300p	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	176	147.5	151.875	268.	87.	1258.201	35.471	109.	128.	172.	198.9
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	142	146.	148.324	245.	86.	1302.334	36.088	105.3	120.	168.25	200.9
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	125	590.	824.472	7600.	194.	820740.13	905.947	295.8	402.	893.	1284.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	139	0.2	0.209	0.36	0.12	0.002	0.05	0.15	0.18	0.24	0.28
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	154	4.5	4.605	16.	0.4	3.671	1.916	2.3	3.5	5.8	6.6
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	42	0.03	0.05	0.23	0.	0.003	0.059	0.	0.	0.07	0.142
71885p	IRON (UG/L AS FE)	09/05/30-09/21/56	67	10.	25.373	220.	0.	1388.874	37.268	0.	10.	30.	60.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0756

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10/30/67-06/08/94	81	18.	17.333	27.	5.	29.225	5.406	9.6	13.	22.	24.
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	05/23/83-06/08/94	10	20.75	21.4	30.	12.5	28.267	5.317	13.	17.875	25.75	29.8
00060p	FLOW, STREAM, MEAN DAILY CFS	09/05/30-09/15/76	101	1520.	1767.376	7597.	422.	1464700.897	1210.248	654.4	980.	1974.5	3528.
00061	FLOW, STREAM, INSTANTANEOUS CFS	11/15/76-06/17/86	23	1090.	1641.522	7790.	397.	2852624.806	1688.972	440.	634.	1610.	4278.
00080p	COLOR (PLATINUM-COBALT UNITS)	09/05/30-06/17/86	144	5.	8.097	55.	0.	42.029	6.483	3.	5.	10.	15.
00095p	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	10/06/48-06/08/94	144	239.	241.222	375.	124.	2421.335	49.207	181.5	201.5	280.	305.5
00400p	PH (STANDARD UNITS)	10/06/48-06/08/94	129	7.8	7.801	8.9	6.9	0.141	0.376	7.3	7.6	8.	8.2
00400p	CONVERTED PH (STANDARD UNITS)	10/06/48-06/08/94	129	7.8	7.665	8.9	6.9	0.16	0.4	7.3	7.6	8.	8.2
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10/06/48-06/08/94	129	0.016	0.022	0.126	0.001	0.	0.018	0.006	0.01	0.025	0.05
00405	CARBON DIOXIDE (MG/L AS CO2)	10/01/72-08/01/79	13	3.1	5.046	26.	0.5	42.489	6.518	1.1	2.25	5.	18.44
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/11/55-11/13/84	88	98.	97.034	150.	50.	431.597	20.775	66.9	81.5	112.75	122.3
00440p	BICARBONATE ION (MG/L AS HCO3)	09/05/30-08/01/79	129	117.	126.868	1330.	61.	11962.475	109.373	84.	101.	137.	150.
00445p	CARBONATE ION (MG/L AS CO3)	09/05/30-08/01/79	80	0.	0.2	16.	0.	3.2	1.789	0.	0.	0.	0.
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	06/15/74-06/08/94	32	0.01	0.018	0.12	0.005	0.001	0.025	0.005	0.005	0.02	0.044
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	10/01/71-12/17/85	39	1.	1.029	1.6	0.5	0.072	0.268	0.69	0.8	1.2	1.4
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	06/15/74-06/08/94	32	1.1	1.066	1.6	0.5	0.087	0.295	0.53	0.85	1.3	1.4
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	10/01/73-03/15/83	28	0.355	0.401	1.4	0.	0.08	0.283	0.12	0.25	0.483	0.803
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10/01/73-06/08/94	36	0.095	0.118	0.45	0.005	0.008	0.087	0.037	0.05	0.15	0.246
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	09/05/30-12/17/85	135	110.	109.852	170.	62.	466.575	21.6	82.	94.	125.	140.
00902p	HARDNESS, NON-CARBONATE (MG/L AS CaCO3)	10/06/48-08/26/81	132	14.	13.864	26.	0.	24.775	4.977	7.	11.	17.	20.
00915p	CALCIUM, DISSOLVED (MG/L AS Ca)	09/05/30-06/17/86	144	29.5	29.729	44.	18.	33.15	5.758	23.	25.	33.	37.5
00925p	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/05/30-06/17/86	144	8.7	8.66	14.	2.8	5.043	2.246	6.	6.9	10.	11.5
00930p	SODIUM, DISSOLVED (MG/L AS Na)	09/05/30-06/17/86	118	6.2	6.727	19.	2.4	8.017	2.831	3.59	4.675	8.4	9.82
00931	SODIUM ADSORPTION RATIO	10/30/67-12/17/85	92	0.3	0.297	0.7	0.1	0.011	0.105	0.2	0.2	0.3	0.4
00932	SODIUM, PERCENT	10/30/67-12/17/85	92	11.	11.772	24.	7.	8.2	2.864	9.	10.	13.	15.
00935p	POTASSIUM, DISSOLVED (MG/L AS K)	09/05/30-06/17/86	115	2.	2.002	5.	1.1	0.366	0.605	1.3	1.6	2.3	2.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0756

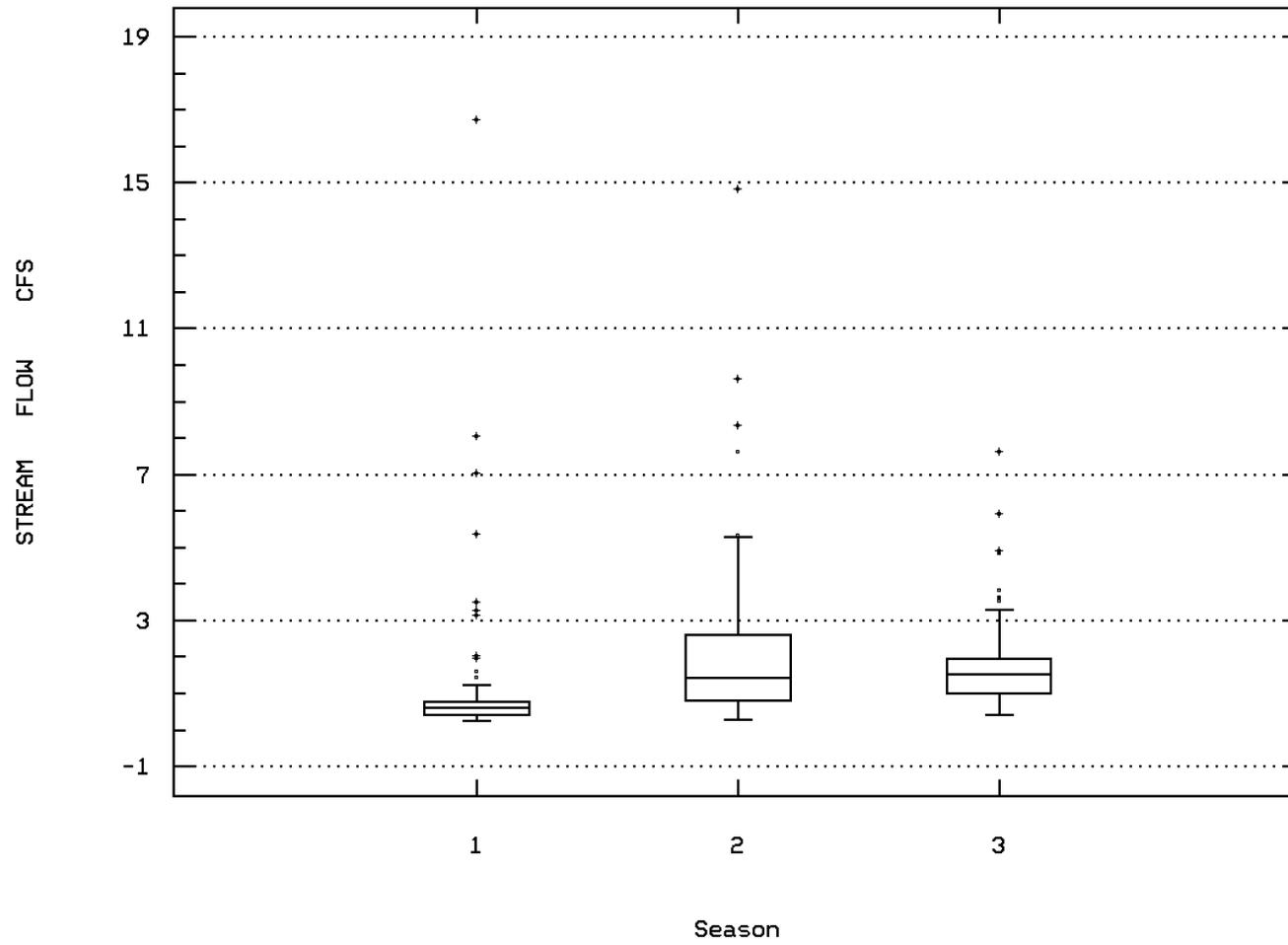
Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00940p	CHLORIDE, TOTAL IN WATER MG/L	09/05/30-06/17/86	118	8.	8.093	16.	2.	6.991	2.644	4.	6.	10.	12.
00945p	SULFATE, TOTAL (MG/L AS SO4)	09/05/30-06/17/86	144	14.5	15.042	92.	5.	60.726	7.793	9.	12.	17.	19.5
00950p	FLUORIDE, DISSOLVED (MG/L AS F)	03/08/45-06/17/86	117	0.1	0.094	0.2	0.	0.003	0.054	0.	0.1	0.1	0.2
00955p	SILICA, DISSOLVED (MG/L AS SI02)	09/05/30-06/17/86	118	4.25	4.107	11.	0.05	5.792	2.407	1.	2.1	5.9	7.02
01046	IRON, DISSOLVED (UG/L AS FE)	10/30/67-06/17/86	100	10.	18.78	180.	0.	717.204	26.781	0.	5.	20.	51.7
70300p	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), MG/L	09/05/30-06/17/86	118	145.	145.305	220.	88.	800.163	28.287	109.	124.	166.	175.4
70301	SOLIDS, DISSOLVED-SUM OF CONSTITUENTS (MG/L)	10/30/67-12/17/85	92	142.	140.13	222.	83.	745.192	27.298	104.	120.5	158.75	171.8
70302	SOLIDS, DISSOLVED-TONS PER DAY	10/30/67-01/18/83	72	544.5	624.153	1930.	182.	108397.483	329.238	326.	393.25	697.75	1197.
70303	SOLIDS, DISSOLVED-TONS PER ACRE-FT	10/30/67-01/18/83	92	0.2	0.201	0.3	0.12	0.001	0.038	0.153	0.17	0.23	0.24
71851p	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	09/05/30-03/15/83	100	3.9	3.951	18.	0.2	4.07	2.017	1.7	3.1	4.8	6.07
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	06/15/74-03/15/83	21	0.03	0.049	0.39	0.	0.008	0.089	0.	0.	0.05	0.148
71885p	IRON (UG/L AS FE)	09/05/30-09/21/56	43	20.	25.116	120.	0.	506.534	22.506	0.	10.	40.	56.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0756 Parameter Code: 00060

FLOW, STREAM, MEAN DAILY

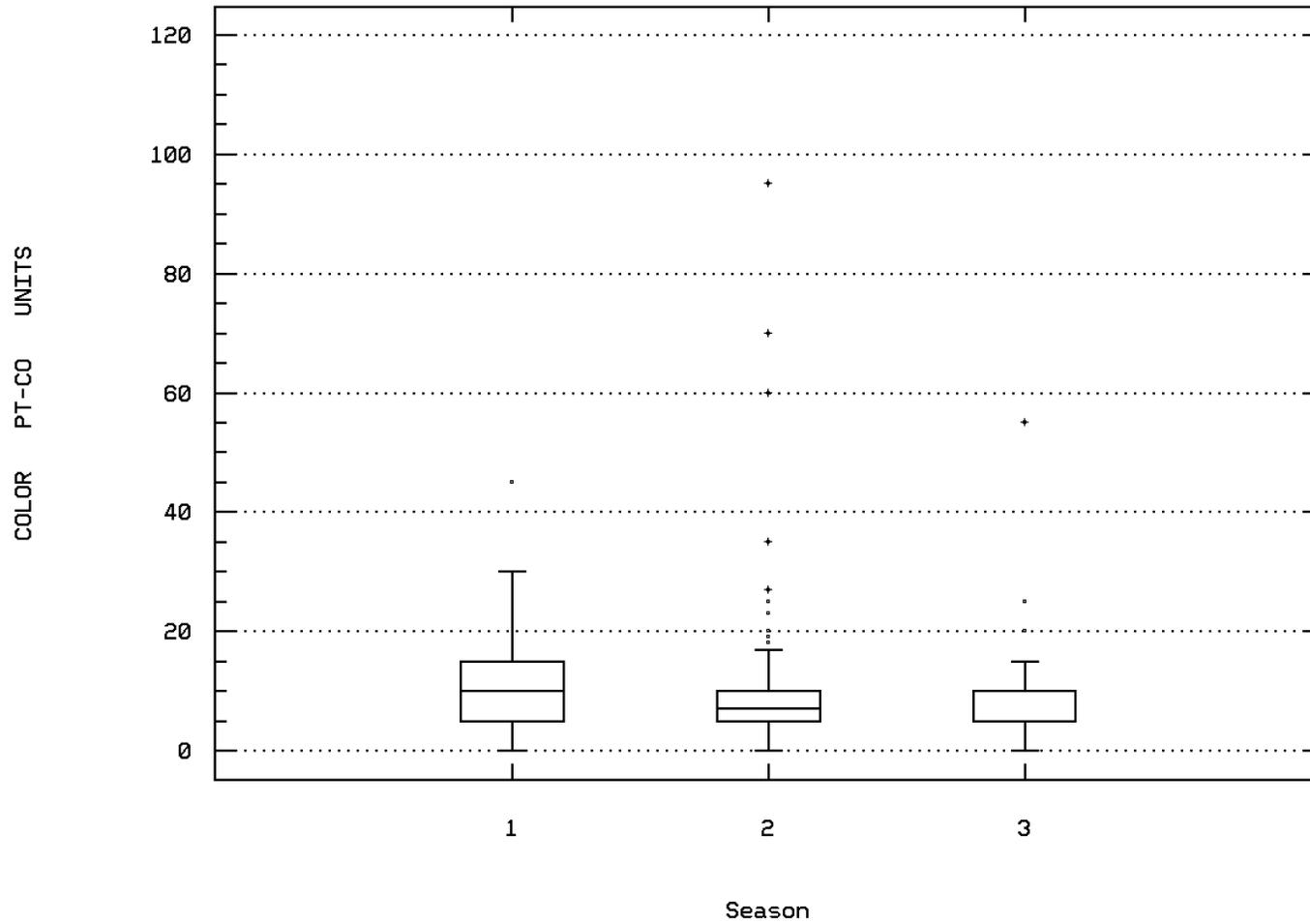
(X 1000)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00080

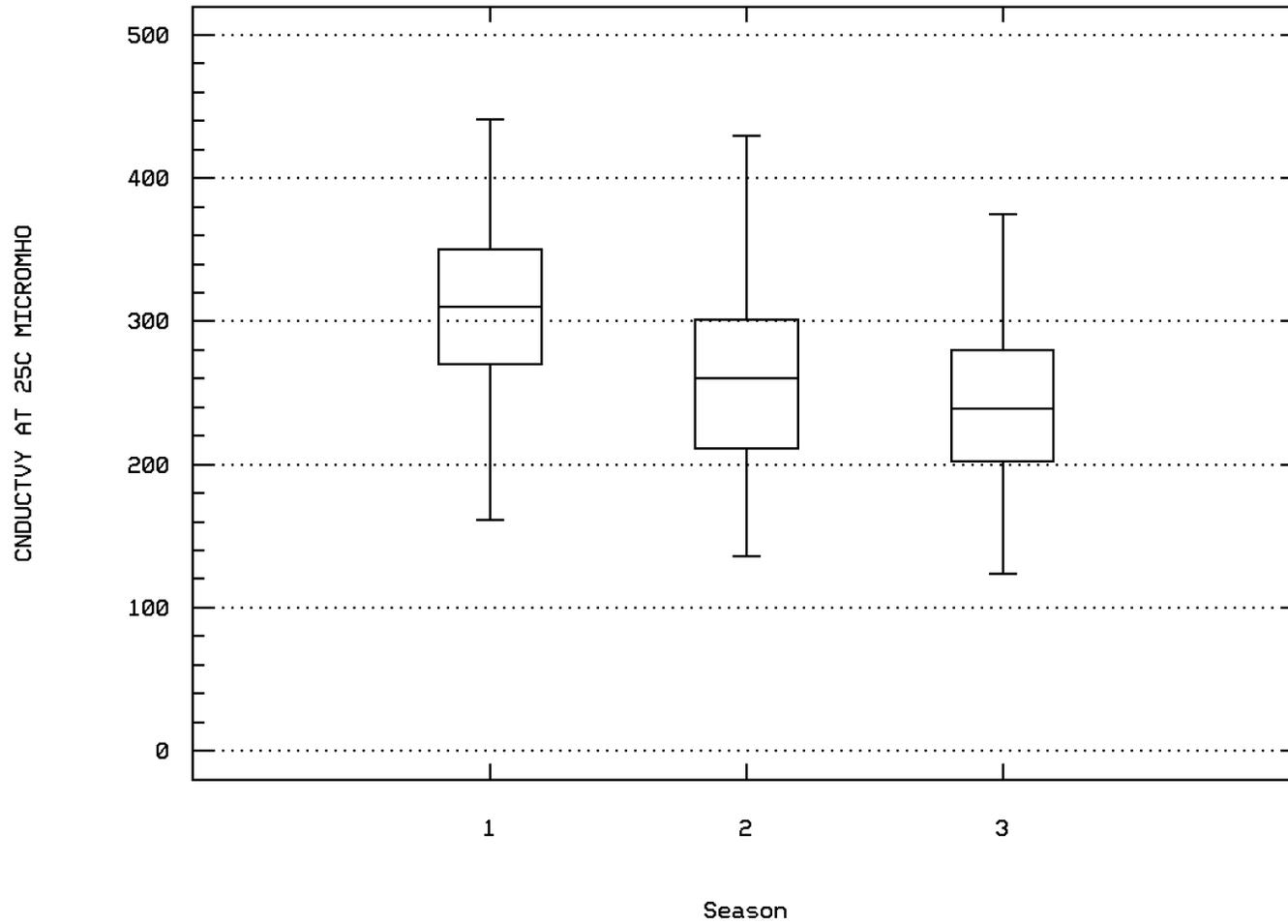
COLOR (PLATINUM-COBALT UNITS)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00095

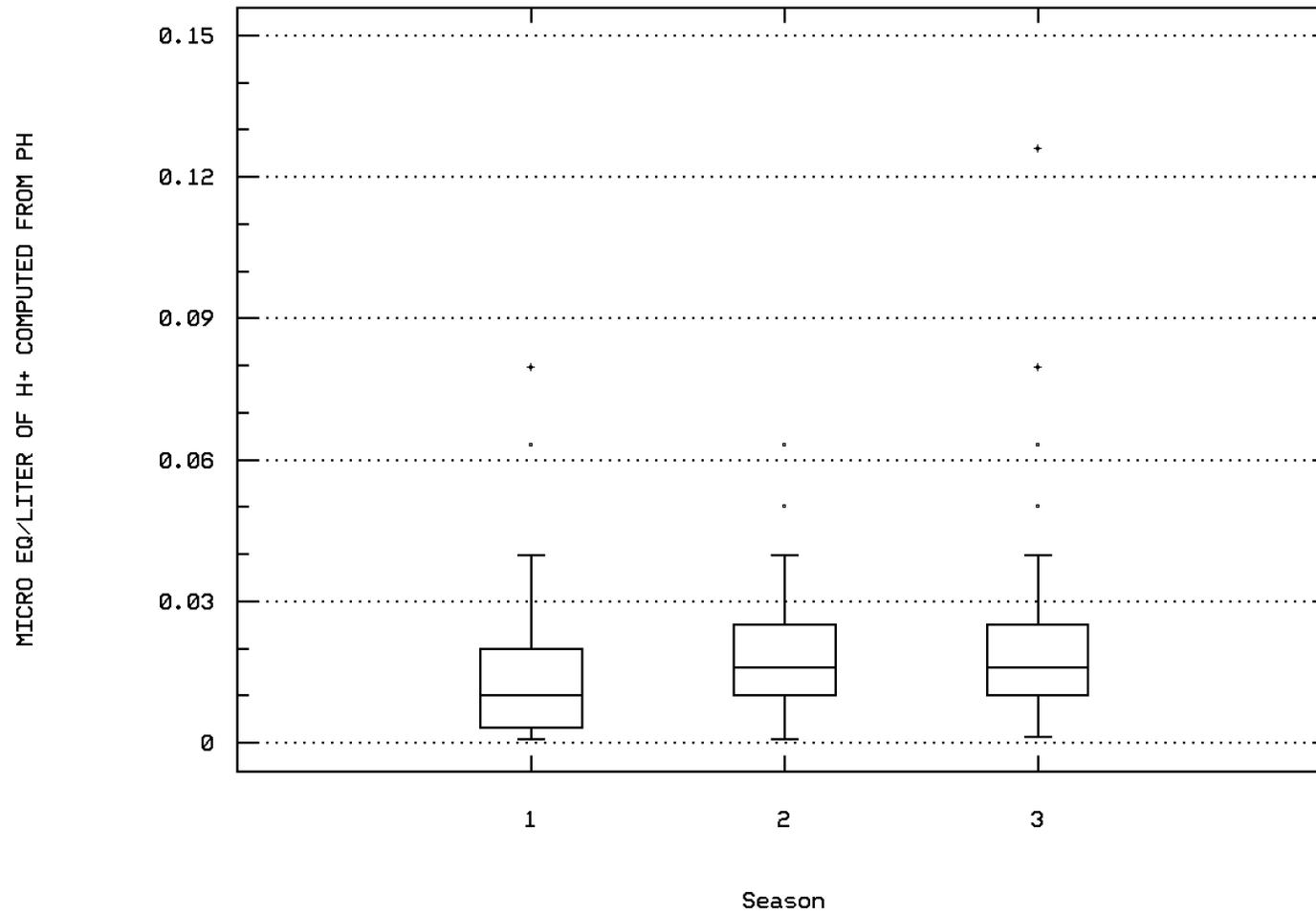
SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00400

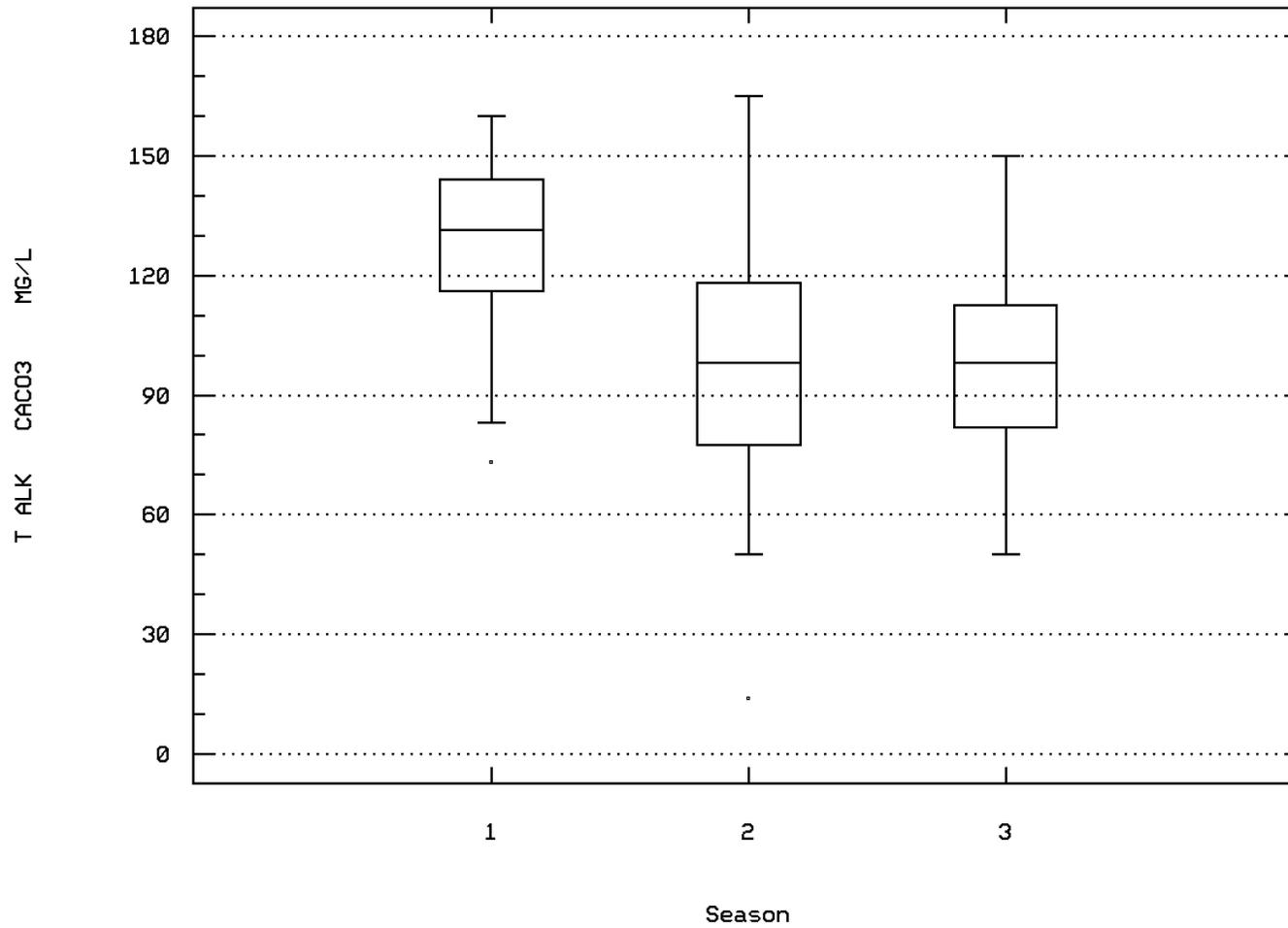
MICRO EQ/LITER OF H+ COMPUTED FROM PH



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00410

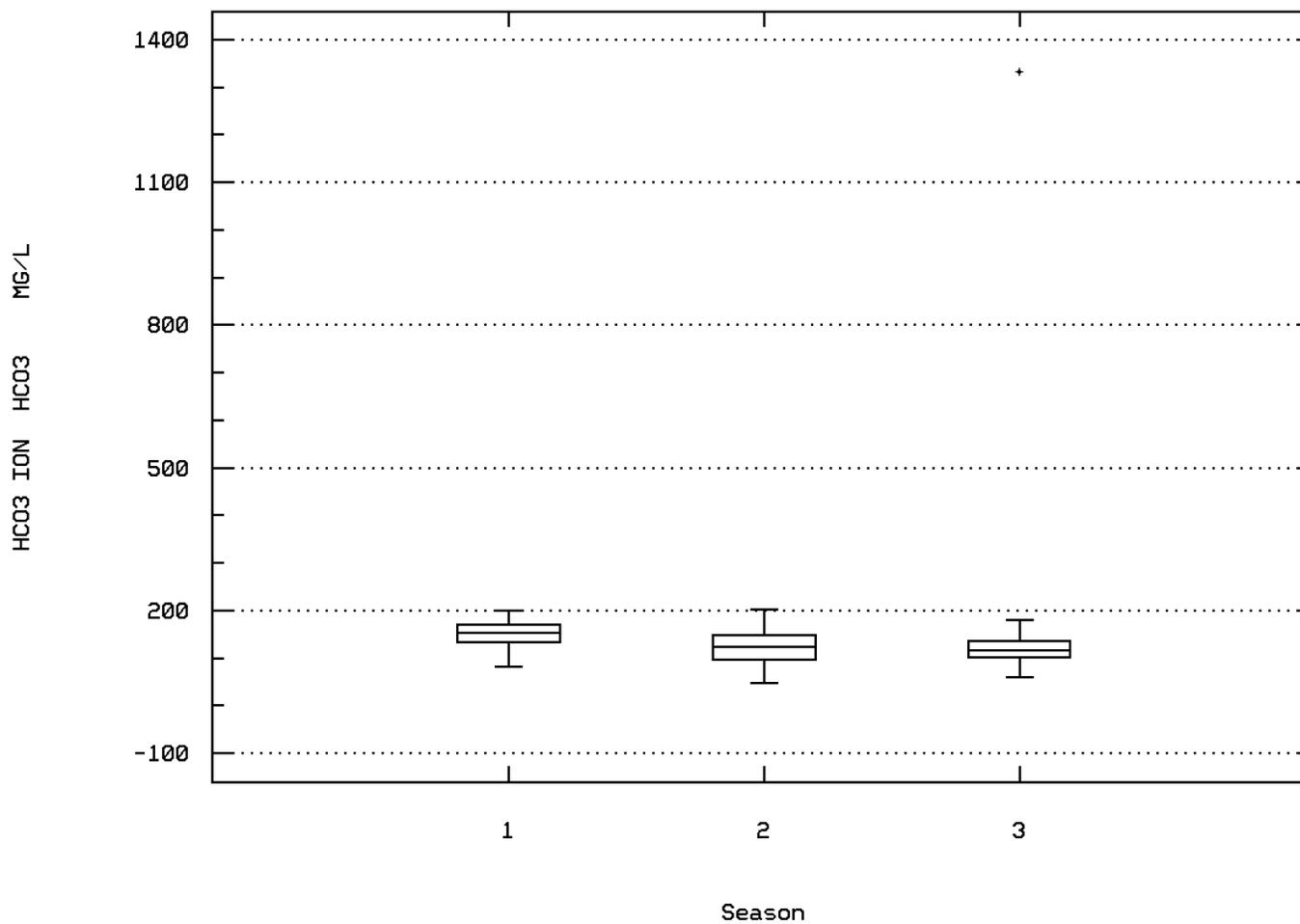
ALKALINITY, TOTAL (MG/L AS CaCO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00440

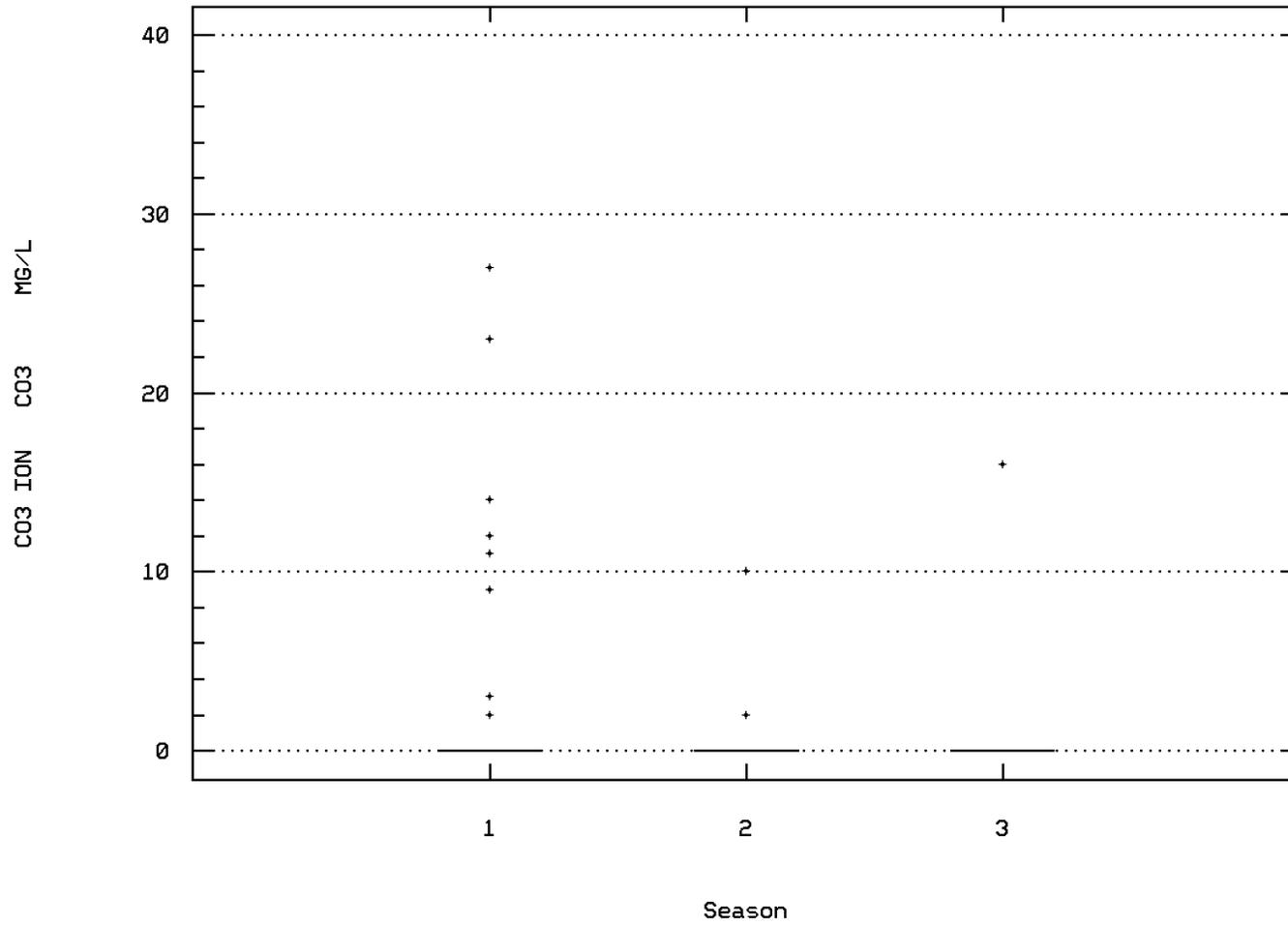
BICARBONATE ION (MG/L AS HCO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00445

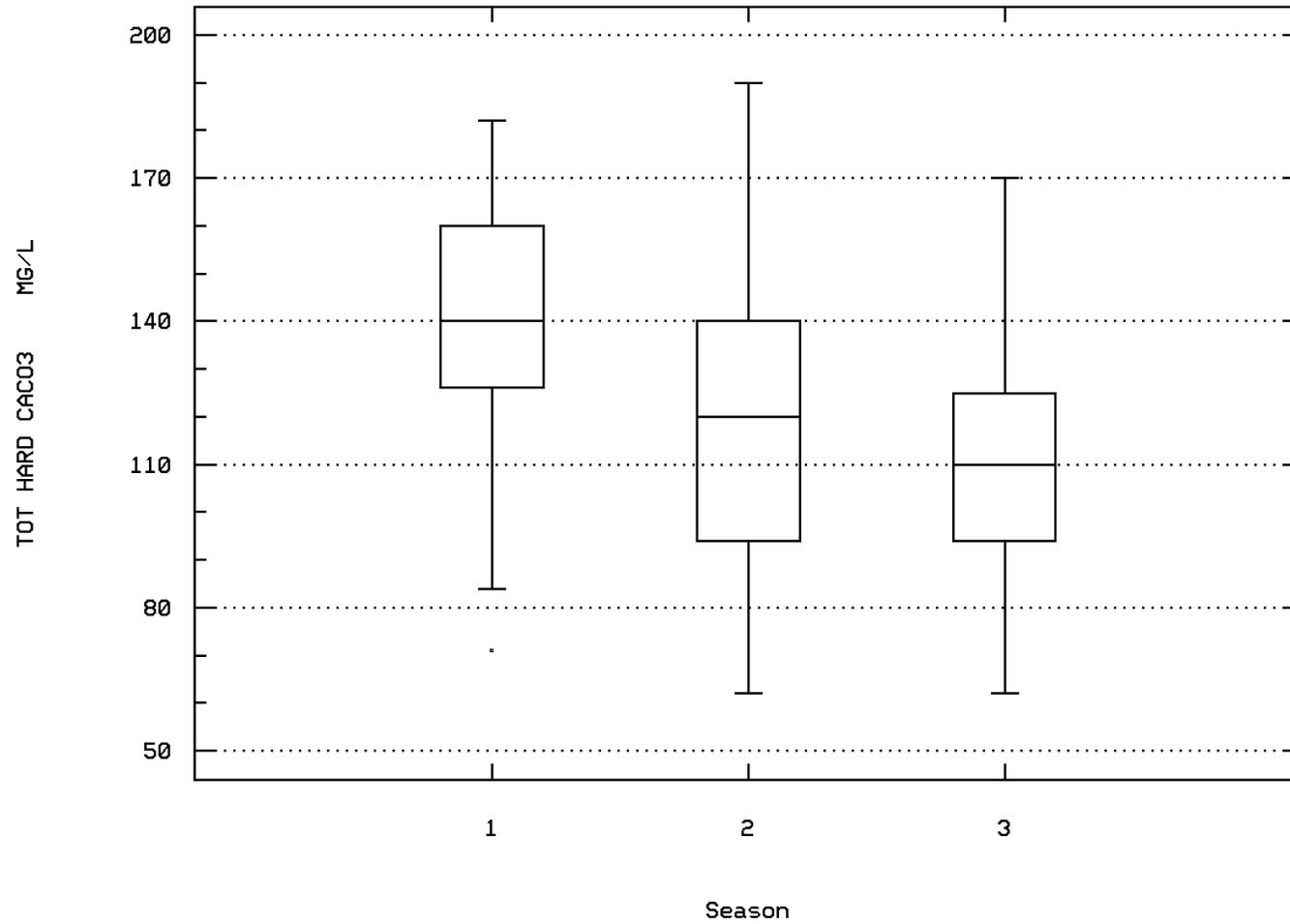
CARBONATE ION (MG/L AS CO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

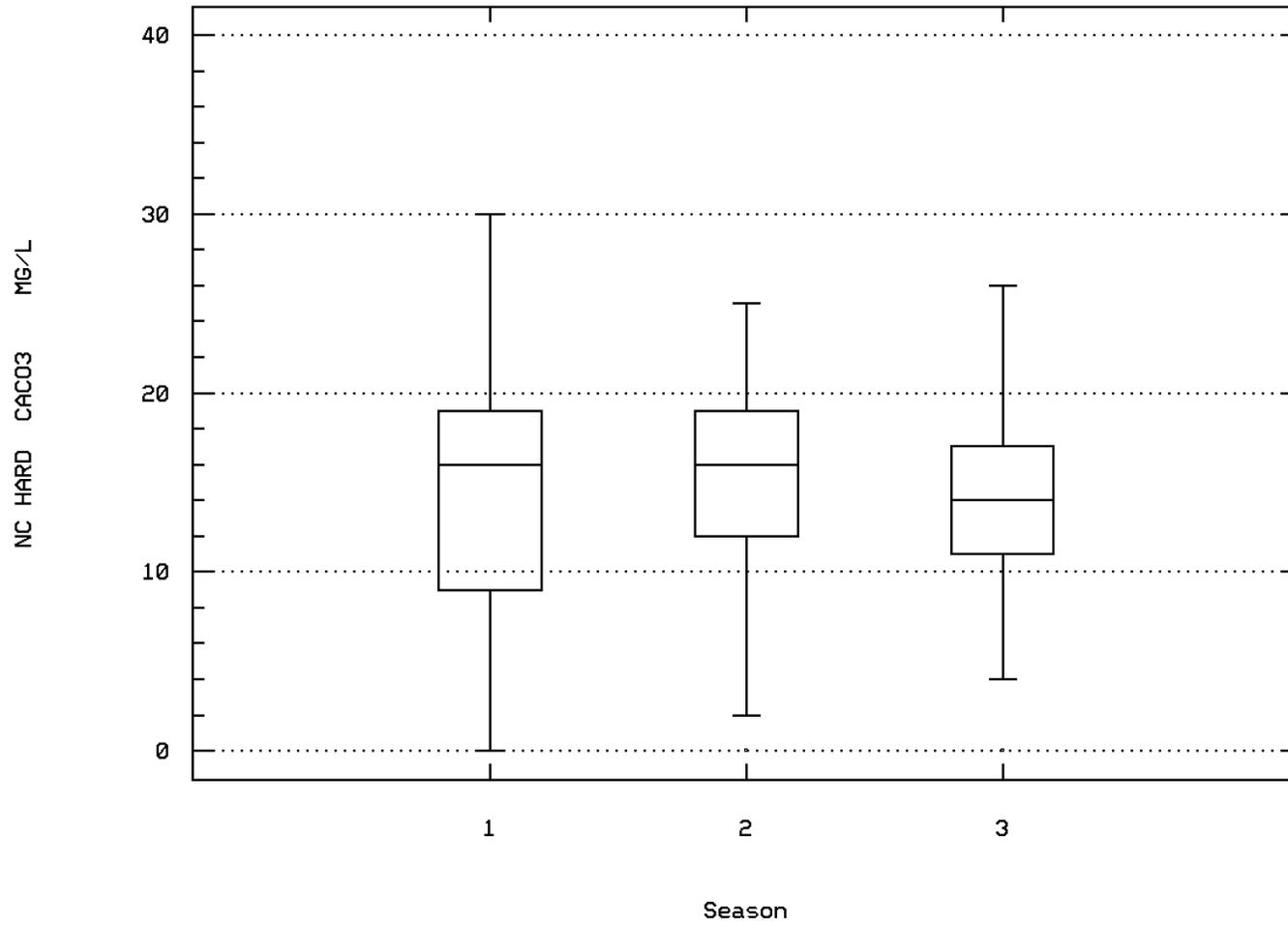
Station: SHEN0756 Parameter Code: 00900

HARDNESS, TOTAL (MG/L AS CaCO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

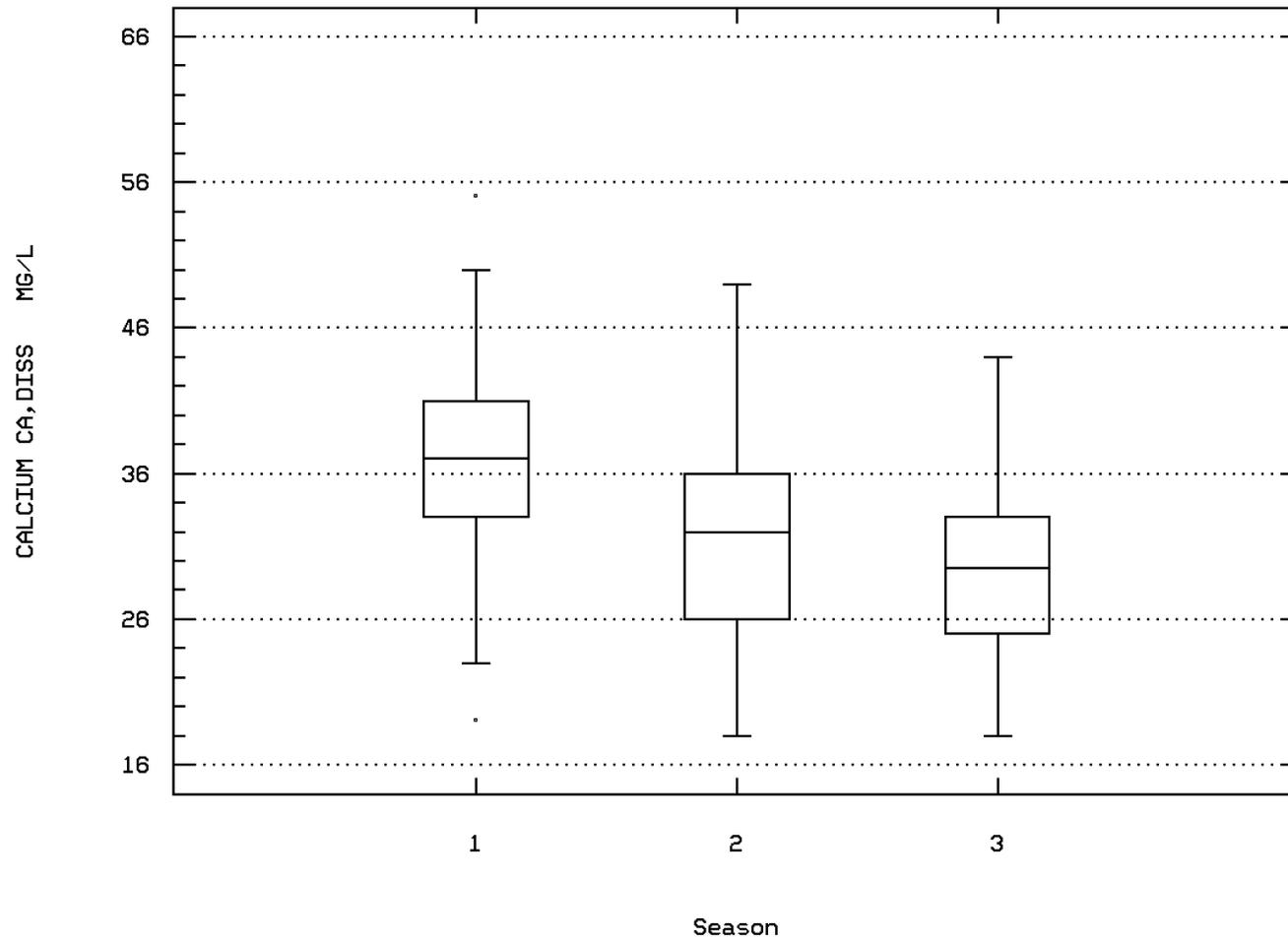
Station: SHEN0756 Parameter Code: 00902
HARDNESS, NON-CARBONATE (MG/L AS CaCO3)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00915

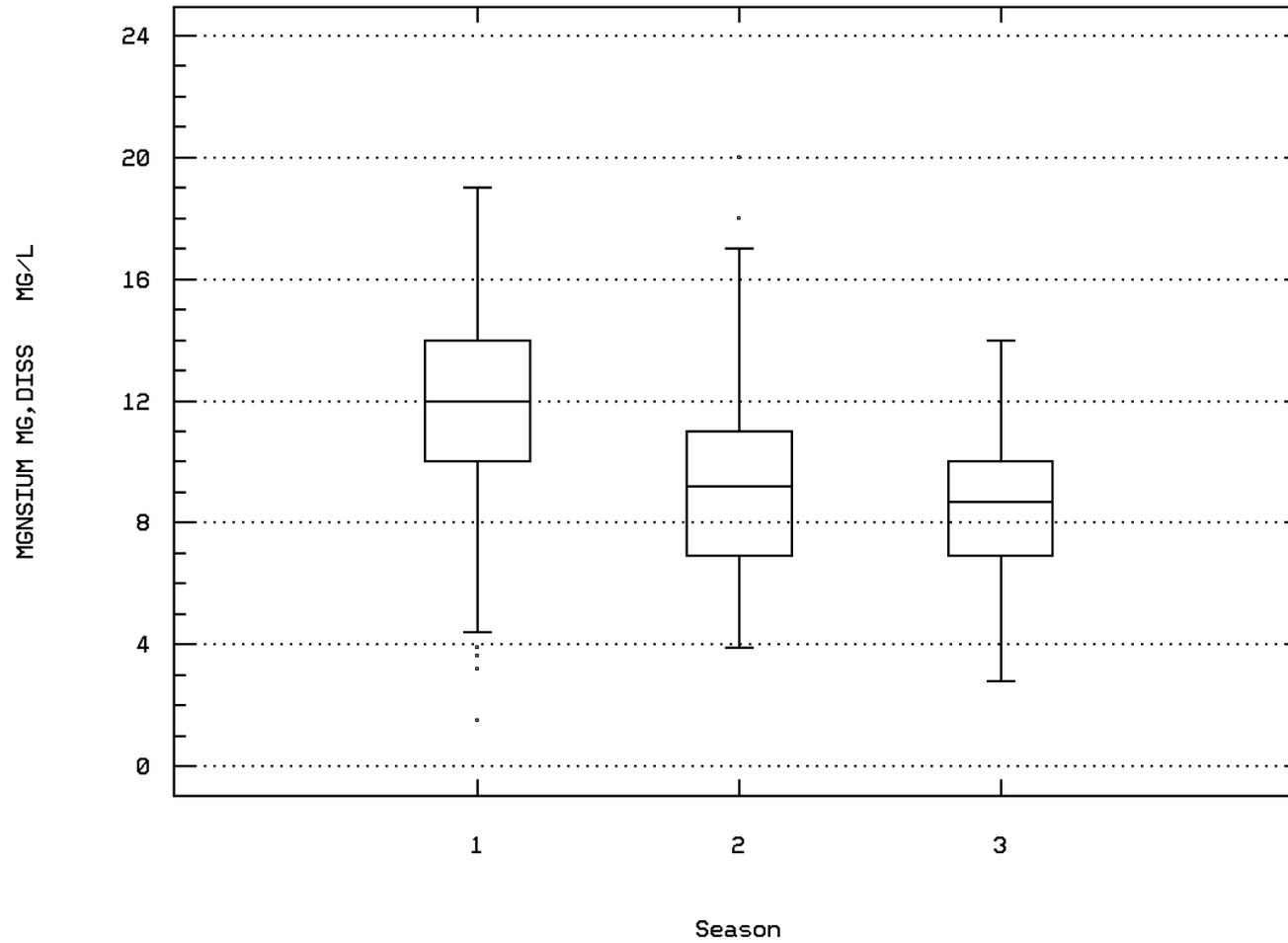
CALCIUM, DISSOLVED (MG/L AS CA)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00925

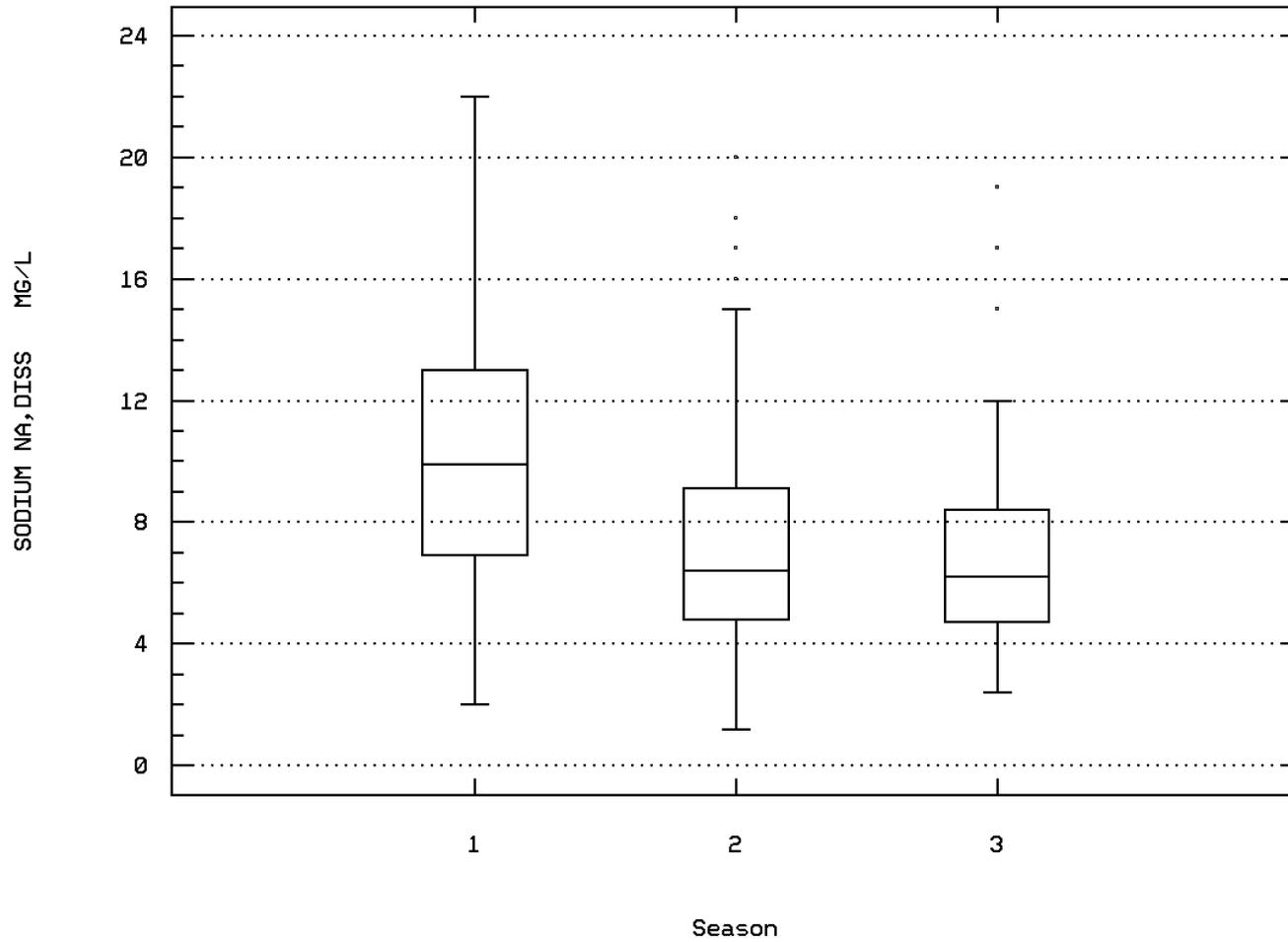
MAGNESIUM, DISSOLVED (MG/L AS MG)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00930

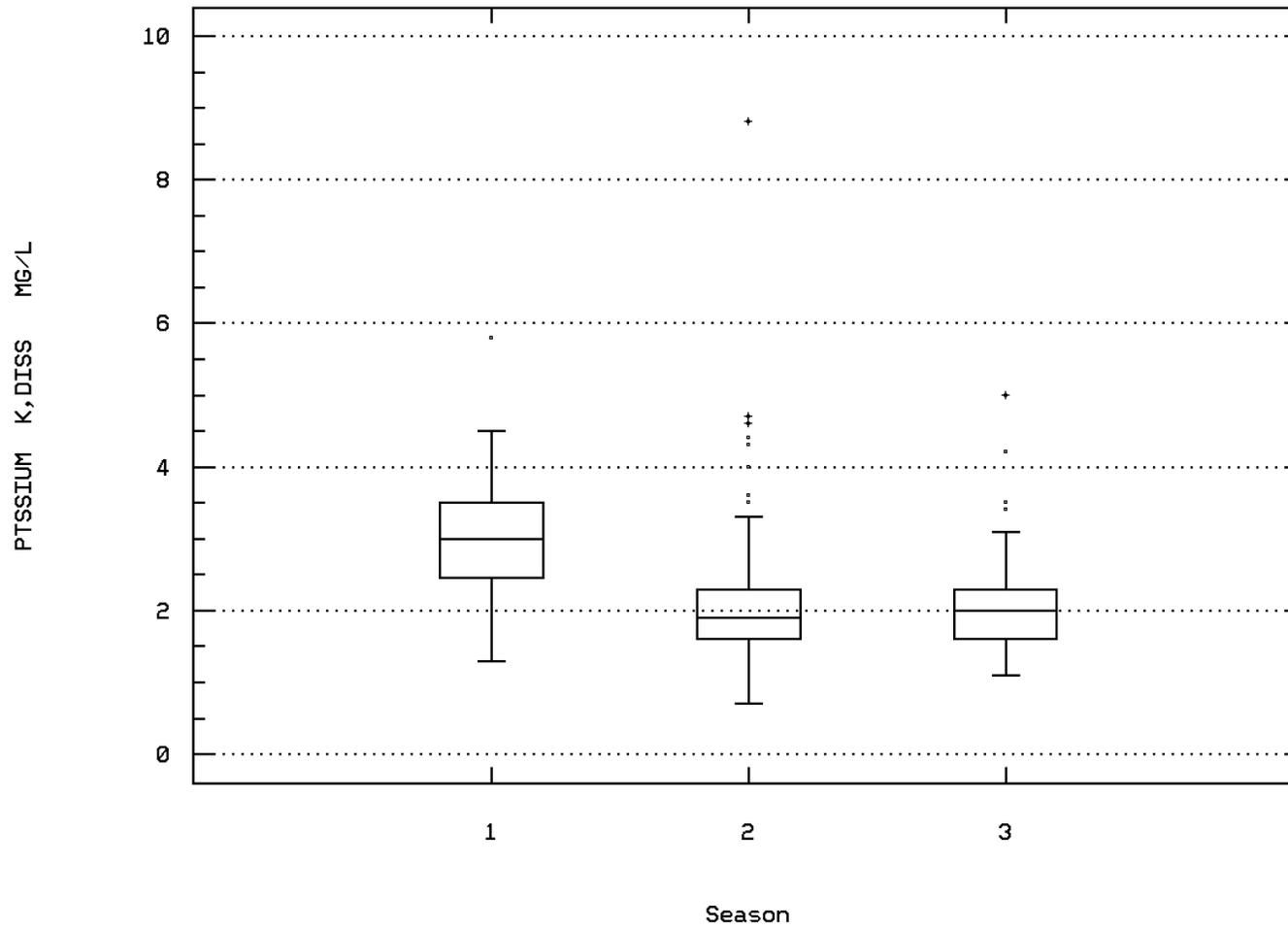
SODIUM, DISSOLVED (MG/L AS NA)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00935

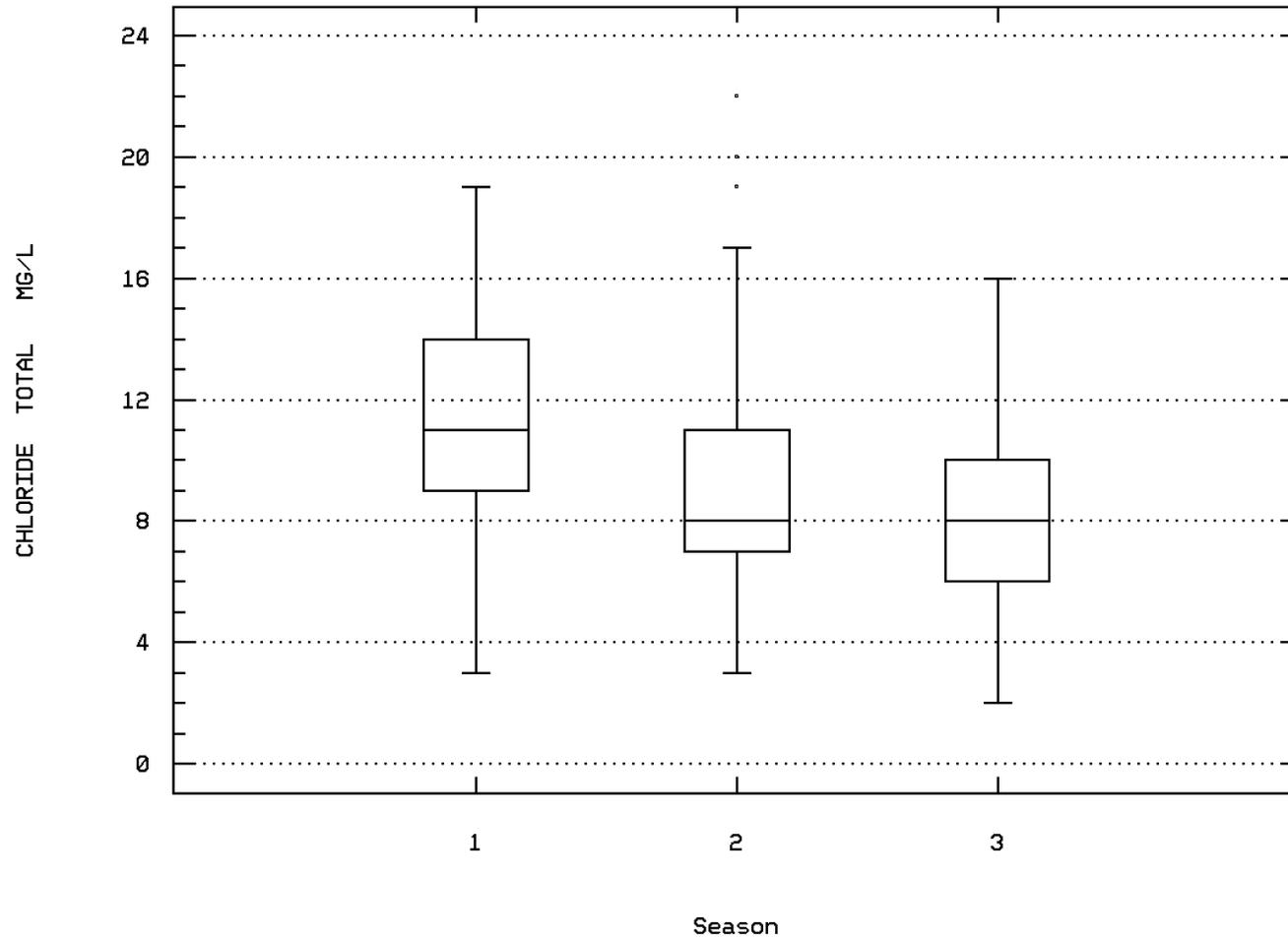
POTASSIUM, DISSOLVED (MG/L AS K)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00940

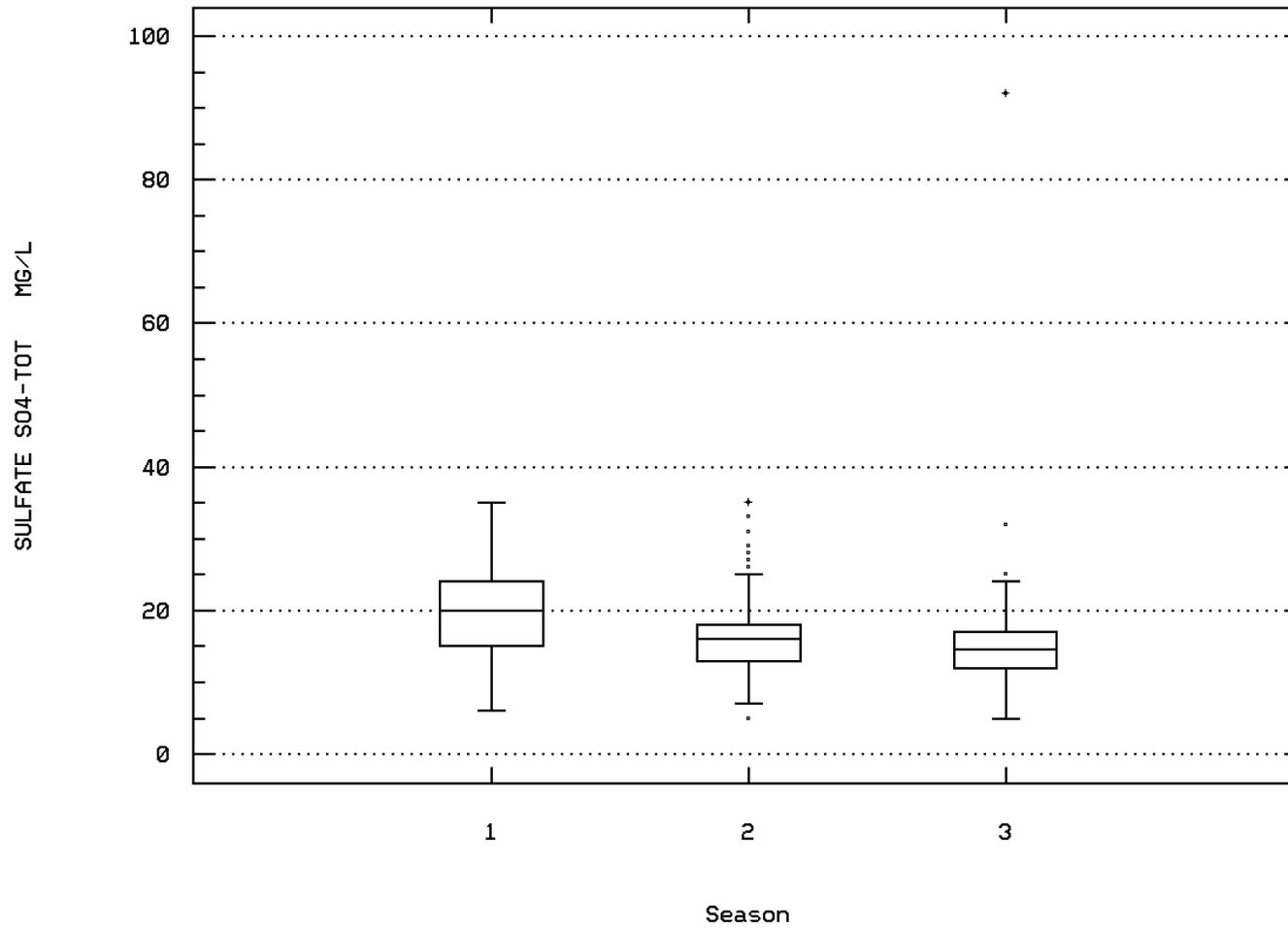
CHLORIDE, TOTAL IN WATER



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00945

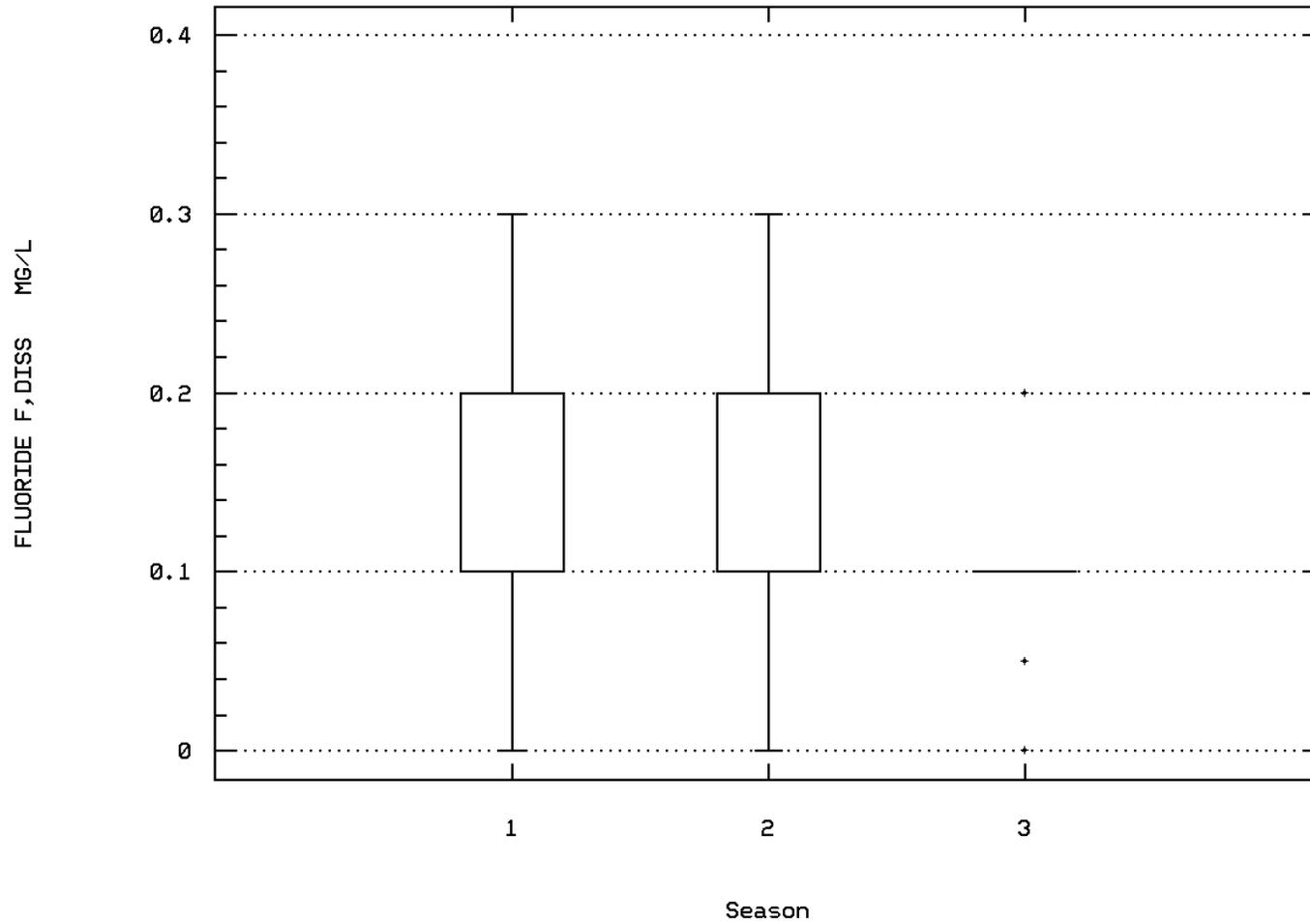
SULFATE, TOTAL (MG/L AS SO4)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 00950

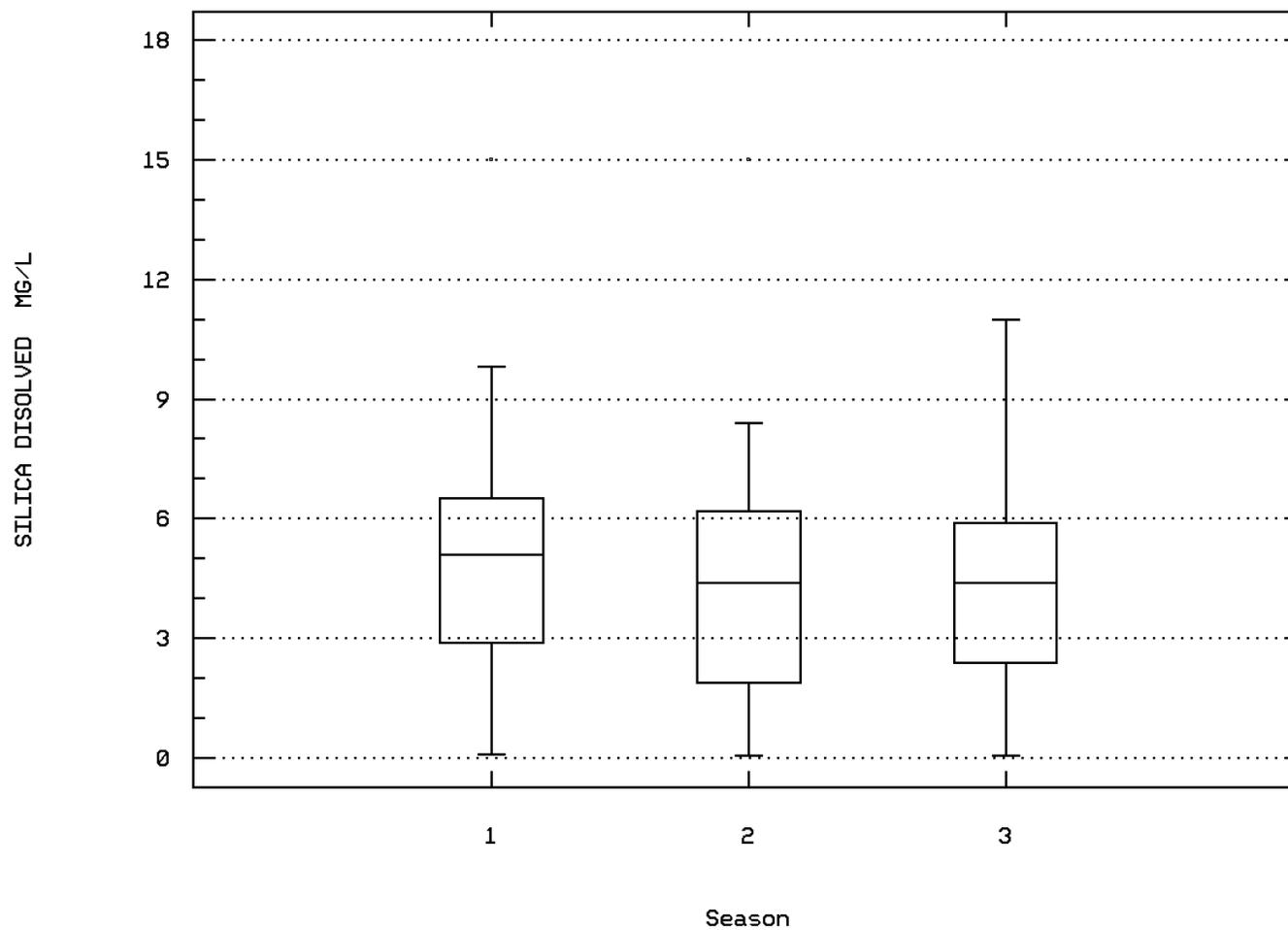
FLUORIDE, DISSOLVED (MG/L AS F)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

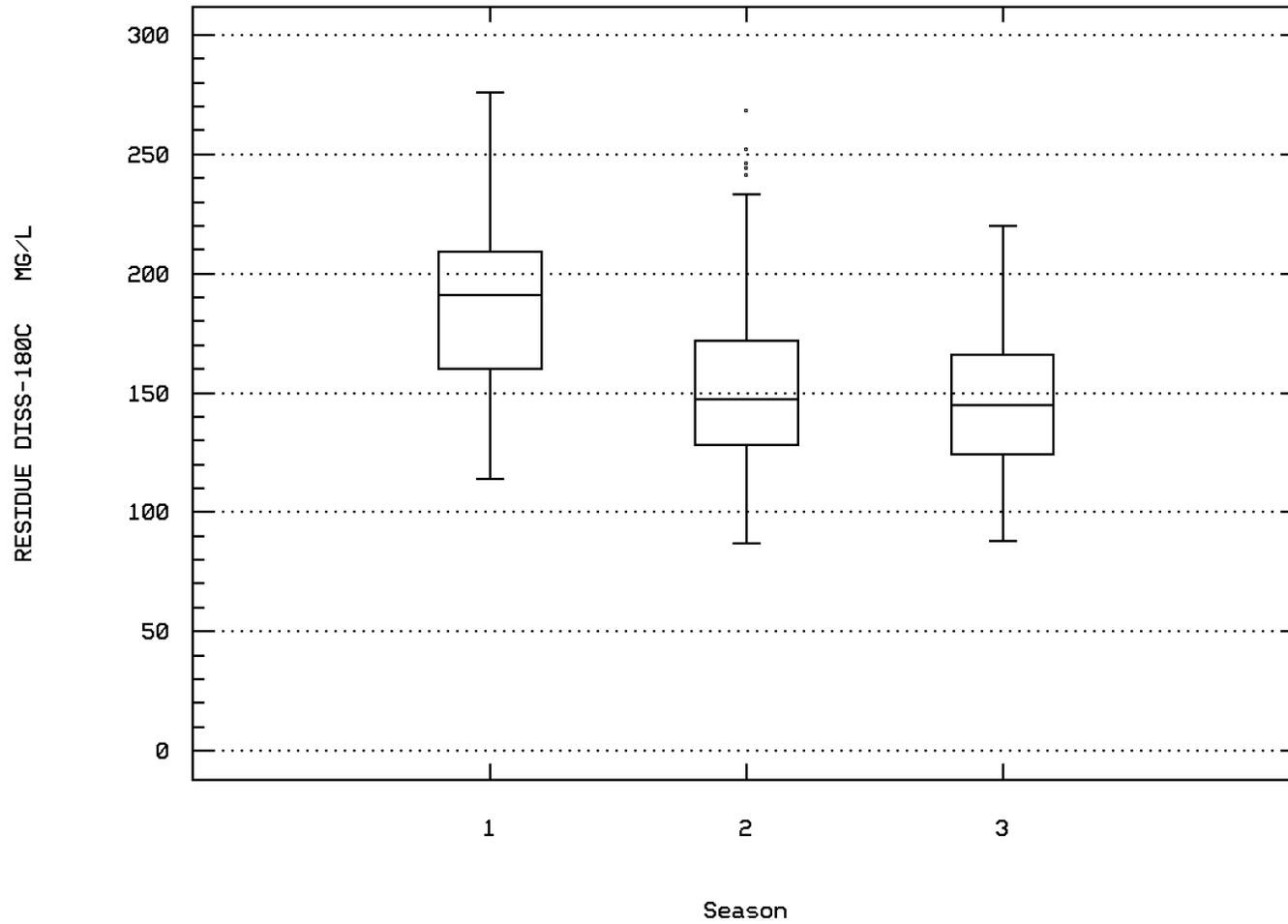
Station: SHEN0756 Parameter Code: 00955

SILICA, DISSOLVED (MG/L AS SI02)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

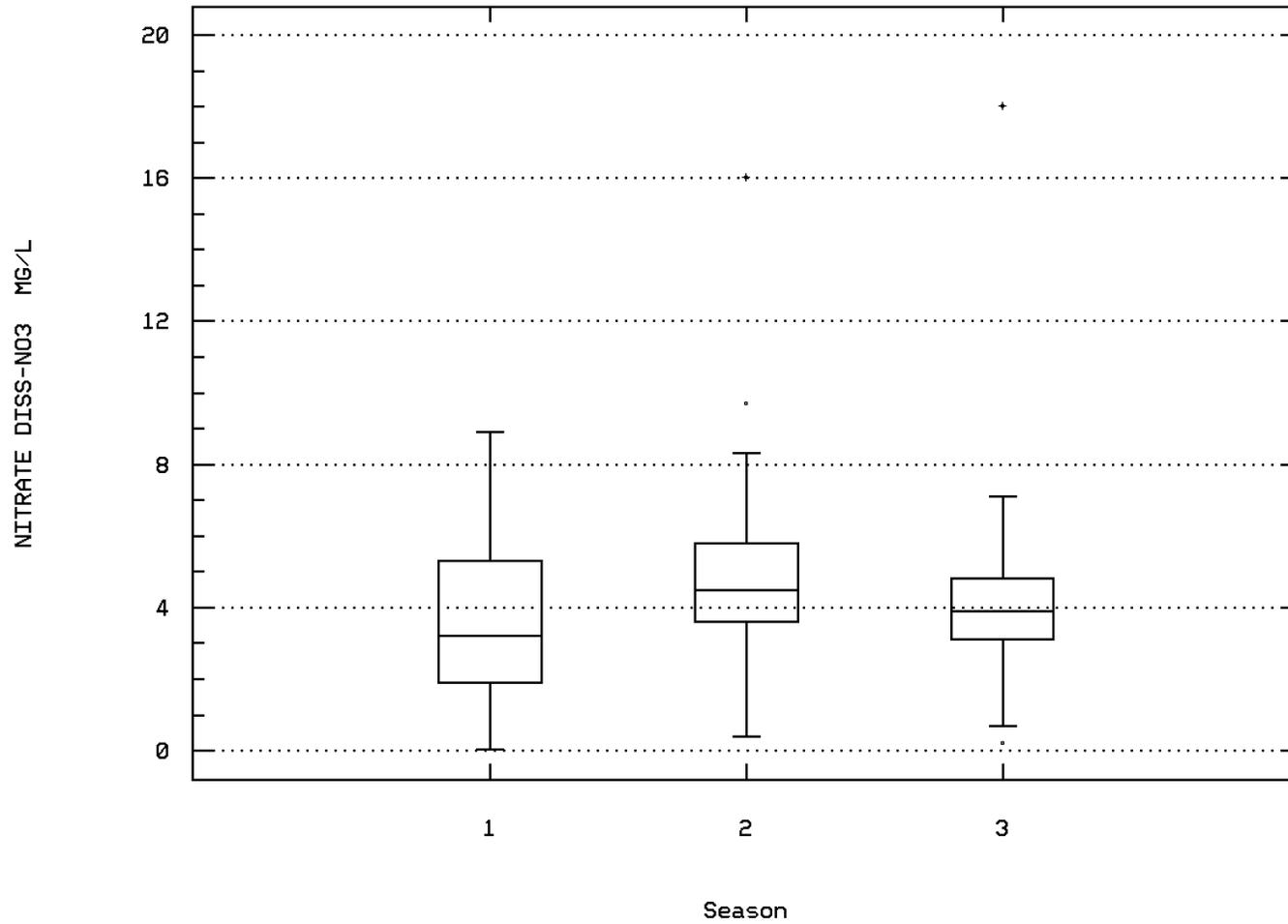
Station: SHEN0756 Parameter Code: 70300
RESIDUE, TOTAL FILTRABLE (DRIED AT 180C)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 71851

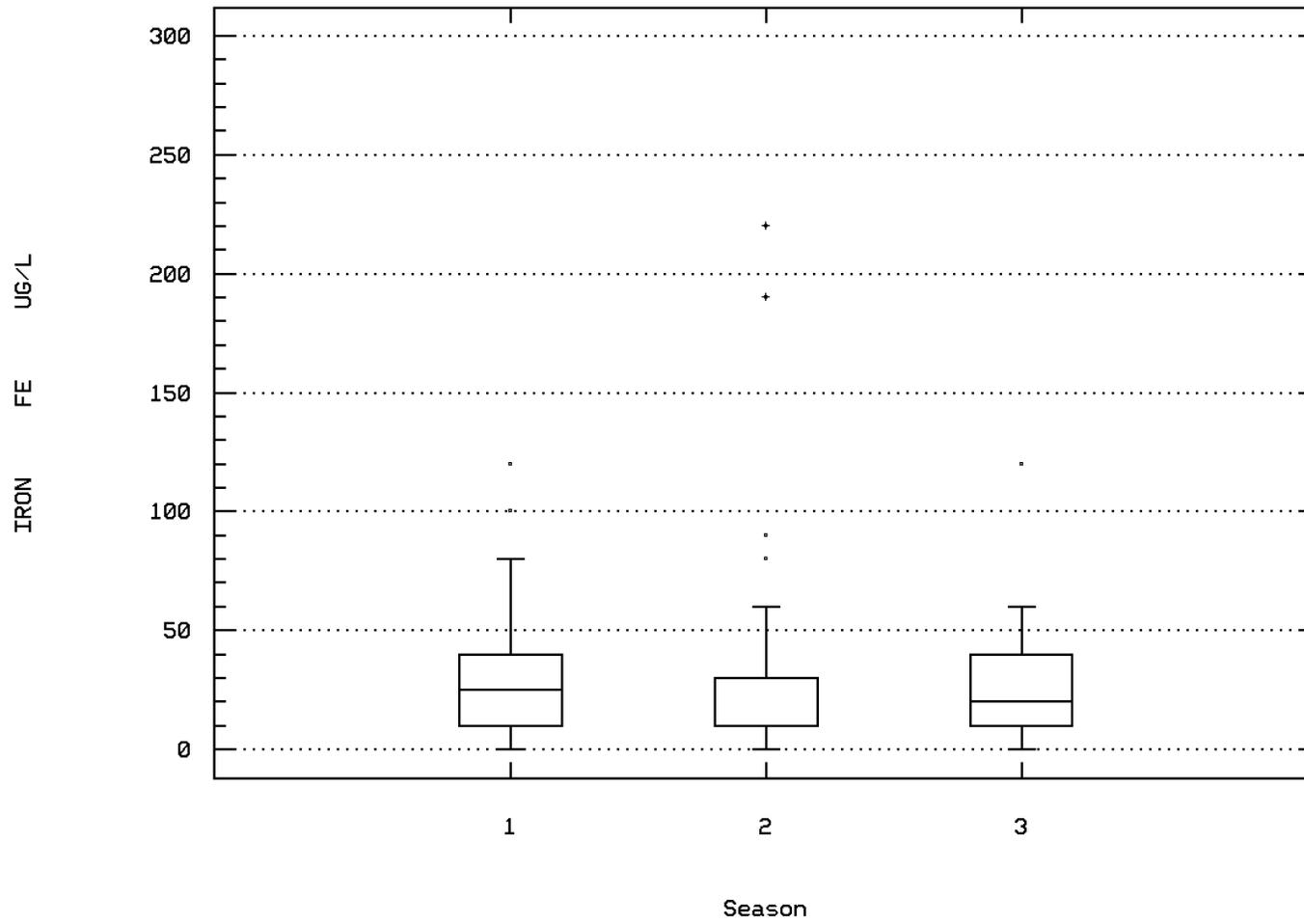
NITRATE NITROGEN, DISSOLVED (MG/L AS NO



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station: SHEN0756 Parameter Code: 71885

IRON (UG/L AS FE)



S F SHENANDOAH RIVER AT FRONT ROYAL, VA

Station Inventory for Station: SHEN0757

NPS Station ID: SHEN0757
 Location: FMC CORP. FRONT ROYAL OTFL #01
 Station Type: /TYPA/IND/TREATD/OUTFL/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070006001104.49
 Description:

LAT/LON: 38.918892/ -78.213892

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 4.600
 RF3 Mile Point: 10.38

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 077 /077 /FMC 01 /141-01
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.05

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0757

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0758

NPS Station ID: SHEN0758
 Location: FMC CORP. FRONT ROYAL OTFL 002
 Station Type: /TYPA/IND/TREATD/OUTFL/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005000102.60
 Description:

LAT/LON: 38.921670/ -78.216115

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 4.310
 RF3 Mile Point: 2.59

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 078 /078 /FMC 02 /141-02
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0758

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0759

NPS Station ID: SHEN0759
 Location: FRONT ROYAL MUNICIPAL TAP WATER
 Station Type: /TYPA/MUN/TREATD/INTAKE/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005000102.72
 Description:

LAT/LON: 38.925004/ -78.208338

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 4.600
 RF3 Mile Point: 3.06

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 076 /076 /TAP 07
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.43

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0759

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0760

NPS Station ID: SHEN0760
 Location: HAPPY CREEK RT 647 FRONT ROYAL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005
 RF3 Index: 02070005000100.87
 Description:

LAT/LON: 38.926392/ -78.190003

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.41

Agency: 1112A9WQ
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): UP-POT-89 /SHEN-89 /089 /HAPPY 089
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0760

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-04/18/73	3	15.	11.333	15.5	3.5	46.083	6.788	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/24/72-04/18/73	4	10.15	10.75	13.	9.7	2.377	1.542	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/72-04/18/73	4	1.6	2.	3.6	1.2	1.18	1.086	**	**	**
00400	PH (STANDARD UNITS)	05/24/72-04/18/73	3	7.2	7.567	8.6	6.9	0.823	0.907	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/72-04/18/73	3	7.2	7.195	8.6	6.9	1.031	1.015	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/72-04/18/73	3	0.063	0.064	0.126	0.003	0.004	0.062	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/24/72-05/24/72	1	32.	32.	32.	32.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/24/72-05/24/72	1	14.	14.	14.	14.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/24/72-04/18/73	4	0.048	0.061	0.135	0.015	0.003	0.056	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/72-04/18/73	4	0.284	0.324	0.569	0.16	0.033	0.183	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/24/72-04/18/73	4	0.29	0.338	0.59	0.18	0.032	0.179	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-04/18/73	4	0.05	0.055	0.1	0.02	0.001	0.034	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/20/72-02/13/73	2	1.95	1.95	3.1	0.8	2.645	1.626	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/24/72-02/13/73	3	8.4	11.567	18.3	8.	34.043	5.835	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	1##	0.2	0.2	0.2	0.2	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/72-05/24/72	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/24/72-05/24/72	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/24/72-05/24/72	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/24/72-05/24/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/72-05/24/72	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/24/72-05/24/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2	389.	389.	700.	78.	193442.	439.82	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2	2.369	2.369	2.845	1.892	0.454	0.674	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			233.666							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	2##	120.	120.	230.	10.	24200.	155.563	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	2##	1.681	1.681	2.362	1.	0.927	0.963	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			47.958							
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/72-04/18/73	4	0.195	3.875	15.	0.11	55.011	7.417	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/24/72-05/24/72	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0760

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	0	0.00				1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	1	0.50				1	0	0.00	1	1	1.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0761

NPS Station ID: SHEN0761
 Location: FMC CORP. FRONT ROYAL OTFL 003
 Station Type: /TYPA/IND/TREATD/OUTFL/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005010100.00
 Description:

LAT/LON: 38.928059/ -78.219449

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 3.860
 RF3 Mile Point: 0.00

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 079 /079 /FMC 03 /141-03
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0761

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0762

NPS Station ID: SHEN0762 LAT/LON: 38.928615/ -78.190560
 Location: HAPPY CREEK AT CROSBY STADIUM AT FRONT ROYAL, VA
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10
 Description:

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01636215
 Within Park Boundary: No

Date Created: 11/20/93

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0762

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/10/93-09/10/93	1	23.	23.	23.	23.	0.	0.	**	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/10/93-09/10/93	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	09/10/93-09/10/93	1	744.	744.	744.	744.	0.	0.	**	**	**	**
00061	FLOW, STREAM, INSTANTANEOUS CFS	09/10/93-09/10/93	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/10/93-09/10/93	1	321.	321.	321.	321.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/10/93-09/10/93	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/10/93-09/10/93	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/10/93-09/10/93	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/10/93-09/10/93	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/10/93-09/10/93	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/10/93-09/10/93	1	7.7	7.7	7.7	7.7	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/10/93-09/10/93	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00453	BICARBONATE, WATER, DISS, INCR TIT, FIELD, AS HCO3, MG/L	09/10/93-09/10/93	1	155.	155.	155.	155.	0.	0.	**	**	**	**
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	09/10/93-09/10/93	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00613	NITRITE NITROGEN, DISSOLVED (MG/L AS N)	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	09/10/93-09/10/93	1##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	09/10/93-09/10/93	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	09/10/93-09/10/93	1	0.8	0.8	0.8	0.8	0.	0.	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	09/10/93-09/10/93	1	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	09/10/93-09/10/93	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	09/10/93-09/10/93	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**	**
00915	CALCIUM, DISSOLVED (MG/L AS CA)	09/10/93-09/10/93	1	38.	38.	38.	38.	0.	0.	**	**	**	**
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	09/10/93-09/10/93	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00930	SODIUM, DISSOLVED (MG/L AS NA)	09/10/93-09/10/93	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00935	POTASSIUM, DISSOLVED (MG/L AS K)	09/10/93-09/10/93	1	1.9	1.9	1.9	1.9	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	09/10/93-09/10/93	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	09/10/93-09/10/93	1	13.	13.	13.	13.	0.	0.	**	**	**	**
00950	FLUORIDE, DISSOLVED (MG/L AS F)	09/10/93-09/10/93	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
00955	SILICA, DISSOLVED (MG/L AS SI02)	09/10/93-09/10/93	1	14.	14.	14.	14.	0.	0.	**	**	**	**
01046	IRON, DISSOLVED (UG/L AS FE)	09/10/93-09/10/93	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01056	MANGANESE, DISSOLVED (UG/L AS MN)	09/10/93-09/10/93	1	21.	21.	21.	21.	0.	0.	**	**	**	**
04024	PROPACHLOR, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	1##	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
04028	BUTYLATE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	1	0.017	0.017	0.017	0.017	0.	0.	**	**	**	**
04037	PROMETON, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	1	0.21	0.21	0.21	0.21	0.	0.	**	**	**	**
04040	DEETHYL ATRAZINE, DISSOLVED, WATER, TOT REC UG/L	09/10/93-09/10/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
04041	CYANAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	1##	0.007	0.007	0.007	0.007	0.	0.	**	**	**	**
04095	FONOFOS, DISSOLVED, WATER, TOTAL RECOVERABLE UG/L	09/10/93-09/10/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0762

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
34253	A-BHC-ALPHA DISSUG/L	09/10/93-09/10/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
34653	P,P'-DDE DISSUG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
38933	CHLORPYRIFOS,DISSOLVED UG/L	09/10/93-09/10/93	1##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
39086	ALKALINITY,WATER,DISS,INCR TIT,FIELD,AS CaCO3,MG/L	09/10/93-09/10/93	1	127.	127.	127.	127.	0.	0.	**	**	**	**
39341	GAMMA-BHC(LINDANE),DISSOLVED UG/L	09/10/93-09/10/93	1##	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/10/93-09/10/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
39415	METOLACHLOR, WATER, DISSOLVED UG/L	09/10/93-09/10/93	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
39532	MALATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/10/93-09/10/93	1##	0.011	0.011	0.011	0.011	0.	0.	**	**	**	**
39572	DIAZINON IN FILT. FRAC. OF WATER SAMPLE (UG/L)	09/10/93-09/10/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
39632	ATRAZINE DISSOLVED IN WATER PPB	09/10/93-09/10/93	1	0.008	0.008	0.008	0.008	0.	0.	**	**	**	**
46342	ALACHLOR (LASSO), WATER, DISSOLVED UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
70300	RESIDUE,TOTAL FILTRABLE (DRIED AT 180C),MG/L	09/10/93-09/10/93	1	186.	186.	186.	186.	0.	0.	**	**	**	**
82630	METRIBUZIN (SENCOR), WATER, DISSOLVED UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82660	DIETHYLANILINE, 2, 6-0.7UM FILT,TOT RECV,WTR UG/L	09/10/93-09/10/93	1##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
82661	TRIFLURALINE, 0.7UM FILT,TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82662	DIMETHOATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.	0.	0.	0.	0.	0.	**	**	**	**
82663	ETHALFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82664	PHORATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82665	TERBACIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.015	0.015	0.015	0.015	0.	0.	**	**	**	**
82666	LINURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
82667	METHYL PARATHION,0.7 UM FILT,TOT RECV,WATER UG/L	09/10/93-09/10/93	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
82668	EPTC, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
82669	PEBULATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82670	TEBUTHIURON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82671	MOLINATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
82672	ETHOPROP, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82673	BENFLURALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82674	CARBOFURAN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82675	TERBUFOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82676	PRONAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82677	DISULFOTON, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82678	TRIALATE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
82679	PROPANIL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82680	CARBARYL, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.025	0.025	0.025	0.025	0.	0.	**	**	**	**
82681	THIOBENCARB, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.004	0.004	0.004	0.004	0.	0.	**	**	**	**
82682	DCPA, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.002	0.002	0.002	0.002	0.	0.	**	**	**	**
82683	PENDIMETHALIN, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
82684	NAPROPAMIDE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82685	PROPARGITE, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
82686	METHYL AZINPHOS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
82687	PERMETHRIN, CIS, 0.7 UM FILT, TOT RECV, WATER UG/L	09/10/93-09/10/93	1##	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0762

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	1	0	0.00	1	0	0.00								
00400	PH	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00403	PH, LAB	Fresh Chronic	9.	1	0	0.00	1	0	0.00								
		Other-Lo Lim.	6.5	1	0	0.00	1	0	0.00								
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	1	0	0.00	1	0	0.00								
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	1	0	0.00	1	0	0.00								
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	1	0	0.00	1	0	0.00								
		Drinking Water	250.	1	0	0.00	1	0	0.00								
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00	1	0	0.00								
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	1	0	0.00	1	0	0.00								

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0762

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
04035 SIMAZINE, DISSOLVED, WATER, TOTAL RECOVER	Drinking Water	4.	1	0	0.00	1	0	0.00										
34653 P,P'-DDE, DISSOLVED	Fresh Acute	1050.	1	0	0.00	1	0	0.00										
38933 CHLORPYRIFOS, DISSOLVED	Fresh Acute	0.083	1	0	0.00	1	0	0.00										
39341 GAMMA-BHC(LINDANE), DISSOLVED	Fresh Acute	2.	1	0	0.00	1	0	0.00										
	Drinking Water	0.2	1	0	0.00	1	0	0.00										
39381 DIELDRIN IN FILT. FRAC. OF WATER SAMPLE	Fresh Acute	2.5	1	0	0.00	1	0	0.00										
39542 PARATHION IN FILT. FRAC. OF WATER SAMPLE	Fresh Acute	0.065	1	0	0.00	1	0	0.00										
39632 ATRAZINE DISSOLVED IN WATER	Drinking Water	3.	1	0	0.00	1	0	0.00										
46342 ALACHLOR (LASSO), WATER, DISSOLVED	Drinking Water	2.	1	0	0.00	1	0	0.00										

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0763

NPS Station ID: SHEN0763
 Location: FMC CORP. FRONT ROYAL OTFL 004
 Station Type: /TYPA/IND/TREATD/OUTFL/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005000102.60
 Description:

LAT/LON: 38.929726/ -78.220282

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 3.410
 RF3 Mile Point: 2.59

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 080 /080 /FMC 04 /141-04
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0763

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0764

NPS Station ID: SHEN0764
 Location: ALLIED CHEM CO FRONT ROYAL OF 01
 Station Type: /TYPA/IND/TREATD/OUTFL/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005000102.33
 Description:

LAT/LON: 38.930838/ -78.214448

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 2.720
 RF3 Mile Point: 2.32

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 082 /082 /ALLIED 01
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0764

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0765

NPS Station ID: SHEN0765
 Location: FRONT ROYAL STP ON HAPPY CREEK
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070006000100.19
 Description:

LAT/LON: 38.931948/ -78.187781

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 1.110
 RF3 Mile Point: 0.18

Agency: 1112A9WQ
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): UP-POT-127 /SHEN-STP 127/127 /STP-127
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 3.30
 Distance from RF3: 0.10

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0765

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-04/18/73	3	15.5	15.333	19.	11.5	14.083	3.753	**	**	**
00060	FLOW, STREAM, MEAN DAILY CFS	04/18/73-04/18/73	1	2.	2.	2.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/72-04/18/73	4	96.55	84.775	115.2	30.8	1388.429	37.262	**	**	**
00400	PH (STANDARD UNITS)	05/24/72-04/18/73	3	7.3	7.267	7.5	7.	0.063	0.252	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/72-04/18/73	3	7.3	7.218	7.5	7.	0.067	0.259	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/72-04/18/73	3	0.05	0.061	0.1	0.032	0.001	0.035	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/24/72-05/24/72	1	190.	190.	190.	190.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/24/72-05/24/72	1	68.	68.	68.	68.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/24/72-04/18/73	4	22.525	22.925	29.5	17.15	36.168	6.014	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/72-04/18/73	4	22.468	23.684	31.	18.8	29.923	5.47	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/24/72-04/18/73	4	0.62	0.76	1.8	0.001	0.79	0.889	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-04/18/73	4	16.13	16.263	19.45	13.34	8.703	2.95	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/72-09/20/72	2	59.25	59.25	62.6	55.9	22.445	4.738	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/24/72-09/20/72	2	101.7	101.7	114.6	88.8	332.82	18.243	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	1	55.	55.	55.	55.	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/72-05/24/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/24/72-05/24/72	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/24/72-05/24/72	1	2.	2.	2.	2.	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/24/72-05/24/72	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/72-05/24/72	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/24/72-05/24/72	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/72-04/18/73	4	22.975	20.685	34.2	2.59	174.975	13.228	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/24/72-05/24/72	1	1.	1.	1.	1.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0765

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00400 PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
	Drinking Water	250.	1	0	0.00							1	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0765

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0766

NPS Station ID: SHEN0766
 Location: OLD VA,INC. FRONT ROYAL OTFL 01
 Station Type: /TYPA/IND/TREATD/OUTFL/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005000102.60
 Description:

LAT/LON: 38.936670/ -78.217227

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 2.720
 RF3 Mile Point: 2.59

Agency: 1113UPEN
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 081 /081 /OLD VA 01 /142-01
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0766

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0767

NPS Station ID: SHEN0767 LAT/LON: 38.937505/ -78.214448
 Location: SF SHENENDOAH RIVER BL CABIN RUN AT FRONT ROYAL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: Elevation: 0
 Minor Basin:
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070007017606.86 RF3 Mile Point: 9.10
 Description:

Agency: 112WRD
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 01631020
 Within Park Boundary: No

Date Created: 11/16/96

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0767

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/18/92-09/15/92	2	22.05	22.05	23.	21.1	1.805	1.344	**	**	**
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	09/15/92-09/15/92	1	24.	24.	24.	24.	0.	0.	**	**	**
00025	BAROMETRIC PRESSURE (MM OF HG)	09/15/92-09/15/92	1	772.	772.	772.	772.	0.	0.	**	**	**
00065	STAGE, STREAM (FEET)	08/18/92-08/19/92	2	1.84	1.84	1.86	1.82	0.001	0.028	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	08/18/92-09/15/92	2	316.	316.	328.	304.	288.	16.971	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/18/92-09/15/92	2	10.85	10.85	13.3	8.4	12.005	3.465	**	**	**
00400	PH (STANDARD UNITS)	08/18/92-09/15/92	2	8.84	8.84	8.97	8.71	0.034	0.184	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/18/92-09/15/92	2	8.821	8.821	8.97	8.71	0.035	0.186	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/18/92-09/15/92	2	0.002	0.002	0.002	0.001	0.	0.001	**	**	**
34790	SURFACTANTS, AS CTAS, WATER MG/L	08/19/92-08/19/92	1	6.	6.	6.	6.	0.	0.	**	**	**
34795	ANTIMONY, SED, BOT,	08/19/92-08/19/92	1	1.	1.	1.	1.	0.	0.	**	**	**
34800	ARSENIC, SED, BOT, WET SIEVE,	08/19/92-08/19/92	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34810	BERYLLIUM, SED, BOT, WET SIEVE,	08/19/92-08/19/92	1	2.	2.	2.	2.	0.	0.	**	**	**
34816	BISMUTH, SED, BOT, WET SIEVE,	08/19/92-08/19/92	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34825	CADMIUM, SED, BOT,	08/19/92-08/19/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**
34830	CALCIUM, SED, BOT,	08/19/92-08/19/92	1	1.	1.	1.	1.	0.	0.	**	**	**
34835	CERIUM, SED, BOT,	08/19/92-08/19/92	1	86.	86.	86.	86.	0.	0.	**	**	**
34840	CHROMIUM, SED, BOT,	08/19/92-08/19/92	1	67.	67.	67.	67.	0.	0.	**	**	**
34845	COBALT, SED, BOT,	08/19/92-08/19/92	1	21.	21.	21.	21.	0.	0.	**	**	**
34850	COPPER, SED, BOT,	08/19/92-08/19/92	1	39.	39.	39.	39.	0.	0.	**	**	**
34855	EUROPIUM, SED, BOT,	08/19/92-08/19/92	1	45.	45.	45.	45.	0.	0.	**	**	**
34860	GALLIUM, SED, BOT,	08/19/92-08/19/92	1	17.	17.	17.	17.	0.	0.	**	**	**
34870	GOLD, SED, BOT,	08/19/92-08/19/92	1 ##	4.	4.	4.	4.	0.	0.	**	**	**
34875	HOLMIUM, SED, BOT,	08/19/92-08/19/92	1 ##	2.	2.	2.	2.	0.	0.	**	**	**
34880	IRON, SED, BOT,	08/19/92-08/19/92	1	4.	4.	4.	4.	0.	0.	**	**	**
34885	LANTHANUM, SED, BOT,	08/19/92-08/19/92	1	45.	45.	45.	45.	0.	0.	**	**	**
34890	LEAD, SED, BOT,	08/19/92-08/19/92	1	34.	34.	34.	34.	0.	0.	**	**	**
34895	LITHIUM, SED, BOT,	08/19/92-08/19/92	1	50.	50.	50.	50.	0.	0.	**	**	**
34900	MAGNESIUM, SED, BOT,	08/19/92-08/19/92	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**
34905	MANGANESE, SED, BOT,	08/19/92-08/19/92	1	830.	830.	830.	830.	0.	0.	**	**	**
34910	MERCURY, SED, BOT,	08/19/92-08/19/92	1	0.86	0.86	0.86	0.86	0.	0.	**	**	**
34915	MOLYBDENUM, SED, BOT,	08/19/92-08/19/92	1 ##	1.	1.	1.	1.	0.	0.	**	**	**
34920	NEODYMIUM, SED, BOT,	08/19/92-08/19/92	1	36.	36.	36.	36.	0.	0.	**	**	**
34925	NICKEL, SED, BOT,	08/19/92-08/19/92	1	31.	31.	31.	31.	0.	0.	**	**	**
34930	NIObIUM, SED, BOT,	08/19/92-08/19/92	1	8.	8.	8.	8.	0.	0.	**	**	**
34935	PHOSPHORUS, SED, BOT,	08/19/92-08/19/92	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**
34940	POTASSIUM, SED, BOT,	08/19/92-08/19/92	1	2.	2.	2.	2.	0.	0.	**	**	**
34945	SCANDIUM, SED, BOT,	08/19/92-08/19/92	1	12.	12.	12.	12.	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0767

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
34950	SELENIUM,SED,BOT,	08/19/92-08/19/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34955	SILVER,SED,BOT,	08/19/92-08/19/92	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
34960	SODIUM,SED,BOT,	08/19/92-08/19/92	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
34965	STRONTIUM,SED,BOT,	08/19/92-08/19/92	1	80.	80.	80.	80.	0.	0.	**	**	**	**
34970	SULFUR,SED,BOT,	08/19/92-08/19/92	1	0.19	0.19	0.19	0.19	0.	0.	**	**	**	**
34975	TANTALUM,SED,BOT,	08/19/92-08/19/92	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
34980	THORIUM,SED,BOT,	08/19/92-08/19/92	1	11.	11.	11.	11.	0.	0.	**	**	**	**
34985	TIN,SED,BOT,	08/19/92-08/19/92	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
35000	URANIUM,SED,BOT,	08/19/92-08/19/92	1	4.3	4.3	4.3	4.3	0.	0.	**	**	**	**
35005	VANADIUM,SED,BOT,	08/19/92-08/19/92	1	88.	88.	88.	88.	0.	0.	**	**	**	**
35010	YTTRIUM,SED,BOT,	08/19/92-08/19/92	1	27.	27.	27.	27.	0.	0.	**	**	**	**
35015	YTTERBIUM,SED,BOT,	08/19/92-08/19/92	1	3.	3.	3.	3.	0.	0.	**	**	**	**
35020	ZINC,SED,BOT,	08/19/92-08/19/92	1	580.	580.	580.	580.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0767

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----	
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00				
00400	PH	Fresh Chronic	9.	2	0	0.00	2	0	0.00				
		Other-Lo Lim.	6.5	2	0	0.00	2	0	0.00				

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0768

NPS Station ID: SHEN0768
 Location: S FORK SHEN RT 340 FRONT ROYAL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005000102.60
 Description:

LAT/LON: 38.941670/ -78.199170

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 1.360
 RF3 Mile Point: 2.59

Agency: 1112A9WQ
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): UP-POT-88 /SHEN-88 /088 /S FK 088
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0768

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/24/72-04/18/73	3	16.	12.933	19.	3.8	64.813	8.051	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/24/72-04/18/73	4	8.8	9.625	13.2	7.7	6.276	2.505	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/72-04/18/73	4	2.4	2.975	4.8	2.3	1.483	1.218	**	**	**
00400	PH (STANDARD UNITS)	05/24/72-04/18/73	3	7.3	7.6	8.2	7.3	0.27	0.52	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/72-04/18/73	3	7.3	7.45	8.2	7.3	0.304	0.551	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/72-04/18/73	3	0.05	0.036	0.05	0.006	0.001	0.025	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/24/72-05/24/72	1	67.	67.	67.	67.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/24/72-05/24/72	1	12.	12.	12.	12.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/24/72-04/18/73	4	0.105	0.111	0.17	0.065	0.002	0.05	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/72-04/18/73	4	0.912	0.989	1.71	0.424	0.311	0.557	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/24/72-04/18/73	4	1.14	1.095	1.21	0.89	0.022	0.149	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-04/18/73	4	0.19	0.198	0.28	0.13	0.004	0.062	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/72-02/13/73	3	4.2	4.733	5.9	4.1	1.023	1.012	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/24/72-02/13/73	3	23.8	26.033	36.6	17.7	93.043	9.646	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-04/18/73	2 ##	13.5	13.5	17.	10.	24.5	4.95	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/72-05/24/72	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	02/13/73-02/13/73	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/24/72-05/24/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/24/72-04/18/73	3	50.	51.667	103.	2.	2552.333	50.521	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/24/72-05/24/72	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/72-05/24/72	1	0.09	0.09	0.09	0.09	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/24/72-05/24/72	1	0.05	0.05	0.05	0.05	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2	665.	665.	1100.	230.	378450.	615.183	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2	2.702	2.702	3.041	2.362	0.231	0.481	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2 ##	250.	250.	490.	10.	115200.	339.411	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	2 ##	1.845	1.845	2.69	1.	1.428	1.195	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	2 ##	70.	70.	70.	1.	1.	1.	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	02/13/73-04/18/73	2	1.	1.	1.	1.	0.	0.	**	**	**
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	09/20/72-02/13/73	2 ##	0.4	0.4	0.5	0.3	0.02	0.141	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/72-04/18/73	4	0.415	0.375	0.51	0.16	0.023	0.151	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/24/72-02/13/73	2 ##	0.001	0.001	0.001	0.	0.	0.001	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0768

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2	0	0.00							2	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	1	0	0.00				1	0	0.00						
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	1	0.50				1	0	0.00	1	1	1.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	1	0.50				1	0	0.00	1	1	1.00			
39370 DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	2	0	0.00	1	0	0.00	1	0	0.00						
71900 MERCURY, TOTAL	Fresh Acute	2.4	2	0	0.00				1	0	0.00	1	0	0.00			
	Drinking Water	2.	2	0	0.00				1	0	0.00	1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0769

NPS Station ID: SHEN0769
 Location: HAPPY CREEK NEAR MOUTH
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070005001
 RF3 Index: 02070005006400.00
 Description:

LAT/LON: 38.942226/ -78.187781

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.870
 RF3 Mile Point: 2.60

Agency: 1112A9WQ
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): UP-POT-090 /SHEN-090 /090 /HAPPY 090
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 15.80
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0769

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	02/13/73-04/18/73	2	10.5	10.5	16.5	4.5	72.	8.485	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/24/72-04/18/73	4	9.6	8.5	12.5	2.3	19.013	4.36	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/24/72-04/18/73	4	5.1	5.35	7.9	3.3	3.637	1.907	**	**	**
00400	PH (STANDARD UNITS)	05/24/72-04/18/73	3	7.2	7.5	8.1	7.2	0.27	0.52	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/24/72-04/18/73	3	7.2	7.35	8.1	7.2	0.304	0.551	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/24/72-04/18/73	3	0.063	0.045	0.063	0.008	0.001	0.032	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	05/24/72-05/24/72	1	50.	50.	50.	50.	0.	0.	**	**	**
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	05/24/72-05/24/72	1	14.	14.	14.	14.	0.	0.	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/24/72-04/18/73	4	0.933	2.724	8.45	0.58	14.615	3.823	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/24/72-04/18/73	4	1.948	3.305	8.274	1.05	11.193	3.346	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	05/24/72-04/18/73	4	0.505	0.57	0.8	0.47	0.024	0.154	**	**	**
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	05/24/72-04/18/73	4	0.715	1.4	3.65	0.52	2.272	1.507	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/24/72-02/13/73	3	5.8	6.533	8.7	5.1	3.643	1.909	**	**	**
00690	CARBON, TOTAL (MG/L AS C)	05/24/72-02/13/73	3	16.9	25.833	46.2	14.4	312.663	17.682	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	05/24/72-05/24/72	1##	0.2	0.2	0.2	0.2	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	05/24/72-05/24/72	1##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	05/24/72-05/24/72	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	05/24/72-05/24/72	1	1.	1.	1.	1.	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/24/72-05/24/72	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	05/24/72-05/24/72	1	0.08	0.08	0.08	0.08	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	05/24/72-05/24/72	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2##	120.	120.	230.	10.	24200.	155.563	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	02/13/73-04/18/73	2##	1.681	1.681	2.362	1.	0.927	0.963	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			47.958							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	2##	10.	10.	10.	10.	0.	0.	**	**	**
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	02/13/73-04/18/73	2##	1.	1.	1.	1.	0.	0.	**	**	**
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			10.							
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	05/24/72-04/18/73	4	4.78	27.755	100.	1.46	2327.383	48.243	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	05/24/72-05/24/72	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0769

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4	1	0.25	1	1	1.00	1	0	0.00	2	0	0.00			
00400 PH	Fresh Chronic	9.	3	0	0.00				1	0	0.00	2	0	0.00			
	Other-Lo Lim.	6.5	3	0	0.00				1	0	0.00	2	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	4	0	0.00	1	0	0.00	1	0	0.00	2	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	1	0	0.00							1	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	1	0	0.00							1	0	0.00			
	Drinking Water	5.	1	0	0.00							1	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	1	0	0.00							1	0	0.00			
	Drinking Water	1300.	1	0	0.00							1	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	1	0	0.00							1	0	0.00			
	Drinking Water	15.	1	0	0.00							1	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	1	0	0.00							1	0	0.00			
	Drinking Water	5000.	1	0	0.00							1	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	2	0	0.00				1	0	0.00	1	0	0.00			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	2	0	0.00				1	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	0	0.00							1	0	0.00			
	Drinking Water	2.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0770

NPS Station ID: SHEN0770
 Location: S.F.SHEN.R. RTE 340 BR FRNT ROYL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070006
 RF3 Index: 02070005000102.60
 Description:

LAT/LON: 38.942226/ -78.200005

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.59

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 022 /022 /SF SHEN S-20
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0770

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/67-06/16/67	10	26.5	26.55	29.	24.	3.136	1.771	24.05	24.875	28.25	29.
00300	OXYGEN, DISSOLVED MG/L	06/14/67-06/16/67	10	7.3	8.	12.8	4.9	7.98	2.825	4.92	5.175	10.525	12.58
00310	BOD, 5 DAY, 20 DEG C MG/L	06/14/67-06/16/67	10	9.55	9.79	11.9	7.5	2.132	1.46	7.6	8.65	11.225	11.87
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/14/67-06/15/67	5	500.	568.	1090.	230.	138720.	372.451	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	06/14/67-06/15/67	5	2.699	2.671	3.037	2.362	0.094	0.307	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			469.349								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	5 ##	10.	30.	100.	10.	1550.	39.37	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	5 ##	1.	1.26	2.	1.	0.188	0.434	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			18.206								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0770

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	10	0	0.00						10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	1	0.20						5	1	0.20			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	0	0.00						5	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0771

NPS Station ID: SHEN0771
 Location: S.F.SHEN.R. US 340 BR FRNT ROYAL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070006
 RF3 Index: 02070005000102.60
 Description:

LAT/LON: 38.942226/ -78.200005

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 2.59

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 078 /078 /SFSHEN-S20
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0771

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/69-08/18/69	2	25.	25.	25.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/29/69-08/18/69	2	29.75	29.75	55.	4.5	1275.125	35.709	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/29/69-08/18/69	2	6.65	6.65	7.	6.3	0.245	0.495	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/29/69-08/18/69	2	3.	3.	3.8	2.2	1.28	1.131	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/69-08/18/69	2	0.065	0.065	0.1	0.03	0.002	0.049	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/69-07/29/69	1	1.104	1.104	1.104	1.104	0.	0.	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/29/69-08/18/69	2	1.385	1.385	1.39	1.38	0.	0.007	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/18/69	2	3555.	3555.	4900.	2210.	3618050.	1902.117	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/18/69	2	3.517	3.517	3.69	3.344	0.06	0.245	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			3290.745							
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/18/69	2	1185.	1185.	2200.	170.	2060450.	1435.427	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/18/69	2	2.786	2.786	3.342	2.23	0.618	0.786	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			611.555							
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/29/69-08/18/69	2	9.	9.	15.75	2.25	91.125	9.546	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/29/69-08/18/69	2	0.55	0.55	0.64	0.46	0.016	0.127	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0771

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	1	0.50	2	1	0.50							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	1	0.50	2	1	0.50							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0772

NPS Station ID: SHEN0772
 Location: AT RIVERTON JUNCTION
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005001
 RF3 Index: 02070005006400.00

LAT/LON: 38.942782/ -78.187449

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BHPY000.10 /VA1B01DX0021/VA1B6X0021
 Within Park Boundary: No

Date Created: / /

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 10.80
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: HAPPY CREEK SECTION: 01D TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Parameter Inventory for Station: SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	87	15.6	14.475	27.8	0.5	54.374	7.374	4.4	6.7	20.5	24.52
00300 OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	88	9.2	8.39	15.	0.	12.362	3.516	2.59	5.85	10.975	12.8
00310 BOD, 5 DAY, 20 DEG C MG/L	12/05/68-06/22/78	19	9.9	11.126	30.	1.1	57.773	7.601	3.	5.8	15.	22.
00400 PH (STANDARD UNITS)	08/15/68-12/14/78	86	7.5	7.741	9.5	6.7	0.363	0.602	7.2	7.3	8.	8.7
00400 CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	86	7.5	7.466	9.5	6.7	0.439	0.663	7.2	7.3	8.	8.7
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	86	0.032	0.034	0.2	0.	0.001	0.035	0.002	0.01	0.05	0.063
00403 PH, LAB, STANDARD UNITS SU	12/05/68-09/24/73	9	7.2	7.244	7.6	7.	0.038	0.194	7.	7.1	7.4	7.6
00403 CONVERTED PH, LAB, STANDARD UNITS	12/05/68-09/24/73	9	7.2	7.208	7.6	7.	0.039	0.198	7.	7.1	7.4	7.6
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12/05/68-09/24/73	9	0.063	0.062	0.1	0.025	0.001	0.026	0.025	0.04	0.082	0.1
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	12/05/68-01/10/73	8	65.5	65.125	87.	44.	209.554	14.476	**	**	**	**
00500 RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	82	161.	193.744	1082.	2.	19172.44	138.465	89.6	125.	223.	331.
00505 RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	82	49.5	59.573	310.	4.	1870.865	43.253	18.3	30.75	79.	106.
00510 RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	82	109.	131.476	772.	12.	10825.981	104.048	50.1	81.5	152.	241.5
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	82	10.	29.134	964.	0.	11758.309	108.436	3.	5.75	18.	33.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	82	4.	10.732	308.	0.	1162.143	34.09	1.	2.	9.25	19.7
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	82	4.	17.464	656.	0.	5664.866	75.265	0.	1.	8.	22.
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	79	1.5	2.552	22.5	0.005	17.252	4.154	0.05	0.3	2.699	6.5
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	81	0.02	0.082	4.	0.005	0.195	0.442	0.005	0.01	0.06	0.08
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	74	0.595	0.613	1.659	0.005	0.149	0.386	0.033	0.33	0.84	1.199
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	80	2.199	4.049	26.79	0.05	24.319	4.931	0.2	0.8	5.074	10.37
00630 NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	6	0.65	0.855	1.8	0.13	0.354	0.595	**	**	**	**
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	07/12/77-06/22/78	3	30.	58.333	135.	10.	4508.333	67.144	**	**	**	**
01002 ARSENIC, TOTAL (UG/L AS AS)	04/13/71-08/09/78	11 ##	1.	1.773	5.	0.5	1.668	1.292	0.6	1.	2.5	4.5
01027 CADMIUM, TOTAL (UG/L AS CD)	04/13/71-08/09/78	15 ##	5.	4.8	10.	0.5	4.064	2.016	1.1	5.	5.	7.
01034 CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/09/78	22 ##	5.	6.591	20.	5.	12.825	3.581	5.	5.	6.25	10.
01042 COPPER, TOTAL (UG/L AS CU)	04/07/70-08/09/78	22	10.	13.864	60.	5.	180.79	13.446	5.	5.	20.	30.
01045 IRON, TOTAL (UG/L AS FE)	11/16/70-04/13/71	2	300.	300.	300.	300.	0.	0.	**	**	**	**
01051 LEAD, TOTAL (UG/L AS PB)	11/16/70-08/09/78	19 ##	5.	9.395	40.	1.	82.683	9.093	1.5	5.	11.	20.
01055 MANGANESE, TOTAL (UG/L AS MN)	04/07/70-04/13/71	2	85.	85.	100.	70.	450.	21.213	**	**	**	**
01065 NICKEL, DISSOLVED (UG/L AS NI)	05/16/73-08/09/78	10 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092 ZINC, TOTAL (UG/L AS ZN)	04/07/70-08/09/78	22 ##	7.5	16.136	110.	5.	540.314	23.245	5.	5.	20.	37.
31505 COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	08/15/68-10/12/70	12	9300.	14427.5	93000.	430.	625607438.636	25012.146	1471.	4300.	11000.	68400.
31505 LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150)	08/15/68-10/12/70	12	3.968	3.852	4.968	2.633	0.282	0.531	2.921	3.633	4.041	4.69

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506											
	GEOMETRIC MEAN =			7113.838								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	74	150.	1387.838	7800.	50.	4723685.672	2173.404	50.	50.	1675.	6000.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	74	2.151	2.483	3.892	1.699	0.65	0.806	1.699	1.699	3.218	3.778
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C											
	GEOMETRIC MEAN =			303.758								
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	1	0.	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	80	0.7	1.069	9.	0.05	2.071	1.439	0.05	0.2	1.2	2.6
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	81	0.45	0.84	6.	0.005	1.316	1.147	0.022	0.145	1.05	2.279
71900	MERCURY, TOTAL (UG/L AS HG)	21 ##	0.25	0.31	0.9	0.003	0.037	0.193	0.17	0.25	0.25	0.66

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0772

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	4.	88	12	0.14	25	11	0.44	36	0	0.00	27	1	0.04			
00400	PH																
	Fresh Chronic	9.	86	6	0.07	26	2	0.08	34	1	0.03	26	3	0.12			
	Other-Lo Lim.	6.5	86	0	0.00	26	0	0.00	34	0	0.00	26	0	0.00			
00403	PH, LAB																
	Fresh Chronic	9.	9	0	0.00	2	0	0.00	4	0	0.00	3	0	0.00			
	Other-Lo Lim.	6.5	9	0	0.00	2	0	0.00	4	0	0.00	3	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	81	1	0.01	23	0	0.00	33	1	0.03	25	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	74	0	0.00	21	0	0.00	30	0	0.00	23	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	10.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
01002	ARSENIC, TOTAL																
	Fresh Acute	360.	11	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	50.	11	0	0.00	6	0	0.00	2	0	0.00	3	0	0.00			
01027	CADMIUM, TOTAL																
	Fresh Acute	3.9	3 &	1	0.33	1	0	0.00	1	0	0.00	2	1	0.50			
	Drinking Water	5.	3 &	1	0.33	1	0	0.00	1	0	0.00	2	1	0.50			
01034	CHROMIUM, TOTAL	100.	22	0	0.00	6	0	0.00	8	0	0.00	8	0	0.00			
01042	COPPER, TOTAL																
	Fresh Acute	18.	22	6	0.27	6	2	0.33	8	1	0.13	8	3	0.38			
	Drinking Water	1300.	22	0	0.00	6	0	0.00	8	0	0.00	8	0	0.00			
01051	LEAD, TOTAL																
	Fresh Acute	82.	19	0	0.00	6	0	0.00	8	0	0.00	5	0	0.00			
	Drinking Water	15.	19	3	0.16	6	1	0.17	8	2	0.25	5	0	0.00			
01065	NICKEL, DISSOLVED																
	Fresh Acute	1400.	10	0	0.00	3	0	0.00	3	0	0.00	4	0	0.00			
	Drinking Water	100.	10	0	0.00	3	0	0.00	3	0	0.00	4	0	0.00			
01092	ZINC, TOTAL																
	Fresh Acute	120.	22	0	0.00	6	0	0.00	8	0	0.00	8	0	0.00			
	Drinking Water	5000.	22	0	0.00	6	0	0.00	8	0	0.00	8	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C																
	Other-Hi Lim.	1000.	12	11	0.92	6	6	1.00	2	1	0.50	4	4	1.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH																
	Other-Hi Lim.	200.	74	37	0.50	20	16	0.80	32	9	0.28	22	12	0.55			
50060	CHLORINE, TOTAL RESIDUAL																
	Fresh Acute	0.019	1	0	0.00							1	0	0.00			
71900	MERCURY, TOTAL																
	Fresh Acute	2.4	21	0	0.00	7	0	0.00	8	0	0.00	6	0	0.00			
	Drinking Water	2.	21	0	0.00	7	0	0.00	8	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1968 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3	19.4	18.133	27.8	7.2	107.293	10.358	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	3	6.7	7.067	10.	4.5	7.663	2.768	**	**	**	**
00400	PH (STANDARD UNITS)	3	8.	8.	8.5	7.5	0.25	0.5	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	3	8.	7.826	8.5	7.5	0.295	0.544	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.01	0.015	0.032	0.003	0.	0.015	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	1	167.	167.	167.	167.	0.	0.	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	1	75.	75.	75.	75.	0.	0.	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	1	92.	92.	92.	92.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	1	16.	16.	16.	16.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	1	15.	15.	15.	15.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	1	1.	1.	1.	1.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	3	16.7	13.5	19.4	4.4	63.93	7.996	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	3	8.	7.6	10.2	4.6	7.96	2.821	**	**	**	**
00400	PH (STANDARD UNITS)	3	7.7	7.833	8.5	7.3	0.373	0.611	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	3	7.7	7.612	8.5	7.3	0.447	0.668	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.02	0.024	0.05	0.003	0.001	0.024	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	3	181.	176.667	191.	158.	286.333	16.921	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	3	70.	67.	83.	48.	313.	17.692	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	3	110.	109.667	121.	98.	132.333	11.504	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	3	11.	10.	14.	5.	21.	4.583	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	3	6.	5.667	7.	4.	2.333	1.528	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	3	4.	4.333	8.	1.	12.333	3.512	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	8	13.9	13.488	22.2	5.6	52.058	7.215	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	9	6.2	7.289	13.	1.4	20.771	4.558	1.4	2.6	11.7	13.
00400	PH (STANDARD UNITS)	9	7.4	7.422	8.	6.7	0.134	0.367	6.7	7.25	7.65	8.
00400	CONVERTED PH (STANDARD UNITS)	9	7.4	7.272	8.	6.7	0.16	0.4	6.7	7.25	7.65	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.04	0.053	0.2	0.01	0.003	0.057	0.01	0.024	0.057	0.2
00500	RESIDUE, TOTAL (MG/L)	6	142.5	168.667	331.	82.	7554.667	86.918	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	6	55.5	56.	88.	11.	736.4	27.137	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	6	87.5	112.667	243.	71.	4272.267	65.363	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	6	13.	18.5	50.	4.	268.7	16.392	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	6	6.	11.333	45.	2.	276.667	16.633	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	6	6.5	7.167	15.	2.	19.767	4.446	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7	1.	2.332	6.5	0.005	7.92	2.814	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	7	0.01	0.019	0.08	0.005	0.001	0.027	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	7	0.64	0.581	0.99	0.04	0.094	0.307	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	7	2.	3.607	12.	0.05	19.577	4.425	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2 ##	525.	525.	1000.	50.	451250.	671.751	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2 ##	2.349	2.349	3.	1.699	0.846	0.92	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			223.607					**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	7	0.45	1.143	3.6	0.05	1.988	1.41	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	7	0.2	0.83	3.	0.01	1.308	1.144	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	10	15.	14.62	26.7	1.1	80.566	8.976	1.55	6.425	24.55	26.53
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	10	10.3	10.5	14.	6.2	5.78	2.404	6.44	8.9	12.95	13.94
00400	PH (STANDARD UNITS)	08/15/68-12/14/78	10	8.35	8.18	9.2	6.8	0.715	0.846	6.85	7.45	9.	9.18
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	10	8.222	7.55	9.2	6.8	1.156	1.075	6.85	7.45	9.	9.18
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	10	0.006	0.028	0.158	0.001	0.002	0.049	0.001	0.001	0.036	0.148
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	10	99.	105.	149.	51.	929.556	30.489	53.6	86.	131.25	148.2
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	10	27.	28.9	59.	7.	232.767	15.257	8.1	18.	39.	57.6
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	10	76.	76.1	123.	40.	663.656	25.762	40.4	53.	94.	120.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	6.5	11.5	55.	3.	241.389	15.537	3.1	4.	10.5	50.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	3.	4.9	20.	1.	30.989	5.567	1.1	2.	5.5	18.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	4.5	6.9	35.	1.	100.767	10.038	1.1	2.	5.5	32.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	9	0.15	0.458	1.899	0.01	0.425	0.652	0.01	0.02	0.9	1.899
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	10	0.01	0.025	0.1	0.01	0.001	0.031	0.01	0.01	0.03	0.096
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	10	0.39	0.383	0.89	0.01	0.082	0.286	0.014	0.155	0.573	0.871
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	10	0.5	0.82	2.699	0.05	0.812	0.901	0.05	0.163	1.649	2.609
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	9	1200.	1766.667	7800.	50.	6026875.	2454.969	50.	75.	2400.	7800.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	9	3.079	2.767	3.892	1.699	0.647	0.805	1.699	1.849	3.379	3.892
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			585.054								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	10##	0.075	0.315	1.5	0.05	0.226	0.475	0.05	0.05	0.55	1.42
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	10	0.04	0.269	1.5	0.01	0.223	0.472	0.01	0.018	0.478	1.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	8	12.75	11.6	18.9	5.6	27.92	5.284	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	8	10.2	9.4	13.	2.	11.223	3.35	**	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-12/14/78	8	7.3	7.325	8.	7.	0.119	0.345	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	8	7.3	7.228	8.	7.	0.13	0.361	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	8	0.05	0.059	0.1	0.01	0.001	0.036	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	8	157.	185.	427.	16.	15345.143	123.876	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	8	39.5	56.125	136.	25.	1610.696	40.133	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	8	95.5	102.5	329.	12.	11163.714	105.658	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	14.	46.5	213.	0.	5173.429	71.927	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	9.5	11.25	30.	0.	109.643	10.471	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	8.	35.25	190.	0.	4184.214	64.686	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	0.33	1.29	6.5	0.04	4.813	2.194	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	0.015	0.025	0.06	0.01	0.	0.02	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	8	0.645	0.759	1.289	0.17	0.131	0.362	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	8	0.7	2.187	10.5	0.2	12.087	3.477	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	450.	1956.25	6000.	50.	6872455.357	2621.537	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	2.628	2.739	3.778	1.699	0.691	0.831	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			547.723								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	8	0.15	0.706	3.	0.05	1.095	1.047	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	8	0.105	0.53	3.099	0.02	1.106	1.051	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	11	14.4	13.864	25.	3.3	57.063	7.554	3.52	5.6	19.4	24.88
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	11	10.	9.864	15.	5.1	8.129	2.851	5.28	7.8	11.8	14.4
00400	PH (STANDARD UNITS)	08/15/68-12/14/78	9	8.	7.889	9.2	6.9	0.574	0.757	6.9	7.25	8.4	9.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	9	8.	7.459	9.2	6.9	0.782	0.884	6.9	7.25	8.4	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	9	0.01	0.035	0.126	0.001	0.002	0.042	0.001	0.004	0.057	0.126
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	11	148.	160.273	334.	2.	8232.618	90.734	13.4	110.	218.	314.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	11	35.	38.818	94.	4.	650.764	25.51	6.2	16.	50.	88.8
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	11	114.	120.	266.	20.	3876.8	62.264	27.	95.	136.	245.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	11	16.	23.273	119.	3.	1079.418	32.855	3.2	6.	20.	101.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	11	4.	8.545	19.	2.	46.673	6.832	2.	3.	15.	19.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	11	2.	14.182	94.	0.	767.964	27.712	0.2	1.	13.	80.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	10	0.92	1.509	4.599	0.05	2.944	1.716	0.05	0.05	2.624	4.559
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	11	0.01	0.377	4.	0.005	1.444	1.202	0.005	0.01	0.03	3.208
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	11	0.8	0.762	1.659	0.005	0.264	0.513	0.03	0.3	1.209	1.581
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	10	2.049	3.725	15.	0.05	23.035	4.799	0.085	0.4	5.625	14.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	11	100.	1295.455	6000.	50.	5551227.273	2356.104	50.	50.	1300.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	11	2.	2.351	3.778	1.699	0.715	0.846	1.699	1.699	3.114	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			224.532								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	10	0.45	1.575	9.	0.05	7.88	2.807	0.05	0.05	1.775	8.45
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	11	0.45	1.141	5.899	0.05	2.985	1.728	0.05	0.15	1.5	5.189

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	7	16.1	14.657	21.	3.3	32.3	5.683	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	7	8.	8.357	11.4	6.4	3.256	1.804	**	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-12/14/78	7	7.8	8.071	8.9	7.5	0.309	0.556	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	7	7.8	7.834	8.9	7.5	0.375	0.612	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	7	0.016	0.015	0.032	0.001	0.	0.013	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	7	145.	193.143	304.	101.	7253.143	85.165	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	7	64.	77.857	140.	41.	1698.143	41.209	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	7	95.	115.286	190.	42.	2971.238	54.509	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	7	11.	13.143	28.	3.	114.143	10.684	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	7	6.	5.714	14.	1.	18.238	4.271	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	7	5.	7.429	22.	2.	59.286	7.7	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	0.8	1.425	4.199	0.05	2.849	1.688	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	0.01	0.017	0.05	0.005	0.	0.016	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	8	0.7	0.7	1.25	0.2	0.121	0.348	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	8	2.85	3.887	11.	0.2	13.613	3.69	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	75.	987.5	6000.	50.	4285535.714	2070.154	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	1.849	2.271	3.778	1.699	0.63	0.793	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			186.482								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	8	0.9	1.025	2.6	0.1	0.631	0.794	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	8	0.55	0.769	2.299	0.05	0.523	0.723	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	10	15.85	14.61	23.9	3.9	50.214	7.086	3.95	7.775	20.55	23.73
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	10	9.35	8.43	11.2	3.	7.449	2.729	3.26	5.6	10.25	11.18
00400	PH (STANDARD UNITS)	08/15/68-12/14/78	11	7.5	7.682	8.7	7.2	0.202	0.449	7.2	7.4	8.	8.56
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	11	7.5	7.53	8.7	7.2	0.227	0.476	7.2	7.4	8.	8.56
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	11	0.032	0.029	0.063	0.002	0.	0.021	0.004	0.01	0.04	0.063
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	10	148.	161.	302.	77.	3673.111	60.606	80.9	127.25	184.25	291.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	10	46.	58.5	155.	22.	1873.389	43.283	22.1	24.5	79.	150.1
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	10	107.	103.1	174.	48.	1547.211	39.335	49.1	68.75	125.75	171.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	7.	17.6	85.	2.	639.6	25.29	2.2	4.75	21.5	79.7
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	4.	3.8	9.	0.	5.956	2.44	0.2	2.	4.5	8.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	4.	6.3	23.	0.	49.567	7.04	0.1	1.75	8.75	22.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	10	1.699	1.819	3.699	0.2	1.148	1.071	0.22	1.225	2.574	3.639
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	10	0.055	0.055	0.1	0.005	0.001	0.036	0.005	0.024	0.093	0.1
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	10	0.6	0.594	1.399	0.02	0.134	0.366	0.038	0.388	0.718	1.336
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	10	2.199	3.289	8.699	0.5	8.346	2.889	0.54	1.35	5.05	8.649
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10	150.	1470.	6000.	50.	5894555.556	2427.871	50.	50.	2550.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10	2.151	2.47	3.778	1.699	0.744	0.862	1.699	1.699	3.304	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				295.286								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	10	0.6	0.86	2.3	0.3	0.494	0.703	0.3	0.375	1.1	2.27
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	10	0.485	0.706	2.	0.1	0.504	0.71	0.109	0.198	1.025	2.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	10	15.2	15.31	26.1	1.1	57.054	7.553	2.05	10.9	22.525	25.99
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	10	8.35	7.31	13.5	1.5	15.539	3.942	1.52	3.65	9.85	13.21
00400	PH (STANDARD UNITS)	08/15/68-12/14/78	10	7.5	7.52	8.	7.	0.088	0.297	7.02	7.275	7.725	7.98
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	10	7.5	7.427	8.	7.	0.098	0.313	7.02	7.275	7.725	7.98
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	10	0.032	0.037	0.1	0.01	0.001	0.027	0.011	0.019	0.053	0.096
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	10	173.5	195.5	278.	151.	2186.278	46.758	152.1	162.	230.75	277.7
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	10	67.5	68.7	90.	49.	193.789	13.921	49.3	57.25	80.75	89.3
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	10	113.5	126.8	195.	92.	1367.733	36.983	92.	98.	149.75	194.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	8.	8.75	18.	0.5	35.514	5.959	0.65	4.25	13.5	18.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	2.	3.65	10.	0.	11.669	3.416	0.05	0.875	6.5	9.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	10	2.	5.15	18.	0.	44.225	6.65	0.	0.375	8.5	17.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	10	1.599	3.32	20.	0.5	34.917	5.909	0.52	0.775	2.324	18.27
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	10	0.06	0.053	0.08	0.01	0.001	0.024	0.012	0.03	0.073	0.08
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	10	0.655	0.64	1.189	0.025	0.142	0.376	0.042	0.333	0.915	1.184
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	10	3.899	3.969	7.399	1.199	4.791	2.189	1.219	2.149	5.575	7.389
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10	100.	690.	3400.	50.	1342111.111	1158.495	50.	50.	925.	3280.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	10	2.	2.297	3.531	1.699	0.498	0.705	1.699	1.699	2.86	3.513
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				198.19								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	10	0.85	1.05	3.2	0.2	0.725	0.851	0.2	0.575	1.325	3.02
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	10	0.625	0.76	1.899	0.16	0.285	0.534	0.163	0.385	1.149	1.839

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	8	21.85	16.838	26.5	0.5	100.04	10.002	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	8	5.45	6.263	13.2	0.	26.594	5.157	**	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-12/14/78	8	7.5	7.688	9.	7.4	0.287	0.536	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	8	7.5	7.55	9.	7.4	0.309	0.556	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	8	0.032	0.028	0.04	0.001	0.	0.012	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	8	309.5	305.25	601.	91.	26359.357	162.356	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	8	77.	70.	117.	20.	1319.714	36.328	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	8	248.5	235.25	484.	71.	16926.5	130.102	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	9.5	11.313	26.	0.5	94.638	9.728	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	7.	9.688	23.	0.5	74.924	8.656	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	0.275	1.694	6.	0.	6.043	2.458	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	5.7	8.125	22.5	0.4	73.794	8.59	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	0.025	0.036	0.1	0.005	0.001	0.035	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	7	0.57	0.399	0.9	0.025	0.135	0.367	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	8	9.794	11.046	26.79	1.	100.2	10.01	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	575.	2412.5	6000.	50.	8951250.	2991.864	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	2.37	2.646	3.778	1.699	1.084	1.041	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8 ##	2.37	2.646	3.778	1.699	1.084	1.041	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	8	1.6	2.175	6.	0.2	4.928	2.22	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	8	1.5	1.954	6.	0.17	4.226	2.056	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	8	17.	15.25	23.	2.5	53.857	7.339	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	8	8.3	7.887	12.8	2.5	14.69	3.833	**	**	**	**
00400	PH (STANDARD UNITS)	08/15/68-12/14/78	8	7.5	7.788	9.5	7.2	0.573	0.757	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	8	7.5	7.511	9.5	7.2	0.66	0.813	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	8	0.032	0.031	0.063	0.	0.001	0.023	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	8	215.	315.75	1082.	115.	101340.5	318.34	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	8	62.	91.375	310.	12.	8922.268	94.458	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	8	144.	224.375	772.	79.	51515.125	226.969	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	9.5	130.375	964.	3.	113538.554	336.955	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	5.5	44.375	308.	1.	11389.411	106.721	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	8	3.5	86.	656.	1.	53055.429	230.338	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	2.25	3.237	7.	1.	5.169	2.274	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	8	0.045	0.048	0.09	0.005	0.001	0.028	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	3	0.56	0.746	1.299	0.38	0.237	0.487	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	8	4.499	4.937	9.2	2.1	7.299	2.702	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	250.	881.25	3100.	50.	1803526.786	1342.954	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	2.389	2.415	3.491	1.699	0.549	0.741	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	8	2.389	2.415	3.491	1.699	0.549	0.741	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	8	0.95	0.925	1.7	0.2	0.199	0.446	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	8	0.59	0.711	1.7	0.005	0.29	0.539	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	08/15/68-02/06/79	1	6.5	6.5	6.5	6.5	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	08/15/68-02/06/79	1	10.9	10.9	10.9	10.9	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	1	2.1	2.1	2.1	2.1	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	1	0.03	0.03	0.03	0.03	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	1	4.2	4.2	4.2	4.2	0.	0.	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	1	0.9	0.9	0.9	0.9	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	1	0.6	0.6	0.6	0.6	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	25	21.7	21.604	27.8	15.6	13.682	3.699	16.1	18.45	25.	26.58
00300	OXYGEN, DISSOLVED MG/L	25	5.1	4.976	9.4	0.	9.134	3.022	1.4	2.25	8.3	9.08
00400	PH (STANDARD UNITS)	26	7.5	7.712	9.	6.7	0.359	0.599	7.11	7.375	8.125	8.65
00400	CONVERTED PH (STANDARD UNITS)	26	7.5	7.43	9.	6.7	0.441	0.664	7.11	7.375	8.125	8.65
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	26	0.032	0.037	0.2	0.001	0.002	0.042	0.003	0.008	0.042	0.082
00500	RESIDUE, TOTAL (MG/L)	22	206.	204.955	415.	16.	11866.331	108.933	58.8	107.75	292.	333.7
00505	RESIDUE, TOTAL VOLATILE (MG/L)	22	63.5	63.5	136.	7.	1486.929	38.561	16.2	26.5	88.5	127.
00510	RESIDUE, TOTAL FIXED (MG/L)	22	131.5	142.591	302.	13.	6490.158	80.562	42.6	87.25	197.	263.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	22	10.	16.455	55.	2.	216.641	14.719	2.3	5.5	23.75	44.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	22	5.5	9.045	45.	0.	109.474	10.463	1.	2.	11.25	22.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	22	3.	7.409	35.	0.	98.348	9.917	0.	1.	9.5	26.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	21	3.099	4.793	22.5	0.05	37.717	6.141	0.05	0.45	6.25	18.
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	23	0.04	0.043	0.1	0.005	0.001	0.031	0.007	0.01	0.07	0.092
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	21	0.3	0.423	1.25	0.005	0.174	0.417	0.013	0.033	0.735	1.195
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	22	5.05	6.094	26.79	0.2	42.732	6.537	0.4	0.825	8.85	14.517
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	20	1800.	2785.	6000.	50.	6749500.	2597.98	55.	200.	6000.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	20	3.244	3.038	3.778	1.699	0.601	0.775	1.729	2.301	3.778	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			1090.641								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	22	1.	1.818	9.	0.05	4.834	2.199	0.065	0.3	2.7	5.28
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	23	0.9	1.473	6.	0.03	2.917	1.708	0.05	0.19	2.	4.779

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	36	6.05	7.892	21.	0.5	23.139	4.81	2.08	4.4	11.1	14.58
00300	OXYGEN, DISSOLVED MG/L	36	10.95	10.669	15.	4.1	5.062	2.25	7.71	9.7	12.	13.29
00400	PH (STANDARD UNITS)	34	7.5	7.641	9.2	6.8	0.269	0.518	7.	7.3	8.	8.3
00400	CONVERTED PH (STANDARD UNITS)	34	7.5	7.417	9.2	6.8	0.32	0.566	7.	7.3	8.	8.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	34	0.032	0.038	0.158	0.001	0.001	0.036	0.005	0.01	0.05	0.1
00500	RESIDUE, TOTAL (MG/L)	35	151.	169.943	427.	2.	6894.644	83.034	86.2	126.	198.	304.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	35	48.	53.2	140.	4.	973.635	31.203	14.4	30.	70.	100.
00510	RESIDUE, TOTAL FIXED (MG/L)	35	105.	114.8	329.	12.	3973.812	63.038	57.4	80.	136.	205.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	35	10.	17.243	213.	0.	1225.917	35.013	3.6	6.	16.	29.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	35	4.	6.7	23.	0.	38.856	6.233	0.8	2.	11.	16.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	35	4.	10.557	190.	0.	999.423	31.614	0.3	2.	8.	14.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	33	1.299	2.003	19.	0.005	11.732	3.425	0.024	0.125	2.1	4.359
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	33	0.01	0.143	4.	0.005	0.48	0.693	0.005	0.01	0.03	0.076
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	30	0.795	0.802	1.659	0.02	0.167	0.408	0.058	0.627	1.067	1.298
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	33	2.599	3.511	23.19	0.05	20.655	4.545	0.05	0.45	4.35	9.12
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	32 ##	50.	528.125	6000.	50.	1483860.887	1218.138	50.	50.	375.	2150.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	32 ##	1.699	2.12	3.778	1.699	0.396	0.629	1.699	1.699	2.571	3.303
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			131.915								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	33	0.6	0.821	4.9	0.05	1.105	1.051	0.05	0.05	0.95	2.24
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	33	0.4	0.584	3.5	0.01	0.594	0.771	0.02	0.065	0.65	1.859

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	26	16.7	16.735	25.	6.7	22.977	4.793	9.01	14.125	20.625	23.27
00300	OXYGEN, DISSOLVED MG/L	27	9.	8.511	13.4	2.1	7.705	2.776	4.54	6.2	10.2	12.56
00400	PH (STANDARD UNITS)	26	7.6	7.9	9.5	7.2	0.48	0.693	7.2	7.45	8.55	9.06

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0772

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	08/15/68-12/14/78	26	7.6	7.586	9.5	7.2	0.583	0.763	7.2	7.45	8.55	9.06
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	08/15/68-12/14/78	26	0.025	0.026	0.063	0.	0.	0.022	0.001	0.003	0.036	0.063
00500	RESIDUE, TOTAL (MG/L)	12/05/68-12/14/78	25	162.	217.2	1082.	77.	43042.083	207.466	97.	125.	203.5	421.6
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-12/14/78	25	48.	65.04	310.	18.	3529.29	59.408	21.2	36.5	74.	132.2
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-12/14/78	25	109.	145.04	772.	20.	24518.79	156.585	49.6	80.5	124.5	336.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-12/14/78	25	7.	56.94	964.	0.5	36599.048	191.309	2.6	4.5	17.5	98.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-12/14/78	25	4.	17.86	308.	0.5	3692.157	60.763	1.	2.	6.	23.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-12/14/78	25	4.	35.982	656.	0.	17097.569	130.758	0.03	1.	8.5	67.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-02/06/79	25	0.9	1.396	8.	0.01	2.795	1.672	0.05	0.35	1.8	3.099
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-02/06/79	25	0.03	0.038	0.1	0.005	0.001	0.031	0.005	0.01	0.06	0.094
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/31/78	23	0.56	0.538	0.84	0.19	0.027	0.164	0.236	0.49	0.6	0.776
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-02/06/79	25	2.199	2.959	14.	0.2	9.65	3.106	0.32	0.85	3.85	7.859
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	22	300.	1368.182	7800.	50.	5137510.823	2266.608	50.	50.	1675.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/14/78	22	2.477	2.505	3.892	1.699	0.638	0.799	1.699	1.699	3.218	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			319.688								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-02/06/79	25	0.7	0.738	2.3	0.05	0.401	0.633	0.08	0.2	1.025	1.78
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-02/06/79	25	0.41	0.593	2.199	0.005	0.382	0.618	0.034	0.11	0.725	1.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0773

NPS Station ID: SHEN0773 LAT/LON: 38.942782/ -78.194448
 Location: RIGHT SIDE AT THREE ISLANDS - WARREN COUNTY
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005 Depth of Water: 0
 Major Basin: 02-NORTH-ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005 RF1 Mile Point: 0.000
 RF3 Index: 02070005006000.00 RF3 Mile Point: 1.89

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSSF000.33
 Within Park Boundary: No

Date Created: 04/08/89

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH RIVER SECTION: 06 TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VIRGINIA

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 7.20
 Distance from RF3: 0.61

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0773

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
***** No Parameter Data Available for this Station *****												

Station Inventory for Station: SHEN0774

NPS Station ID: SHEN0774
 Location: APPROX. 0.4 MILE BELOW RT340/522 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1B-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007000337.91
 Description:

LAT/LON: 38.943337/ -78.192782

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 37.98

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSSF000.58 /VA1B02-X0065/VA1B6X0065
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 02 TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VIRGINIA

Parameter Inventory for Station: SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	202	16.7	16.189	32.	0.	75.162	8.67	4.12	8.3	23.925	27.
00023	SAMPLE WEIGHT IN POUNDS	07/26/79-06/06/90	16	0.71	2.003	8.82	0.1	7.024	2.65	0.135	0.205	3.628	7.42
00024	SAMPLE LENGTH IN INCHES	07/26/79-06/06/90	17	11.15	12.805	26.4	5.9	44.641	6.681	5.9	6.575	19.57	23.52
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	108	627.	662.694	1787.	187.	103480.812	321.684	272.	413.	874.	1110.
00300p	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	204	9.9	9.986	16.2	0.6	5.404	2.325	6.95	8.4	11.6	13.1
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	118	2.	2.569	11.8	0.5	4.478	2.116	1.	11.8	1.	3.
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	109	12.	19.281	700.	0.02	4387.53	66.238	6.	8.	16.	25.
00400p	PH (STANDARD UNITS)	09/19/67-08/02/88	196	8.5	8.473	10.	6.5	0.476	0.69	7.5	8.	9.	9.3
00400p	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	196	8.5	7.89	10.	6.5	0.817	0.904	7.5	8.	9.	9.3
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	196	0.003	0.013	0.316	0.	0.001	0.033	0.001	0.001	0.01	0.032
00403p	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	141	8.	8.006	8.9	6.	0.266	0.516	7.4	7.7	8.4	8.6
00403p	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	141	8.	7.579	8.9	6.	0.451	0.671	7.4	7.7	8.4	8.6
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	141	0.01	0.026	1.	0.001	0.008	0.09	0.003	0.004	0.02	0.04
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	142	113.	109.085	162.	2.	832.773	28.858	68.2	92.5	131.	144.
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	02/25/68-12/05/68	2	4.	4.	6.	2.	8.	2.828	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	04/25/68-02/05/85	19	411.	578.053	1551.	110.	185490.275	430.686	187.	272.	759.	1420.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	12/05/68-02/05/85	18	69.5	95.778	546.	24.	12885.007	113.512	49.2	62.	85.	141.9
00510	RESIDUE, TOTAL FIXED (MG/L)	12/05/68-06/09/86	19	348.	467.737	1345.	13.	155642.982	394.516	17.	171.	691.	1042.
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C),MG/L	12/14/82-03/17/83	2	280.	280.	345.	215.	8450.	91.924	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	120	7.	15.675	234.	2.	710.099	26.648	2.5	2.5	18.75	37.9
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	119	3.	4.887	26.	0.	17.231	4.151	2.	2.5	6.	10.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	119	4.	10.874	210.	0.	495.492	22.26	2.	2.5	11.	27.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	164	0.1	0.197	1.099	0.02	0.04	0.199	0.05	0.05	0.3	0.45
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	165	0.02	0.021	0.35	0.005	0.001	0.03	0.005	0.01	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	160	1.095	1.017	2.799	0.025	0.23	0.479	0.362	0.7	1.3	1.6
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	160	0.6	0.732	2.4	0.05	0.17	0.412	0.3	0.463	0.9	1.399
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	06/22/78-02/06/79	6	1.525	1.36	1.8	0.8	0.202	0.45	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	100	0.2	0.157	0.7	0.05	0.009	0.094	0.05	0.1	0.2	0.218
00668	PHOSPHORUS, TOTAL, BOTTOM DEPOSIT (MG/KG-P DRY WGT)	05/11/82-05/11/82	1	0.2	0.2	0.2	0.	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	105	0.1	0.283	17.	0.005	2.726	1.651	0.03	0.06	0.155	0.208
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	130	6.5	7.077	19.	0.	15.662	3.958	2.43	4.	9.	13.9
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	116	177.	178.138	328.	34.	3928.833	62.68	99.4	132.5	221.5	254.5
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-06/09/88	42	132.	145.5	308.	4.	8566.695	92.556	19.3	68.75	222.5	288.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/87-06/09/88	2	0.115	0.115	0.12	0.11	0.	0.007	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	08/09/71-05/29/85	25 ##	2.	1.88	6.	0.5	1.798	1.341	0.5	0.75	2.75
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/20/79-07/14/92	4 ##	11.25	12.375	24.5	2.5	93.289	9.659	**	**	**
01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	08/17/88-07/14/92	6 ##	0.098	0.083	0.125	0.025	0.002	0.049	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/27/83-05/29/85	2 ##	2.5	2.5	3.8	1.2	3.38	1.838	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	08/09/71-05/29/85	30 ##	5.	6.417	40.	0.5	50.605	7.114	1.85	5.	9.5
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-07/14/92	4 ##	0.323	0.816	2.5	0.12	1.273	1.128	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-07/14/92	4	22.3	22.875	35.9	11.	132.816	11.525	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-05/29/85	38 ##	5.	9.013	30.	0.5	62.628	7.914	5.	10.	21.
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-05/29/85	37 ##	5.	7.432	30.	5.	32.808	5.728	5.	5.	20.
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/20/79-07/14/92	4	16.5	18.2	29.8	10.	90.853	9.532	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	11/16/70-12/05/79	6	220.	240.	500.	90.	23960.	154.79	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-05/29/85	36 ##	5.	9.139	60.	0.5	181.823	13.484	1.	1.	7.75
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/20/79-07/14/92	4	38.65	37.5	62.7	10.	464.78	21.559	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/07/70-01/22/80	7	40.	41.429	90.	10.	747.619	27.343	**	**	**
01065	NICKEL, DISSOLVED (UG/L AS NI)	04/16/74-08/09/78	7 ##	50.	50.	50.	50.	0.	0.	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	08/20/79-05/29/85	17 ##	10.	15.294	50.	5.	288.971	16.999	5.	5.	15.
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	08/20/79-07/14/92	4	11.95	12.313	22.9	2.45	86.211	9.285	**	**	**
01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	08/17/88-07/14/92	6 ##	1.8	2.667	7.5	0.5	7.831	2.798	**	**	**
01073	THALLIUM,TISSUE,WET WEIGHT,MG/KG	07/14/92-07/14/92	3 ##	1.	1.	1.	1.	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	72	90.	150.419	860.	0.01	34356.808	185.356	5.	40.	195.
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/20/79-07/14/92	4	327.1	393.1	862.2	56.	121752.813	348.931	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/27/83-05/29/85	2 ##	4.3	4.3	4.8	3.8	0.5	0.707	**	**	**
01149	SELENIUM, TOTAL IN FISH OR ANIMALS WET WGT MG/KG	07/14/92-07/14/92	3	0.42	0.487	0.64	0.4	0.018	0.133	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	09/19/67-10/12/70	17	2300.	6133.588	43000.	15.	105790358.882	10285.444	31.8	930.	9250.
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	09/19/67-10/12/70	17	3.362	3.258	4.633	1.176	0.777	0.881	1.48	2.968	3.958
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =		1809.629								
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-08/02/88	179 ##	50.	422.346	8000.	50.	1472503.452	1213.468	50.	50.	100.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-08/02/88	179 ##	1.699	2.034	3.903	1.699	0.302	0.549	1.699	1.699	2.
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =		108.034								
34252	BERYLLIUM WET WGT TISMG/KG	07/14/92-07/14/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
34258	B-BHC-BETA WET WGT TISMG/KG	08/16/88-07/14/92	6 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34263	DELTA BENZENE HEXACHLORIDE WET WGT TISMG/KG	08/16/88-07/14/92	6 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34360	ENDOSULFAN, BETA WET WGT TISMG/KG	08/16/88-07/14/92	6 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34365	ENDOSULFAN, ALPHA WET WGT TISMG/KG	08/16/88-07/14/92	6 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34480	THALLIUM DRY WGT BTMGM/KG	06/27/83-05/29/85	2	6.2	6.2	7.6	4.8	3.92	1.98	**	**	**
34664	PCB - 1221 WET WGT TISMG/KG	06/06/90-07/14/92	5 ##	0.25	0.35	0.5	0.25	0.019	0.137	**	**	**
34667	PCB - 1232 WET WGT TISMG/KG	06/06/90-07/14/92	5 ##	0.25	0.35	0.5	0.25	0.019	0.137	**	**	**
34669	PCB - 1248 WET WGT TISMG/KG	06/06/90-07/14/92	5 ##	0.25	0.35	0.5	0.25	0.019	0.137	**	**	**
34670	PCB - 1260 WET WGT TISMG/KG	08/16/88-07/14/92	9	12.	18.644	92.	0.5	807.773	28.421	0.5	0.95	18.
34674	PCB - 1016 WET WGT TISMG/KG	06/06/90-07/14/92	5 ##	0.5	5.3	25.	0.25	121.294	11.013	**	**	**
34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388
34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT,MG/KG	07/26/79-07/14/92	16 ##	0.5	0.314	0.5	0.005	0.061	0.248	0.005	0.005	0.5
34685	ENDRIN WET WGT TISMG/KG	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388
34686	HEPTACHLOR EPOXIDE WET WGT TISMG/KG	08/16/88-07/14/92	5 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34687	HEPTACHLOR WET WGT TISMG/KG	08/16/88-07/14/92	6 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34688	HEXACHLORO BENZENE WET WGT TISMG/KG	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388
34689	PCB - 1242 WET WGT TISMG/KG	06/06/90-07/14/92	5 ##	0.25	0.35	0.5	0.25	0.019	0.137	**	**	**
34690	PCB - 1254 WET WGT TISMG/KG	08/16/88-07/14/92	9 ##	0.5	1.094	4.1	0.25	2.027	1.424	0.25	0.25	1.75
34691	TOXAPHENE WET WGT TISMG/KG	08/16/88-07/14/92	6 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**
39060	PCP (PENTACHLOROPHENOL) IN TISSUE WET WGT UG/G	07/26/79-08/14/85	10 ##	0.005	0.613	3.5	0.005	1.284	1.133	0.005	0.005	0.775
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/14/92-07/14/92	1 ##	25.	25.	25.	25.	0.	0.	**	**	**
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**
39063	CHLORDANE-CIS ISOMER,TISSUE WET WGT (UG/G)	07/26/79-08/14/85	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**
39066	CHLORDANE-TRANS ISOMER,TISSUE WET WGT (UG/G)	07/26/79-08/14/85	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**
39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/20/79-07/08/80	2	0.	0.	0.	0.	0.	0.	**	**	**
39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388
39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
39075	BHC- GAMMA ISOMER, TISSUE WET WGT (UG/G)	7 ##	0.5	0.288	0.5	0.005	0.07	0.265	**	**	**	**
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39302	P P DDT IN TISSUE WET WGT (UG/G)	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5	0.5
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39309	O P DDT IN AQUATIC ORGANISMS WET WEIGHT BASIS(UG/G)	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5	0.5
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39312	P P DDD IN TISSUE WET WGT (UG/G)	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5	0.5
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39322	P,P'-DDE IN TISSUE WET WGT MG/KG	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5	0.5
39325	O,P DDD IN TISSUE WET WGT (UG/G)	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5	0.5
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39329	O,P DDE IN TISSUE, WET WGT(UG/G)	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5	0.5
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	3	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39358	DDT TOTAL IN AQUATIC ORGANISMS WT WGT (UG/G)	7 ##	0.5	0.288	0.5	0.005	0.07	0.265	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	7 ##	0.5	0.288	0.5	0.005	0.07	0.265	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	19 ##	0.5	10.044	110.	0.005	634.894	25.197	0.005	0.005	12.	21.
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	1 ##	250.	250.	250.	250.	0.	0.	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	2	0.25	0.25	0.5	0.	0.125	0.354	**	**	**	**
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	10 ##	0.005	0.203	0.5	0.005	0.065	0.256	0.005	0.005	0.5	0.5
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	5 ##	0.25	0.35	0.5	0.25	0.019	0.137	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	6	0.	0.	0.	0.	0.	0.	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	60	0.1	0.178	0.8	0.05	0.025	0.157	0.05	0.05	0.3	0.4
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	60	0.1	0.136	0.57	0.02	0.013	0.115	0.04	0.05	0.2	0.3
71900	MERCURY, TOTAL (UG/L AS HG)	35 ##	0.15	0.24	1.7	0.15	0.067	0.259	0.15	0.15	0.25	0.25
71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	10 ##	4.15	2.971	5.8	0.05	6.539	2.557	0.051	0.07	5.075	5.78
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	4 ##	0.225	0.325	0.8	0.05	0.111	0.333	**	**	**	**
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	16	0.105	0.112	0.3	0.01	0.007	0.081	0.014	0.053	0.15	0.251
71934	LEAD TOTAL IN FISH DRY WEIGHT BASIS	10	4.21	4.342	9.5	0.81	7.964	2.822	0.879	1.875	6.675	9.24
71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	12 ##	0.5	0.9	3.	0.1	0.86	0.927	0.1	0.5	1.625	2.73
71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	12	2.25	2.6	5.9	0.3	3.067	1.751	0.51	1.05	4.225	5.54
71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	6	12.9	26.3	93.5	10.5	1089.52	33.008	**	**	**	**
71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	12	0.5	2.622	12.4	0.2	16.922	4.114	0.2	0.325	5.613	11.02
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	12 ##	0.078	0.175	0.5	0.05	0.039	0.197	0.05	0.05	0.4	0.5
71941	CADMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	10 ##	0.163	0.136	0.2	0.05	0.004	0.063	0.051	0.07	0.2	0.2
71942	COPPER,TOTAL IN FISH-DRY WEIGHT BASIS	10	7.79	9.054	20.2	1.	37.585	6.131	1.28	4.4	14.7	19.8
71943	CHROMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	10	1.12	1.31	2.6	0.7	0.331	0.576	0.71	0.86	1.585	2.53
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	20	5.	4.45	6.	1.	1.418	1.191	2.1	4.	5.	5.
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	6 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	6 ##	0.038	0.034	0.05	0.005	0.	0.019	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
81896 DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/16/88-07/14/92	6 ##	0.05	0.077	0.15	0.05	0.002	0.043	**	**	**	**
81897 DDD TOTAL IN TISSUE WET WEIGHT MG/KG	08/16/88-07/14/92	6 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
82029 OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

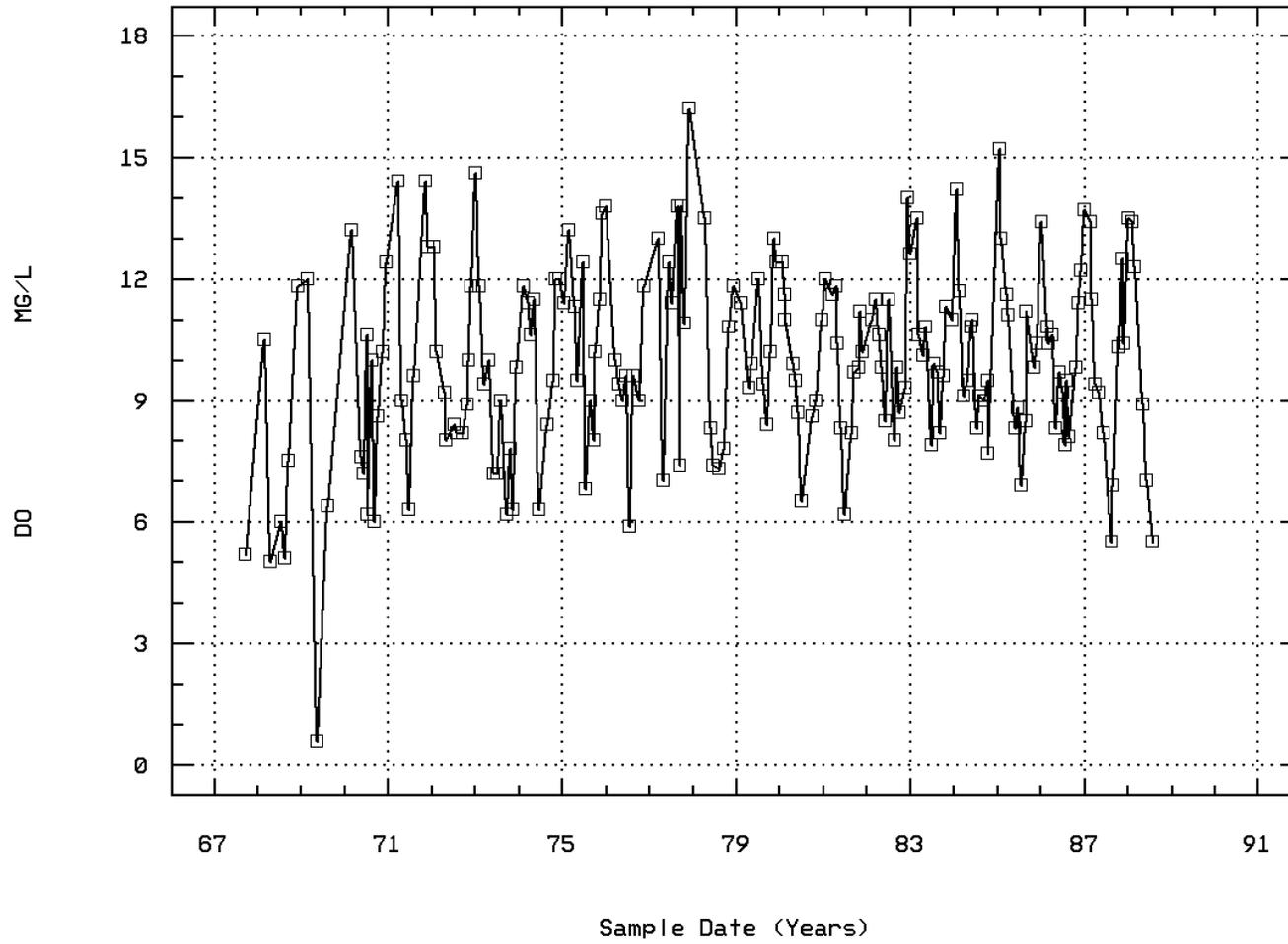
EPA Water Quality Criteria Analysis for Station: SHEN0774

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300 OXYGEN, DISSOLVED	Other-Lo Lim.	4.	204	1	0.00	63	0	0.00	79	0	0.00	62	1	0.02			
00400 PH	Fresh Chronic	9.	196	57	0.29	61	20	0.33	74	19	0.26	61	18	0.30			
	Other-Lo Lim.	6.5	196	1	0.01	61	0	0.00	74	1	0.01	61	0	0.00			
00403 PH, LAB	Fresh Chronic	9.	141	0	0.00	42	0	0.00	55	0	0.00	44	0	0.00			
	Other-Lo Lim.	6.5	141	2	0.01	42	0	0.00	55	1	0.02	44	1	0.02			
00615 NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	165	0	0.00	45	0	0.00	68	0	0.00	52	0	0.00			
00620 NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	160	0	0.00	43	0	0.00	66	0	0.00	51	0	0.00			
00630 NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
00945 SULFATE, TOTAL (AS SO4)	Drinking Water	250.	42	8	0.19	10	5	0.50	22	3	0.14	10	0	0.00			
00951 FLUORIDE, TOTAL AS F	Drinking Water	4.	2	0	0.00				1	0	0.00	1	0	0.00			
01002 ARSENIC, TOTAL	Fresh Acute	360.	25	0	0.00	10	0	0.00	9	0	0.00	6	0	0.00			
	Drinking Water	50.	25	0	0.00	10	0	0.00	9	0	0.00	6	0	0.00			
01027 CADMIUM, TOTAL	Fresh Acute	3.9	6 &	3	0.50	1	0	0.00	3	3	1.00	2	0	0.00			
	Drinking Water	5.	6 &	3	0.50	1	0	0.00	3	3	1.00	2	0	0.00			
01034 CHROMIUM, TOTAL	Drinking Water	100.	38	0	0.00	13	0	0.00	15	0	0.00	10	0	0.00			
01042 COPPER, TOTAL	Fresh Acute	18.	37	4	0.11	13	2	0.15	15	0	0.00	9	2	0.22			
	Drinking Water	1300.	37	0	0.00	13	0	0.00	15	0	0.00	9	0	0.00			
01051 LEAD, TOTAL	Fresh Acute	82.	36	0	0.00	12	0	0.00	15	0	0.00	9	0	0.00			
	Drinking Water	15.	36	6	0.17	12	2	0.17	15	3	0.20	9	1	0.11			
01065 NICKEL, DISSOLVED	Fresh Acute	1400.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
	Drinking Water	100.	7	0	0.00	2	0	0.00	2	0	0.00	3	0	0.00			
01067 NICKEL, TOTAL	Fresh Acute	1400.	17	0	0.00	5	0	0.00	8	0	0.00	4	0	0.00			
	Drinking Water	100.	17	0	0.00	5	0	0.00	8	0	0.00	4	0	0.00			
01092 ZINC, TOTAL	Fresh Acute	120.	72	28	0.39	21	9	0.43	27	12	0.44	24	7	0.29			
	Drinking Water	5000.	72	0	0.00	21	0	0.00	27	0	0.00	24	0	0.00			
31505 COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	17	11	0.65	10	7	0.70	3	1	0.33	4	3	0.75			
31616 FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	179	43	0.24	50	14	0.28	72	13	0.18	57	16	0.28			
39032 PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	2	0	0.00	2	0	0.00									
	Drinking Water	1.	2	0	0.00	2	0	0.00									
39300 P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	2	0	0.00	2	0	0.00									
39310 P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	2	0	0.00	2	0	0.00									
39320 P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	2	0	0.00	2	0	0.00									
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	3	0	0.00	3	0	0.00									
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	2	0	0.00	2	0	0.00									
	Drinking Water	2.	2	0	0.00	2	0	0.00									
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	2	0	0.00	2	0	0.00									
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	2	0	0.00	2	0	0.00									
	Drinking Water	2.	2	0	0.00	2	0	0.00									
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	2	0	0.00									
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	2	0	0.00	1	0	0.00	1	0	0.00						
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	2	0	0.00									
	Drinking Water	1.	2	0	0.00	2	0	0.00									
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	6	0	0.00	2	0	0.00	3	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	35	0	0.00	12	0	0.00	15	0	0.00	8	0	0.00			
	Drinking Water	2.	35	0	0.00	12	0	0.00	15	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station: SHEN0774 Parameter Code: 00300

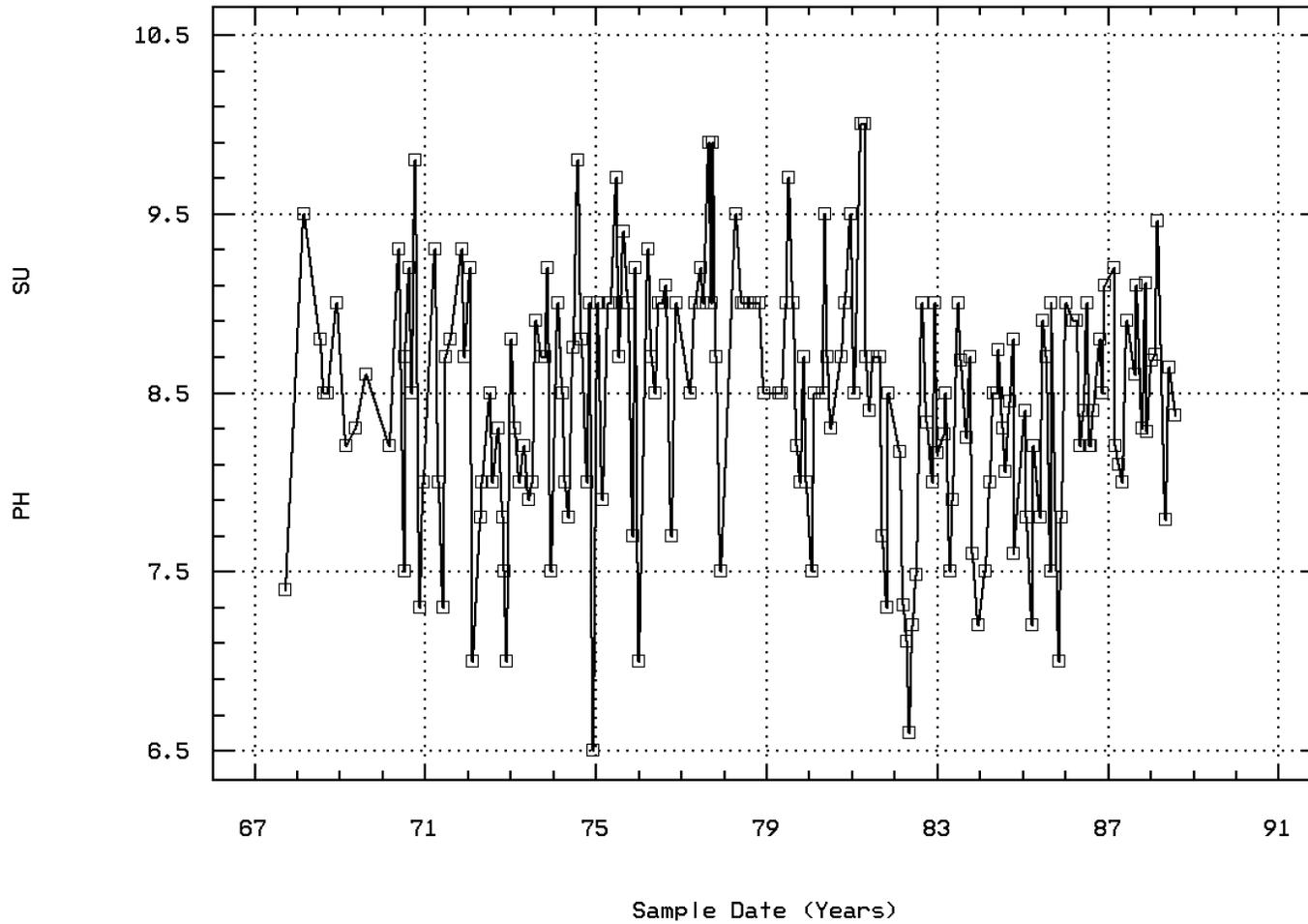
OXYGEN, DISSOLVED



APPROX. 0.4 MILE BELOW RT340/522 BRIDGE

Station: SHEN0774 Parameter Code: 00400

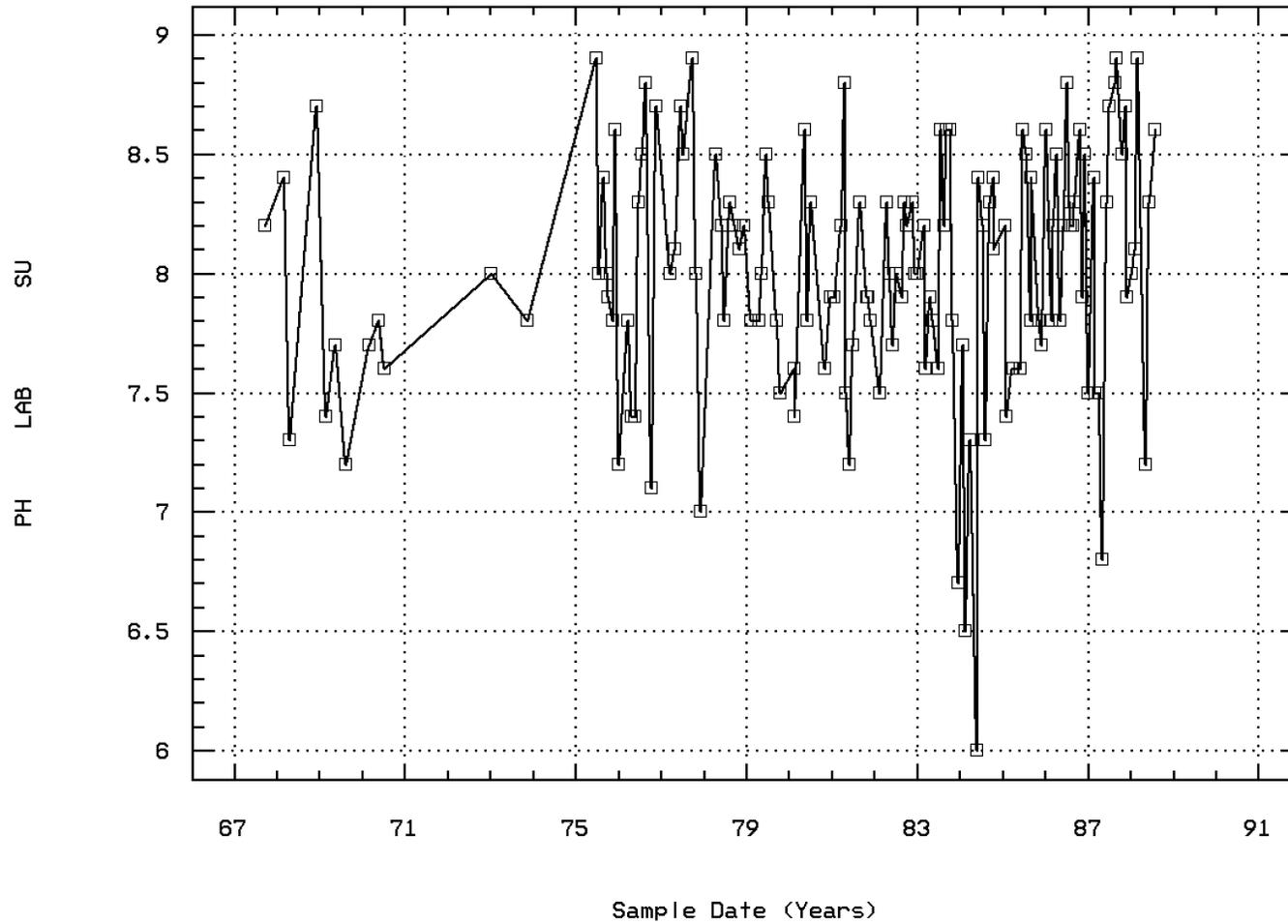
PH (STANDARD UNITS)



APPROX. 0.4 MILE BELOW RT340/522 BRIDGE

Station: SHEN0774 Parameter Code: 00403

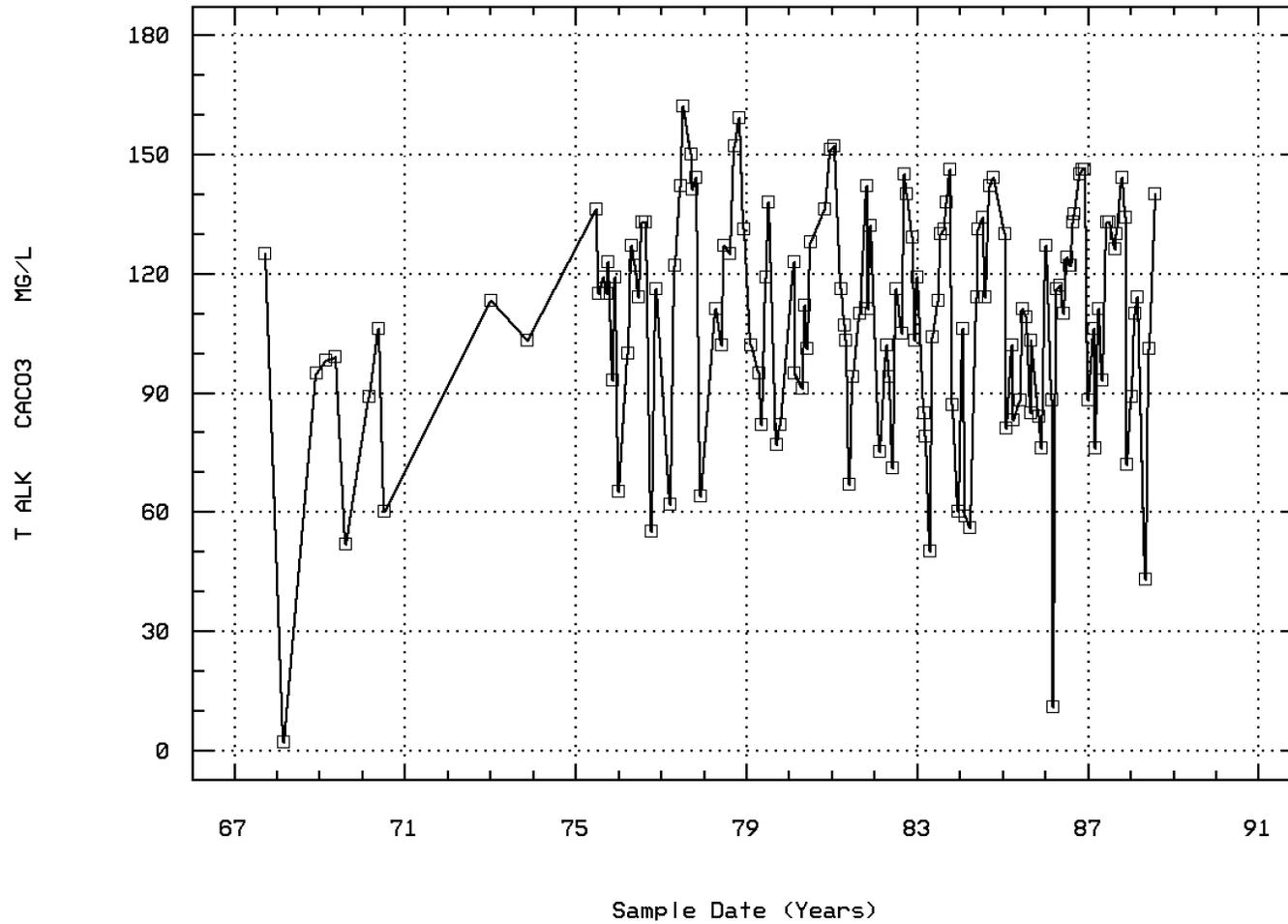
PH, LAB, STANDARD UNITS



APPROX. 0.4 MILE BELOW RT340/522 BRIDGE

Station: SHEN0774 Parameter Code: 00410

ALKALINITY, TOTAL (MG/L AS CaCO3)



APPROX. 0.4 MILE BELOW RT340/522 BRIDGE

Annual Analysis for 1967 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	1	25.6	25.6	25.6	25.6	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	1	5.2	5.2	5.2	5.2	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	1	7.6	7.6	7.6	7.6	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	1	7.4	7.4	7.4	7.4	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	1	0.04	0.04	0.04	0.04	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	1	8.2	8.2	8.2	8.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	1	0.006	0.006	0.006	0.006	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	1	125.	125.	125.	125.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	1	204.	204.	204.	204.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	1	150.	150.	150.	150.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1968 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	6	19.45	17.683	30.	3.3	114.23	10.688	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	6	6.75	7.65	11.8	5.	8.323	2.885	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	1	5.6	5.6	5.6	5.6	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	5	8.8	8.86	9.5	8.5	0.173	0.416	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	5	8.8	8.734	9.5	8.5	0.193	0.439	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	5	0.002	0.002	0.003	0.	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	3	8.4	8.133	8.7	7.3	0.543	0.737	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	3	8.4	7.728	8.7	7.3	0.79	0.889	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	3	0.004	0.019	0.05	0.002	0.001	0.027	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	2	48.5	48.5	95.	2.	4324.5	65.761	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	1	7.	7.	7.	7.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	2	112.	112.	190.	34.	12168.	110.309	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	2	345.	345.	420.	270.	11250.	106.066	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1969 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	3	18.9	15.767	22.8	5.6	81.323	9.018	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	3	6.4	6.333	12.	0.6	32.493	5.7	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	3	3.6	5.433	9.9	2.8	15.123	3.889	**	**	**	**
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	3	8.3	8.367	8.6	8.2	0.043	0.208	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	3	8.3	8.336	8.6	8.2	0.045	0.211	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	3	0.005	0.005	0.006	0.003	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	3	7.4	7.433	7.7	7.2	0.063	0.252	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	3	7.4	7.388	7.7	7.2	0.066	0.258	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	3	0.04	0.041	0.063	0.02	0.	0.022	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	3	98.	83.	99.	52.	721.	26.851	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	3	6.	24.333	63.	4.	1122.333	33.501	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	3	4.	5.	10.	1.	21.	4.583	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	3	3.	19.333	53.	2.	850.333	29.16	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	2	80.	80.	80.	80.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1970 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	19.4	17.167	27.8	5.6	90.93	9.536	5.6	7.5	26.7	27.8
00300	OXYGEN, DISSOLVED MG/L	10	9.3	9.2	13.2	6.	6.222	2.494	6.02	6.95	11.05	13.12
00310	BOD, 5 DAY, 20 DEG C MG/L	3	5.1	5.067	7.1	3.	4.203	2.05	**	**	**	**
00400	PH (STANDARD UNITS)	9	8.5	8.5	9.8	7.3	0.705	0.84	7.3	7.75	9.25	9.8
00400	CONVERTED PH (STANDARD UNITS)	9	8.5	7.935	9.8	7.3	1.064	1.031	7.3	7.75	9.25	9.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.003	0.012	0.05	0.	0.	0.018	0.	0.001	0.021	0.05
00403	PH, LAB, STANDARD UNITS	3	7.7	7.7	7.8	7.6	0.01	0.1	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	3	7.7	7.692	7.8	7.6	0.01	0.1	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	3	0.02	0.02	0.025	0.016	0.	0.005	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	3	89.	85.	106.	60.	541.	23.259	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	3	29.	26.	32.	17.	63.	7.937	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	3	6.	7.	11.	4.	13.	3.606	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	3	21.	19.	25.	11.	52.	7.211	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	2	0.165	0.165	0.31	0.02	0.042	0.205	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	3	0.6	0.53	0.69	0.3	0.042	0.204	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	3	0.6	0.667	0.8	0.6	0.013	0.115	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	3	40.	50.	90.	20.	1300.	36.056	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2 ##	375.	375.	700.	50.	211250.	459.619	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2 ##	2.272	2.272	2.845	1.699	0.657	0.81	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =				187.083				
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	3	0.1	0.133	0.2	0.1	0.003	0.058	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	2	0.035	0.035	0.05	0.02	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	16.1	16.671	28.9	4.4	87.159	9.336	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	7	9.6	10.643	14.4	6.3	10.42	3.228	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	2	8.8	8.8	10.3	7.3	4.5	2.121	**	**	**	**
00400	PH (STANDARD UNITS)	7	8.7	8.586	9.3	7.3	0.515	0.717	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	8.7	8.021	9.3	7.3	0.887	0.942	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.002	0.01	0.05	0.001	0.	0.018	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	2	95.	95.	160.	30.	8450.	91.924	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	7 ##	50.	1192.857	8000.	50.	9010357.143	3001.726	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	7 ##	1.699	2.057	3.903	1.699	0.675	0.822	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =				113.985				

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	10	14.75	14.18	22.8	5.	44.746	6.689	5.06	6.8	20.425	22.69
00300	OXYGEN, DISSOLVED MG/L	10	9.05	9.57	12.8	8.	2.685	1.638	8.02	8.2	10.6	12.7
00310	BOD, 5 DAY, 20 DEG C MG/L	1	11.8	11.8	11.8	11.8	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	10	7.9	7.91	9.2	7.	0.448	0.669	7.	7.375	8.35	9.13
00400	CONVERTED PH (STANDARD UNITS)	10	7.889	7.534	9.2	7.	0.604	0.777	7.	7.375	8.35	9.13
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.013	0.029	0.1	0.001	0.001	0.038	0.001	0.005	0.049	0.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	2	0.1	0.1	0.11	0.09	0.	0.014	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	2	0.835	0.835	0.98	0.69	0.042	0.205	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	2	0.5	0.5	0.6	0.4	0.02	0.141	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	4 ##	5.	11.25	30.	5.	156.25	12.5	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	10	300.	1310.	5900.	50.	4349333.333	2085.506	50.	87.5	1925.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	10	2.349	2.546	3.771	1.699	0.603	0.777	1.699	1.925	3.192
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		351.212								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	2	0.06	0.06	0.06	0.06	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	11	14.4	14.545	30.6	1.1	97.231	9.861	1.32	5.6	23.3
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	11	9.	9.027	14.6	6.2	6.404	2.531	6.22	7.2	10.
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	11	8.3	8.382	9.2	7.5	0.266	0.515	7.58	8.	8.8
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	11	8.3	8.122	9.2	7.5	0.34	0.583	7.58	8.	8.8
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	11	0.005	0.008	0.032	0.001	0.	0.009	0.001	0.002	0.01
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	2	7.9	7.9	8.	7.8	0.02	0.141	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	2	7.889	7.889	8.	7.8	0.02	0.142	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	2	0.013	0.013	0.016	0.01	0.	0.004	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	2	108.	108.	113.	103.	50.	7.071	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	11 ##	0.05	0.103	0.6	0.04	0.027	0.165	0.042	0.05	0.05
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	11	0.01	0.01	0.02	0.005	0.	0.005	0.005	0.005	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	11	1.089	1.001	1.729	0.07	0.203	0.451	0.154	0.79	1.289
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	11	0.7	0.963	1.599	0.2	0.288	0.537	0.24	0.4	1.5
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	1	214.	214.	214.	214.	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	1	400.	400.	400.	400.	0.	0.	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	10 ##	50.	400.	2200.	50.	580000.	761.577	50.	50.	387.5
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	10 ##	1.699	2.008	3.342	1.699	0.427	0.653	1.699	1.699	2.061
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		101.866								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	11 ##	0.05	0.127	0.4	0.05	0.015	0.121	0.05	0.05	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	11	0.06	0.105	0.2	0.04	0.005	0.069	0.042	0.05	0.2

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	9	15.	14.122	25.	4.4	50.867	7.132	4.4	8.05	20.8
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	9	11.4	10.389	12.	6.3	3.869	1.967	6.3	8.95	11.9
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	10	8.625	8.415	9.8	6.5	0.807	0.898	6.63	7.95	9.
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	10	8.607	7.443	9.8	6.5	1.857	1.363	6.63	7.95	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	10	0.002	0.036	0.316	0.	0.01	0.099	0.	0.001	0.011
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	10	0.2	0.33	1.099	0.05	0.133	0.364	0.05	0.088	0.45
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	10 ##	0.005	0.007	0.02	0.005	0.	0.005	0.005	0.005	0.019
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	10	1.284	1.441	2.799	0.9	0.291	0.54	0.92	1.099	1.624
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	10	0.85	0.9	1.599	0.3	0.18	0.424	0.32	0.575	1.324
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	2	435.	435.	720.	150.	162450.	403.051	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	9 ##	50.	50.	50.	50.	0.	0.	50.	50.	50.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	9 ##	1.699	1.699	1.699	1.699	0.	0.	1.699	1.699	1.699
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		50.								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	10	0.3	0.305	0.8	0.05	0.048	0.219	0.055	0.1	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	10	0.2	0.215	0.4	0.05	0.019	0.138	0.055	0.1	0.325

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	9	17.2	17.389	29.4	4.4	68.899	8.301	4.4	10.55	25.25	29.4
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	11	11.3	10.627	13.6	6.8	4.606	2.146	7.04	9.	12.4	13.52
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	10	9.	8.86	9.7	7.7	0.387	0.622	7.72	8.5	9.25	9.67
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	10	9.	8.4	9.7	7.7	0.622	0.788	7.72	8.5	9.25	9.67
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	10	0.001	0.004	0.02	0.	0.	0.007	0.	0.001	0.005	0.019
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	7	8.	8.229	8.9	7.8	0.169	0.411	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	7	8.	8.095	8.9	7.8	0.19	0.436	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	7	0.01	0.008	0.016	0.001	0.	0.006	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	7	119.	117.143	136.	93.	164.81	12.838	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	1	10.	10.	10.	10.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	10	0.2	0.25	0.7	0.1	0.029	0.172	0.1	0.175	0.3	0.66
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	10	0.01	0.01	0.02	0.005	0.	0.004	0.005	0.009	0.01	0.019
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	10	1.04	0.969	1.5	0.07	0.198	0.445	0.122	0.665	1.314	1.489
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	10	0.45	0.54	1.099	0.3	0.063	0.25	0.3	0.375	0.65	1.069
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	6	7.5	8.083	14.	4.5	10.842	3.293	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	7	174.	168.	202.	126.	1001.333	31.644	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	9	100.	112.778	240.	5.	5956.944	77.181	5.	55.	170.	240.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	11	100.	654.545	5600.	50.	2709727.273	1646.125	50.	50.	400.	4560.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	11	2.	2.202	3.748	1.699	0.392	0.626	1.699	1.699	2.602	3.519
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			159.331								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	10	0.15	0.15	0.3	0.05	0.011	0.103	0.05	0.05	0.225	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	10	0.09	0.111	0.23	0.04	0.006	0.077	0.04	0.048	0.205	0.229

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	9	16.1	18.033	30.	1.7	88.443	9.404	1.7	11.45	27.5	30.
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	9	9.6	9.789	13.8	5.9	4.596	2.144	5.9	9.	10.9	13.8
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	9	9.	8.589	9.3	7.	0.576	0.759	7.	8.1	9.05	9.3
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	9	9.	7.842	9.3	7.	1.203	1.097	7.	8.1	9.05	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	9	0.001	0.014	0.1	0.001	0.001	0.033	0.001	0.001	0.012	0.1
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	9	7.8	7.911	8.8	7.1	0.451	0.672	7.1	7.3	8.6	8.8
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	9	7.8	7.557	8.8	7.1	0.592	0.77	7.1	7.3	8.6	8.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	9	0.016	0.028	0.079	0.002	0.001	0.029	0.002	0.003	0.051	0.079
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	9	116.	107.222	133.	55.	827.944	28.774	55.	82.5	130.	133.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	9	0.3	0.3	0.5	0.1	0.02	0.141	0.1	0.2	0.45	0.5
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	9	0.02	0.026	0.07	0.01	0.	0.018	0.01	0.015	0.03	0.07
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	9	0.79	0.729	1.199	0.09	0.2	0.447	0.09	0.305	1.184	1.199
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	9	0.8	0.855	1.399	0.3	0.135	0.367	0.3	0.55	1.199	1.399
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	9	8.	8.	11.	5.	3.75	1.936	5.	6.5	9.5	11.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	9	178.	175.111	300.	98.	3844.861	62.007	98.	120.5	206.5	300.
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	10	105.	126.	220.	20.	5960.	77.201	22.	55.	210.	219.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	10 ##	50.	190.	1000.	50.	86000.	293.258	50.	50.	200.	920.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	10 ##	1.699	2.01	3.	1.699	0.202	0.449	1.699	1.699	2.301	2.93
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			102.257								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	9	0.1	0.089	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	9	0.06	0.069	0.12	0.04	0.001	0.027	0.04	0.045	0.09	0.12

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	9.5	13.456	30.8	0.5	156.528	12.511	0.5	2.	25.45	30.8
00300	OXYGEN, DISSOLVED MG/L	9	12.4	11.767	16.2	7.	9.065	3.011	7.	9.15	13.8	16.2
00310	BOD, 5 DAY, 20 DEG C MG/L	1	2.	2.	2.	2.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	9	9.	8.967	9.9	7.5	0.53	0.728	7.5	8.6	9.55	9.9
00400	CONVERTED PH (STANDARD UNITS)	9	9.	8.345	9.9	7.5	0.965	0.982	7.5	8.6	9.55	9.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.001	0.005	0.032	0.	0.	0.01	0.	0.	0.003	0.032
00403	PH, LAB, STANDARD UNITS SU	7	8.1	8.171	8.9	7.	0.392	0.626	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	7	8.1	7.717	8.9	7.	0.633	0.796	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.008	0.019	0.1	0.001	0.001	0.036	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	8	141.5	123.375	162.	62.	1511.125	38.873	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	3	20.	15.333	21.	5.	80.333	8.963	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	2	12.	12.	13.	11.	2.	1.414	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	3	8.	6.333	9.	2.	14.333	3.786	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	8	0.15	0.269	0.8	0.05	0.081	0.285	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	8	0.03	0.036	0.07	0.01	0.	0.02	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	8	0.6	0.695	1.099	0.17	0.099	0.315	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	7	0.8	0.885	1.5	0.2	0.264	0.514	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	8	10.5	10.375	14.	5.	10.839	3.292	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	8	209.	219.25	328.	102.	8951.929	94.615	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	7	90.	207.143	860.	10.	89590.476	299.317	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8 ##	50.	81.25	300.	50.	7812.5	88.388	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8 ##	1.699	1.796	2.477	1.699	0.076	0.275	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			62.552								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	7	0.2	0.236	0.5	0.05	0.029	0.17	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	8	0.175	0.243	0.57	0.08	0.028	0.166	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	7	19.5	19.714	28.	6.	62.988	7.937	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	1	923.	923.	923.	923.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	7	8.3	9.557	13.5	7.3	6.09	2.468	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	2	3.5	3.5	4.	3.	0.5	0.707	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	1	700.	700.	700.	700.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	7	9.	9.	9.5	8.5	0.083	0.289	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	7	9.	8.917	9.5	8.5	0.091	0.302	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.001	0.001	0.003	0.	0.	0.001	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	7	8.2	8.186	8.5	7.8	0.045	0.212	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	7	8.2	8.138	8.5	7.8	0.047	0.218	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	7	0.006	0.007	0.016	0.003	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	7	127.	129.571	159.	102.	417.286	20.428	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	1	8.	8.	8.	8.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7	0.3	0.429	1.	0.1	0.106	0.325	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	7	0.03	0.026	0.05	0.01	0.	0.016	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	2	0.935	0.935	1.	0.87	0.008	0.092	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	7	0.9	1.243	2.4	0.7	0.413	0.643	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	7	12.	11.857	16.	5.	13.81	3.716	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	7	178.	209.571	317.	138.	4976.286	70.543	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	5	170.	168.	320.	60.	11770.	108.49	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	7 ##	50.	85.714	200.	50.	3095.238	55.635	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	7 ##	1.699	1.871	2.301	1.699	0.056	0.237	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			74.3								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	7	0.2	0.221	0.6	0.05	0.041	0.202	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	7	0.14	0.137	0.26	0.03	0.009	0.096	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	13	20.	16.885	26.2	4.	66.656	8.164	4.88	8.1	24.6	26.2
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	10	547.	616.	1107.	281.	84625.333	290.904	281.3	367.25	922.5	1090.2
00300 OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	12	10.8	10.858	13.	8.4	2.283	1.511	8.67	9.525	12.3	12.82
00310 BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	6	2.	2.	4.	1.	1.2	1.095	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	10	9.5	7.759	16.	0.02	31.693	5.63	0.025	0.393	11.25	15.6
00400 PH (STANDARD UNITS)	09/19/67-08/02/88	12	8.5	8.65	9.7	8.	0.363	0.602	8.	8.05	9.	9.7
00400 CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	12	8.5	8.379	9.7	8.	0.443	0.666	8.	8.05	9.	9.7
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	12	0.003	0.004	0.01	0.	0.	0.004	0.	0.001	0.009	0.01
00403 PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	7	7.8	7.957	8.5	7.5	0.116	0.341	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	7	7.8	7.857	8.5	7.5	0.128	0.358	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	7	0.016	0.014	0.032	0.003	0.	0.009	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	7	95.	99.286	138.	77.	501.238	22.388	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	10	8.	20.2	100.	2.	881.733	29.694	2.3	5.75	25.75	93.4
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	10	3.	4.1	12.	1.	10.544	3.247	1.1	2.	6.	11.4
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	10	3.5	6.25	22.	0.	65.292	8.08	0.	0.375	10.25	21.8
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	10	0.25	0.25	0.7	0.05	0.04	0.2	0.05	0.088	0.325	0.67
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	10	0.01	0.018	0.05	0.01	0.	0.013	0.01	0.01	0.023	0.048
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	10	1.	1.03	1.8	0.7	0.105	0.323	0.71	0.8	1.15	1.75
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	10	0.55	0.595	1.1	0.05	0.108	0.329	0.075	0.375	0.85	1.09
00665 PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	10 ##	0.05	0.09	0.2	0.05	0.004	0.061	0.05	0.05	0.125	0.2
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	10	0.07	0.071	0.18	0.02	0.002	0.048	0.02	0.028	0.09	0.171
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	10	6.5	5.8	11.	0.	11.511	3.393	0.	4.5	7.25	10.7
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	5	206.	184.6	226.	132.	2282.8	47.779	**	**	**	**
01092 ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	10	45.	71.018	250.	0.01	7540.494	86.836	0.011	0.043	135.	243.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-08/02/88	9	100.	222.222	600.	50.	41319.444	203.272	50.	75.	400.	600.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-08/02/88	9	2.	2.184	2.778	1.699	0.161	0.402	1.699	1.849	2.588	2.778
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			152.648								
70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	1	0.2	0.2	0.2	0.2	0.	0.	**	**	**	**
70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	12	15.75	14.85	25.	4.	50.55	7.11	4.3	7.2	19.7	24.4
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	9	613.	723.	1254.	272.	150273.75	387.652	272.	365.	1154.5	1254.
00300 OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	12	9.7	9.8	12.4	6.5	2.478	1.574	7.13	8.775	11.	12.16
00310 BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	8	2.	3.125	7.	2.	3.554	1.885	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	9	12.	14.111	32.	4.	87.361	9.347	4.	6.5	21.5	32.
00400 PH (STANDARD UNITS)	09/19/67-08/02/88	12	8.6	8.725	9.5	7.5	0.342	0.585	7.74	8.5	9.375	9.5
00400 CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	12	8.589	8.337	9.5	7.5	0.506	0.711	7.74	8.5	9.375	9.5
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	12	0.003	0.005	0.032	0.	0.	0.009	0.	0.	0.003	0.024
00403 PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	7	7.8	7.886	8.6	7.4	0.181	0.426	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	7	7.8	7.745	8.6	7.4	0.205	0.452	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	7	0.016	0.018	0.04	0.003	0.	0.013	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	8	117.5	117.125	151.	91.	444.982	21.095	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	9	13.	15.667	39.	2.5	146.938	12.122	2.5	4.25	24.5	39.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	9	4.	4.667	9.	1.	7.438	2.727	1.	2.5	7.	9.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	9	8.	11.556	31.	2.5	99.965	9.998	2.5	2.75	19.5	31.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	9	0.2	0.233	0.7	0.05	0.049	0.221	0.05	0.05	0.35	0.7
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	9	0.02	0.025	0.04	0.005	0.	0.011	0.005	0.02	0.035	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	9	1.47	1.374	2.	0.7	0.226	0.476	0.7	0.95	1.85	2.
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	9	0.7	0.711	1.7	0.2	0.224	0.473	0.2	0.25	0.9	1.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	9	0.1	0.156	0.3	0.1	0.005	0.073	0.1	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	9	0.13	0.225	0.9	0.005	0.075	0.274	0.005	0.055	0.295	0.9
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	9	9.	9.111	19.	2.	32.111	5.667	2.	3.5	13.5	19.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	6	209.5	199.667	272.	110.	4102.667	64.052	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	9	110.	154.444	750.	10.	51652.778	227.272	10.	45.	125.	750.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	9	100.	1138.889	8000.	50.	6907986.111	2628.305	50.	900.	8000.	8000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	9	2.	2.248	3.903	1.699	0.607	0.779	1.699	1.699	2.615	3.903
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			176.941								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	11	21.	16.964	25.6	3.5	66.803	8.173	3.84	10.	24.	25.52
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	11	1088.	1121.727	1787.	266.	183579.418	428.462	338.2	938.	1390.	1748.
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	11	10.2	9.945	12.	6.2	3.211	1.792	6.6	8.3	11.6	11.96
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	11	2.	2.636	8.	1.	3.655	1.912	1.	2.	3.	7.
00340	COD, 25N K2CR2O7 MG/L	12/14/78-08/02/88	11	16.	17.909	34.	6.	54.291	7.368	7.4	14.	21.	32.4
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	10	8.6	8.65	10.	7.3	0.721	0.849	7.34	8.225	9.025	10.
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	10	8.589	8.063	10.	7.3	1.104	1.051	7.34	8.225	9.025	10.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	10	0.003	0.009	0.05	0.	0.016	0.	0.002	0.008	0.047	0.047
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	10	7.9	7.92	8.8	7.2	0.195	0.442	7.23	7.65	8.225	8.75
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	10	7.9	7.742	8.8	7.2	0.23	0.48	7.23	7.65	8.225	8.75
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	10	0.013	0.018	0.063	0.002	0.	0.018	0.002	0.006	0.023	0.06
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	10	110.5	113.4	152.	67.	595.156	24.396	69.7	100.75	134.5	151.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	11	5.	11.136	46.	2.5	240.105	15.495	2.5	2.5	8.	44.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	11	2.5	4.409	16.	1.	19.141	4.375	1.	2.5	6.	14.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	11	2.5	7.864	38.	2.	133.905	11.572	2.	2.5	6.	34.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	11	0.3	0.3	0.6	0.05	0.034	0.183	0.05	0.1	0.4	0.58
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	11	0.02	0.024	0.04	0.01	0.	0.008	0.012	0.02	0.03	0.038
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	11	1.2	1.122	2.5	0.025	0.446	0.668	0.078	0.7	1.4	2.34
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	11	0.8	0.909	1.6	0.4	0.135	0.367	0.42	0.7	1.2	1.56
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	11	0.2	0.191	0.3	0.1	0.003	0.054	0.1	0.2	0.2	0.28
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	11	0.15	0.165	0.28	0.1	0.003	0.051	0.104	0.13	0.2	0.268
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	11	10.	9.455	15.	2.	17.473	4.18	2.2	7.	13.	14.8
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	6	237.	222.667	292.	84.	5471.467	73.969	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	3	480.	480.	800.	160.	102400.	320.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	11	100.	695.455	5900.	50.	3017227.273	1737.017	50.	50.	500.	4840.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	11	2.	2.186	3.771	1.699	0.439	0.663	1.699	1.699	2.699	3.572
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			153.393								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	12	21.25	17.525	26.5	2.	71.158	8.436	3.2	10.	24.625	26.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	12	643.5	662.583	988.	356.	44365.538	210.631	366.5	480.5	825.5	982.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	12	10.2	10.35	14.	8.	2.832	1.683	8.15	8.85	11.5	13.25
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	12	1.5	1.667	4.	1.	0.788	0.888	1.	1.	2.	3.4
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	12	10.5	11.5	23.	7.	20.273	4.503	7.3	8.	13.75	20.6
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	11	7.48	7.789	9.	6.6	0.606	0.778	6.702	7.2	8.33	9.
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	11	7.48	7.317	9.	6.6	0.851	0.923	6.702	7.2	8.33	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	11	0.033	0.048	0.251	0.001	0.005	0.072	0.001	0.005	0.063	0.216
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	10	8.	8.02	8.3	7.5	0.073	0.27	7.52	7.85	8.3	8.3
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	10	8.	7.937	8.3	7.5	0.08	0.284	7.52	7.85	8.3	8.3
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	10	0.01	0.012	0.032	0.005	0.	0.008	0.005	0.005	0.014	0.03
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	10	104.	108.	145.	71.	624.667	24.993	71.4	89.25	131.75	144.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	12	8.	11.167	38.	2.5	106.106	10.301	2.5	5.	13.5	33.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	12	3.5	4.5	11.	2.	7.682	2.772	2.15	2.625	5.	10.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	12	5.	7.083	27.	0.	57.674	7.594	0.3	2.5	10.25	23.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	12	0.2	0.183	0.3	0.05	0.006	0.075	0.065	0.113	0.2	0.3
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	12	0.025	0.022	0.03	0.005	0.	0.009	0.007	0.013	0.03	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	12	1.21	1.14	1.6	0.07	0.169	0.411	0.259	1.093	1.4	1.57
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	11	0.6	0.559	0.7	0.35	0.014	0.12	0.36	0.5	0.7	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	10	0.2	0.197	0.4	0.1	0.007	0.084	0.1	0.138	0.205	0.382
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	12	0.135	0.152	0.36	0.02	0.008	0.087	0.041	0.093	0.208	0.318
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	12	6.	5.792	10.	0.5	8.248	2.872	1.25	3.25	8.5	9.7
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	5	208.	194.4	258.	122.	2820.8	53.111	**	**	**	**
01092	ZINC, TOTAL (UG/L AS Zn)	09/19/67-05/29/85	1	40.	40.	40.	40.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	12 ##	50.	79.167	300.	50.	5208.333	72.169	50.	50.	87.5	240.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	12 ##	1.699	1.814	2.477	1.699	0.057	0.239	1.699	1.699	1.925	2.334
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			65.161								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	12	15.	16.592	30.	4.	79.188	8.899	4.6	9.225	25.45	29.16
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	12	600.5	547.667	1000.	187.	57521.333	239.836	196.9	357.5	699.75	932.8
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	12	10.35	10.433	13.5	7.9	2.579	1.606	7.99	9.625	11.225	13.23
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	12	1.	1.417	3.	1.	0.447	0.669	1.	2.	2.	2.7
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	12	8.	10.	17.	3.	18.545	4.306	3.9	7.25	13.75	16.7
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	11	8.25	8.16	9.	7.2	0.314	0.561	7.26	7.6	8.68	8.94
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	11	8.25	7.841	9.	7.2	0.426	0.653	7.26	7.6	8.68	8.94
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	11	0.006	0.014	0.063	0.001	0.	0.019	0.001	0.002	0.025	0.057
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	12	7.95	7.967	8.6	6.7	0.295	0.543	6.97	7.65	8.5	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	12	7.947	7.568	8.6	6.7	0.468	0.684	6.97	7.65	8.5	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	12	0.011	0.027	0.2	0.003	0.003	0.055	0.003	0.003	0.023	0.147
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	12	108.5	103.5	146.	50.	977.727	31.269	53.	80.5	130.75	143.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	12	9.5	14.625	50.	2.5	255.278	15.977	2.5	3.125	18.	48.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	12	5.	4.708	10.	1.	8.157	2.856	1.	2.5	6.75	9.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	12	4.5	10.542	44.	2.	191.475	13.837	2.15	2.5	12.	41.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	12 ##	0.05	0.117	0.4	0.05	0.012	0.107	0.05	0.05	0.188	0.34
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	12	0.01	0.046	0.35	0.005	0.009	0.097	0.005	0.01	0.04	0.26
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	12	0.73	0.852	1.5	0.09	0.141	0.376	0.243	0.69	1.175	1.44
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	12	0.425	0.6	1.8	0.1	0.263	0.513	0.13	0.213	0.7	1.68
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	12	0.1	0.129	0.3	0.05	0.007	0.081	0.05	0.05	0.2	0.27
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	12	0.085	0.101	0.18	0.04	0.003	0.055	0.04	0.053	0.165	0.18
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	12	4.	4.833	11.	2.	8.515	2.918	2.	2.	7.5	10.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	8	126.	144.5	244.	54.	5997.429	77.443	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	12 ##	50.	108.333	600.	50.	24469.697	156.428	50.	50.	100.	450.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	12 ##	1.699	1.864	2.778	1.699	0.101	0.318	1.699	1.699	2.	2.545
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			73.141								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	11	19.	17.636	27.	1.	64.405	8.025	2.4	11.	23.5	27.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	10	532.	530.2	878.	228.	70011.956	264.598	229.3	247.	812.5	877.
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	11	9.5	9.991	14.2	7.7	3.347	1.829	7.82	9.	11.	13.7
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	10	1.5	1.65	4.	0.5	1.003	1.001	0.55	1.	2.	3.8
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	11	10.	12.091	30.	4.	46.291	6.804	4.8	9.	14.	27.4
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	10	8.375	8.245	8.8	7.5	0.199	0.446	7.51	7.9	8.56	8.794
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	10	8.369	8.245	8.8	7.5	0.252	0.502	7.51	7.9	8.56	8.794
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	10	0.004	0.009	0.032	0.002	0.	0.01	0.002	0.003	0.014	0.031
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	10	7.9	7.62	8.4	6.	0.704	0.839	6.05	7.1	8.325	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	10	7.855	6.835	8.4	6.	1.389	1.179	6.05	7.1	8.325	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	10	0.014	0.146	1.	0.004	0.099	0.315	0.004	0.005	0.117	0.932
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	10	122.5	114.4	144.	56.	1080.489	32.871	56.3	94.25	142.5	144.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	11 ##	2.5	31.273	234.	2.5	4703.468	68.582	2.5	2.5	21.	196.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	11 ##	2.5	6.091	24.	2.5	44.141	6.644	2.5	2.5	9.	21.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	11 ##	2.5	26.545	210.	2.5	3800.323	61.647	2.5	2.5	16.	175.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	11 ##	0.05	0.133	0.4	0.05	0.014	0.118	0.05	0.05	0.2	0.372
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	11	0.02	0.017	0.04	0.005	0.	0.01	0.005	0.01	0.02	0.036
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	11	1.2	1.095	1.67	0.09	0.189	0.435	0.214	0.8	1.4	1.622
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	11	0.5	0.527	0.9	0.2	0.06	0.245	0.2	0.3	0.8	0.88
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	11	0.1	0.124	0.3	0.05	0.006	0.078	0.05	0.05	0.2	0.28
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	11	0.1	0.092	0.19	0.02	0.003	0.055	0.024	0.04	0.11	0.188
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	11	5.	6.727	16.	2.	22.218	4.714	2.2	4.	9.	15.8
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	9	176.	172.667	252.	84.	4151.	64.428	84.	107.	238.	252.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	11	100.	295.455	2300.	50.	445227.273	667.254	50.	50.	200.	1880.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	11	2.	2.042	3.362	1.699	0.247	0.497	1.699	1.699	2.301	3.15
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			110.076								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	11	16.	15.5	27.	1.	95.7	9.783	1.1	7.5	25.	26.8
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	11	428.	431.636	673.	231.	20642.255	143.674	236.	292.	544.	663.8
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	11	10.4	10.436	15.2	6.9	5.555	2.357	7.18	8.5	11.6	14.76
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	11	2.	2.455	9.	1.	5.673	2.382	1.	1.	3.	8.
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	11	8.	14.455	39.	5.	126.473	11.246	5.2	8.	19.	37.6
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	11	7.8	8.027	9.	7.	0.45	0.671	7.04	7.5	8.7	8.98
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	11	7.8	7.632	9.	7.	0.622	0.789	7.04	7.5	8.7	8.98
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	11	0.016	0.023	0.1	0.001	0.001	0.031	0.001	0.002	0.032	0.093
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	11	7.8	7.927	8.6	7.4	0.176	0.42	7.44	7.6	8.4	8.58
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	11	7.8	7.779	8.6	7.4	0.2	0.477	7.44	7.6	8.4	8.58
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	11	0.016	0.017	0.04	0.003	0.	0.012	0.003	0.004	0.025	0.037
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	11	88.	95.636	130.	76.	275.655	16.603	77.	83.	109.	126.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	11	12.	25.818	108.	5.	979.564	31.298	5.	6.	30.	97.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	11	5.	6.727	26.	2.	46.818	6.842	2.2	3.	8.	22.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	11	6.	19.091	82.	2.	612.491	24.749	2.	4.	22.	74.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	8 ##	0.075	0.138	0.6	0.05	0.036	0.189	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	8	0.02	0.021	0.04	0.01	0.	0.012	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	8	1.23	1.18	1.8	0.69	0.156	0.395	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	5	0.5	0.46	0.9	0.2	0.083	0.288	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	5	0.2	0.27	0.7	0.05	0.067	0.259	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	8	0.11	0.155	0.6	0.04	0.034	0.184	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	11	5.	6.364	19.	4.	18.655	4.319	4.	4.	6.	16.6
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	11	132.	134.636	184.	90.	877.255	29.618	92.8	114.	164.	180.8
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	1	30.	30.	30.	30.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	10 ##	75.	785.	3300.	50.	1501138.889	1225.21	50.	50.	1700.	3230.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-08/02/88	10 ##	1.849	2.288	3.519	1.699	0.593	0.77	1.699	1.699	3.213	3.508
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 193.887											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	13	18.8	17.077	32.	0.	106.359	10.313	2.	7.75	26.5	31.04
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	14	758.	778.786	1161.	378.	60891.566	246.762	446.5	554.75	959.5	1149.5
00300 OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	13	9.8	10.1	13.4	7.9	2.61	1.616	7.98	8.75	11.1	12.92
00310 BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	14	2.	2.357	6.	1.	1.786	1.336	1.	1.75	3.	5.
00340 COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	14	15.	16.214	33.	7.	50.643	7.116	7.5	11.	17.75	30.5
00400 PH (STANDARD UNITS)	09/19/67-08/02/88	12	8.65	8.633	9.1	8.2	0.122	0.35	8.2	8.25	8.975	9.07
00400 CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	12	8.625	8.512	9.1	8.2	0.139	0.372	8.2	8.25	8.975	9.07
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	12	0.002	0.003	0.006	0.001	0.	0.002	0.001	0.001	0.006	0.006
00403 PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	14	8.25	8.279	8.8	7.8	0.093	0.304	7.8	8.125	8.525	8.7
00403 CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	14	8.247	8.18	8.8	7.8	0.103	0.321	7.8	8.125	8.525	8.7
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	14	0.006	0.007	0.016	0.002	0.	0.005	0.002	0.003	0.008	0.016
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	14	123.	117.286	146.	11.	1182.374	34.386	49.5	114.5	137.5	146.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	14	5.5	7.75	26.	2.5	48.49	6.964	2.5	2.5	10.75	22.
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	14	3.5	5.25	16.	2.5	18.183	4.264	2.5	2.5	6.25	14.
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	13	2.5	4.192	14.	0.	14.397	3.794	0.8	2.5	5.	12.4
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	14	0.1	0.114	0.4	0.05	0.011	0.105	0.05	0.05	0.1	0.35
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	14	0.01	0.014	0.02	0.005	0.	0.006	0.005	0.01	0.02	0.02
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	14	0.715	0.755	1.63	0.025	0.218	0.467	0.143	0.375	1.173	1.515
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	14	0.75	0.836	2.	0.4	0.184	0.429	0.4	0.575	0.925	1.7
00665 PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	14	0.2	0.179	0.3	0.05	0.006	0.078	0.05	0.1	0.2	0.3
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	14	0.12	1.312	17.	0.02	20.392	4.516	0.02	0.028	0.19	8.6
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	13	5.	5.385	7.	3.	1.923	1.387	3.4	4.	7.	7.
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	13	192.	201.846	310.	134.	2346.308	48.439	140.4	160.	238.	286.
31616 FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-08/02/88	13 ##	50.	153.846	1400.	50.	140192.308	374.423	50.	50.	50.	860.
31616 LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-08/02/88	13 ##	1.699	1.81	3.146	1.699	0.161	0.401	1.699	1.699	1.699	2.567
31616 GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN = 64.609											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	11	12.5	13.982	26.2	2.5	68.482	8.275	3.02	7.6	23.2	26.16
00094 SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	12	599.	603.583	995.	272.	53575.72	231.464	281.	384.5	784.75	946.1
00300 OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	11	10.3	10.091	13.7	5.5	6.801	2.608	5.78	8.2	12.5	13.64
00310 BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	12	2.	2.	5.	1.	1.273	1.128	1.	1.	2.	4.4
00340 COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	12	11.5	13.167	33.	4.	63.242	7.953	4.6	7.5	17.5	29.4
00400 PH (STANDARD UNITS)	09/19/67-08/02/88	10	8.45	8.579	9.2	8.	0.213	0.462	8.01	8.175	9.102	9.191
00400 CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	10	8.425	8.393	9.2	8.	0.252	0.502	8.01	8.175	9.102	9.191
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	10	0.004	0.004	0.01	0.001	0.	0.003	0.001	0.001	0.007	0.01
00403 PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	12	8.35	8.125	8.9	6.8	0.449	0.67	7.01	7.5	8.7	8.87
00403 CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	12	8.347	7.624	8.9	6.8	0.723	0.85	7.01	7.5	8.7	8.87
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	12	0.004	0.024	0.158	0.001	0.002	0.044	0.001	0.002	0.032	0.12
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	12	118.5	112.167	144.	72.	616.333	24.826	73.2	89.25	133.	141.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	12 ##	2.5	6.583	37.	2.5	97.538	9.876	2.5	2.5	6.5	28.9
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	12 ##	2.5	3.375	8.	2.5	3.051	1.747	2.5	2.5	4.375	7.1
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	12 ##	2.5	5.208	29.	2.5	57.521	7.584	2.5	2.5	4.375	22.1

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	12 ##	0.05	0.079	0.2	0.05	0.002	0.045	0.05	0.05	0.1	0.17
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	12	0.01	0.019	0.04	0.005	0.	0.013	0.007	0.01	0.03	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	12	1.2	1.13	1.68	0.23	0.232	0.482	0.242	0.88	1.548	1.674
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	12	0.6	0.65	1.	0.4	0.034	0.183	0.4	0.525	0.775	0.97
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	12	0.2	0.163	0.2	0.05	0.003	0.057	0.065	0.1	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	12	0.08	0.09	0.14	0.04	0.001	0.032	0.043	0.073	0.115	0.14
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	8	4.5	5.125	8.	3.	3.839	1.959	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	12	160.	164.25	222.	95.	2138.205	46.241	98.3	121.5	211.	220.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	12 ##	50.	195.833	1400.	50.	153844.697	392.23	50.	50.	87.5	1100.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	12 ##	1.699	1.92	3.146	1.699	0.22	0.469	1.699	1.699	1.925	2.983
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			83.159								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	6	11.8	13.2	28.9	1.6	118.024	10.864	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	6	481.	487.167	776.	222.	31489.767	177.454	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	6	10.6	10.1	13.5	5.5	11.9	3.45	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	6	2.	1.75	3.	0.5	0.775	0.88	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	6	8.	10.833	25.	6.	51.367	7.167	**	**	**	**
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	6	8.66	8.608	9.46	7.79	0.294	0.542	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	6	8.66	8.344	9.46	7.79	0.377	0.614	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	6	0.002	0.005	0.016	0.	0.	0.006	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	6	8.2	8.183	8.9	7.2	0.342	0.585	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	6	8.189	7.825	8.9	7.2	0.496	0.704	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	6	0.006	0.015	0.063	0.001	0.001	0.024	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	6	105.5	99.5	140.	43.	1053.1	32.452	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	6 ##	4.75	11.417	30.	2.5	152.342	12.343	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	6 ##	2.5	2.417	4.	0.	1.742	1.32	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	6 ##	2.75	10.25	30.	2.5	147.675	12.152	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	6	0.065	0.075	0.13	0.02	0.002	0.043	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	6	0.03	0.04	0.1	0.01	0.001	0.037	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	6	0.965	0.98	1.63	0.41	0.251	0.501	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	6	0.55	0.55	0.7	0.4	0.011	0.105	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	6	0.1	0.108	0.2	0.05	0.002	0.049	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	6	0.055	0.065	0.13	0.01	0.002	0.041	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	3	2.4	2.333	2.7	1.9	0.163	0.404	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	6	149.	139.	182.	60.	1866.8	43.206	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	6	100.	166.667	400.	50.	21666.667	147.196	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	6	2.	2.08	2.602	1.699	0.147	0.383	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			120.094								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	62	25.25	24.085	32.	2.3	31.812	5.64	19.15	22.65	27.05	29.88
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	30	837.5	821.5	1220.	241.	62893.5	250.786	418.6	703.75	996.25	1158.7
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	63	8.4	8.517	13.8	5.1	3.902	1.975	6.	6.9	9.6	11.46
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	32	2.	1.997	7.6	0.5	2.298	1.516	1.	1.	2.	3.7
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	30	14.	15.267	33.	0.02	76.526	8.748	7.1	8.	20.	32.
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	61	8.7	8.643	9.9	7.4	0.368	0.607	7.7	8.3	9.	9.64
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	61	8.7	8.24	9.9	7.4	0.533	0.73	7.7	8.3	9.	9.64
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	61	0.002	0.006	0.04	0.	0.	0.009	0.	0.001	0.005	0.02
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	42	8.3	8.231	8.9	7.1	0.185	0.43	7.63	8.	8.525	8.8
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	42	8.3	7.974	8.9	7.1	0.253	0.503	7.63	8.	8.525	8.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	42	0.005	0.011	0.079	0.001	0.	0.016	0.002	0.003	0.01	0.024
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	43	126.	121.163	162.	52.	617.663	24.853	80.2	114.	138.	145.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	34	7.	11.544	63.	2.5	167.96	12.96	2.5	2.5	17.25	31.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	34	3.	4.588	16.	0.	15.734	3.967	1.	2.5	5.25	11.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	34	4.	7.809	53.	0.	105.743	10.283	2.5	2.5	8.	21.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	45	0.2	0.202	0.7	0.05	0.027	0.165	0.05	0.05	0.3	0.44
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	45	0.02	0.029	0.35	0.005	0.003	0.051	0.005	0.01	0.03	0.05
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	43	0.75	0.778	1.67	0.025	0.223	0.472	0.09	0.3	1.189	1.396
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	03/03/70-08/02/88	43	0.7	0.891	2.4	0.3	0.2	0.448	0.4	0.6	1.1	1.46
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	26	0.2	0.176	0.3	0.05	0.004	0.062	0.1	0.1	0.2	0.244
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	27	0.13	0.756	17.	0.02	10.541	3.247	0.076	0.09	0.18	0.196
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	39	7.	7.908	16.	0.	15.977	3.997	2.	5.	11.	14.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	38	210.	206.	328.	98.	2601.405	51.004	129.6	171.5	238.5	260.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-05/29/85	13 ##	5.	7.846	20.	2.	33.641	5.8	3.2	5.	10.	20.
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-05/29/85	13 ##	5.	7.308	20.	5.	31.731	5.633	5.	5.	5.	20.
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-05/29/85	12 ##	4.	8.375	40.	0.5	139.869	11.827	0.65	1.	9.5	34.9
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	21	100.	110.953	270.	0.01	5818.937	76.282	22.	40.	175.	218.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	50 ##	50.	478.	5900.	50.	1622159.184	1273.64	50.	50.	225.	960.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	50 ##	1.699	2.051	3.771	1.699	0.347	0.589	1.699	1.699	2.345	2.978
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	50 ##	1.699	2.051	3.771	1.699	0.347	0.589	1.699	1.699	2.345	2.978
34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
34682	CHLORDANE (TECH MIX & METABS), TISSUE WET WGT, MG/KG	07/26/79-07/14/92	16 ##	0.5	0.314	0.5	0.005	0.061	0.248	0.005	0.005	0.5	0.5
34685	ENDRIN WET WGT TISMG/KG	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
34688	HEXACHLOROBENZENE WET WGT TISMG/KG	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
39069	CHLORDANE-NONACHLOR, CIS ISO, TISSUE WET WGT (UG/G)	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
39072	CHLORDANE-NONACHLOR, TRANS ISO, TISSUE, WET WT, UG/G	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
39074	BHC-ALPHA ISOMER, TISSUE UG/G WET WGT	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/26/79-07/14/92	16 ##	0.5	9.964	110.	0.005	752.409	27.43	0.005	0.005	8.	47.7
39785	GAMMA-BHC (LINDANE), TISSUE, WET WEIGHT, MG/KG	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	17	0.2	0.232	0.8	0.05	0.04	0.201	0.05	0.05	0.3	0.56
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	18	0.145	0.173	0.57	0.04	0.021	0.145	0.04	0.05	0.238	0.417
71930	MERCURY, TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/26/79-07/14/92	16	0.105	0.112	0.3	0.01	0.007	0.081	0.014	0.053	0.15	0.251
71936	LEAD, TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-07/14/92	12 ##	0.5	0.9	3.	0.1	0.86	0.927	0.1	0.5	1.625	2.73
71937	COPPER, TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-07/14/92	12	2.25	2.6	5.9	0.3	3.067	1.751	0.51	1.05	4.225	5.54
71939	CHROMIUM, TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-07/14/92	12	0.5	2.622	12.4	0.2	16.922	4.114	0.2	0.325	5.613	11.02
71940	CADMIUM, TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/28/83-07/14/92	12 ##	0.078	0.175	0.5	0.05	0.039	0.197	0.05	0.05	0.4	0.5
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/26/79-07/14/92	17	5.	4.412	6.	1.	1.632	1.278	1.8	4.	5.	5.2
81644	METHOXYCHLOR IN FISH TISSUE, UG/G WET WEIGHT	07/26/79-07/14/92	16 ##	0.05	0.146	0.5	0.005	0.045	0.212	0.005	0.005	0.388	0.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	78	7.2	7.933	21.	0.	24.003	4.899	1.69	4.4	10.975	15.06
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	46	573.	625.63	1390.	220.	95720.105	309.387	278.3	376.5	798.5	1104.1
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	79	11.6	11.568	16.2	6.3	3.046	1.745	9.5	10.4	12.8	13.7
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	51	2.	2.955	11.8	1.	6.796	2.607	1.	1.	3.	7.08
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	47	12.	27.309	700.	0.5	10103.669	100.517	5.8	8.	16.	25.2
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	74	8.35	8.305	9.5	6.5	0.505	0.711	7.3	7.8	9.	9.2
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	74	8.347	7.723	9.5	6.5	0.847	0.921	7.3	7.8	9.	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	74	0.004	0.019	0.316	0.	0.002	0.043	0.001	0.001	0.016	0.05
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	55	7.9	7.925	8.9	6.5	0.242	0.492	7.4	7.6	8.2	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	55	7.9	7.599	8.9	6.5	0.35	0.592	7.4	7.6	8.2	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	55	0.013	0.025	0.316	0.001	0.002	0.05	0.003	0.006	0.025	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	55	106.	104.982	159.	2.	1121.796	33.493	64.6	84.	132.	145.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	50	5.	16.04	234.	2.	1320.213	36.335	2.5	2.5	13.25	28.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	50	2.5	4.44	26.	1.	21.119	4.596	2.5	2.5	5.	6.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	50	2.5	12.7	210.	0.	1020.633	31.947	2.	2.5	8.	24.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	68	0.1	0.22	1.099	0.02	0.06	0.245	0.05	0.05	0.3	0.61
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	68	0.01	0.017	0.05	0.005	0.	0.011	0.005	0.01	0.02	0.031
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	66	1.21	1.243	2.799	0.09	0.199	0.446	0.697	0.96	1.5	1.75
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	68	0.5	0.644	1.8	0.05	0.157	0.397	0.2	0.4	0.8	1.409
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	46	0.175	0.165	0.7	0.05	0.014	0.117	0.05	0.1	0.2	0.3
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	46	0.1	0.139	0.9	0.01	0.025	0.159	0.02	0.05	0.19	0.295
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	48	5.5	6.823	19.	0.5	20.101	4.483	2.	4.	9.75	14.1
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	38	173.	172.447	317.	54.	4809.389	69.35	89.4	105.5	216.5	275.8
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-05/29/85	15 ##	5.	8.667	30.	5.	51.667	7.188	5.	5.	10.	24.
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-05/29/85	15 ##	5.	6.333	10.	5.	5.238	2.289	5.	5.	10.	10.
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-05/29/85	15	5.	12.267	60.	1.	303.21	17.413	1.	1.	14.	48.
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	27	110.	197.037	860.	5.	54327.422	233.082	9.	50.	250.	726.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	72 ##	50.	340.972	8000.	50.	1156994.816	1075.637	50.	50.	100.	670.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	72 ##	1.699	1.971	3.903	1.699	0.26	0.51	1.699	1.699	2.	2.825
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			93.507								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	23	0.1	0.183	0.6	0.05	0.025	0.159	0.05	0.05	0.3	0.4
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	23	0.1	0.143	0.4	0.02	0.012	0.111	0.028	0.06	0.2	0.318

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	09/19/67-08/02/88	62	18.9	18.679	29.4	7.5	28.726	5.36	11.56	15.	23.	26.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12/14/78-08/02/88	32	507.	567.094	1787.	187.	123512.862	351.444	239.4	388.25	634.5	1036.7
00300	OXYGEN, DISSOLVED MG/L	09/19/67-08/02/88	62	9.5	9.463	14.4	0.6	4.376	2.092	7.2	8.3	10.65	11.74
00310	BOD, 5 DAY, 20 DEG C MG/L	09/19/67-08/02/88	35	2.	2.529	8.	0.5	2.786	1.669	1.	1.	3.	4.44
00340	COD, .25N K2CR2O7 MG/L	12/14/78-08/02/88	32	10.	11.252	34.	0.07	41.627	6.452	5.3	8.	13.	17.
00400	PH (STANDARD UNITS)	09/19/67-08/02/88	61	8.5	8.507	10.	6.6	0.498	0.706	7.558	8.	9.	9.46
00400	CONVERTED PH (STANDARD UNITS)	09/19/67-08/02/88	61	8.5	7.896	10.	6.6	0.877	0.937	7.558	8.	9.	9.46
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	61	0.003	0.013	0.251	0.	0.001	0.035	0.	0.001	0.01	0.029
00403	PH, LAB, STANDARD UNITS SU	09/19/67-08/02/88	44	7.8	7.893	8.9	6.	0.316	0.562	7.25	7.6	8.3	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	09/19/67-08/02/88	44	7.8	7.367	8.9	6.	0.6	0.774	7.25	7.6	8.3	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	09/19/67-08/02/88	44	0.016	0.043	1.	0.001	0.023	0.15	0.003	0.005	0.025	0.057
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	44	105.	102.409	142.	43.	505.643	22.487	64.5	93.25	116.	129.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12/05/68-08/02/88	36	10.	19.069	100.	2.5	379.059	19.469	5.	6.	28.5	44.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12/05/68-08/02/88	35	5.	5.814	16.	1.	12.825	3.581	1.6	3.	8.	11.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12/05/68-08/02/88	35	6.	11.243	38.	0.	131.667	11.475	1.6	2.5	21.	32.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/03/70-08/02/88	51	0.1	0.164	0.6	0.05	0.023	0.152	0.05	0.05	0.2	0.4
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	52	0.02	0.021	0.1	0.005	0.	0.018	0.005	0.01	0.03	0.037
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/03/70-08/02/88	51	0.89	0.926	1.9	0.025	0.159	0.399	0.522	0.69	1.2	1.456
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/03/70-08/02/88	49	0.6	0.716	1.8	0.2	0.133	0.365	0.3	0.5	0.85	1.299

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0774

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00665	PHOSPHORUS, TOTAL (MG/L AS P)	02/06/79-08/02/88	28	0.1	0.127	0.3	0.05	0.005	0.069	0.05	0.063	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	02/06/79-08/02/88	32	0.09	0.09	0.22	0.005	0.003	0.051	0.023	0.043	0.13	0.157
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	06/24/75-08/02/88	43	7.	6.607	15.	0.	10.214	3.196	2.52	4.	8.	11.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	09/19/67-08/02/88	40	153.	157.075	322.	34.	3311.302	57.544	84.4	124.5	182.5	227.7
01034	CHROMIUM, TOTAL (UG/L AS CR)	05/15/69-05/29/85	10 ##	5.	11.05	30.	0.5	125.469	11.201	0.95	5.	22.5	30.
01042	COPPER, TOTAL (UG/L AS CU)	05/15/69-05/29/85	9 ##	5.	9.444	30.	5.	84.028	9.167	5.	5.	12.5	30.
01051	LEAD, TOTAL (UG/L AS PB)	05/15/69-05/29/85	9 ##	5.	4.944	19.	0.5	33.528	5.79	0.5	1.	6.	19.
01092	ZINC, TOTAL (UG/L AS ZN)	09/19/67-05/29/85	24	75.	132.507	800.	0.02	35276.303	187.82	0.075	15.	145.	450.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	57	100.	476.316	8000.	50.	1779920.113	1334.136	50.	50.	200.	1400.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-08/02/88	57	2.	2.097	3.903	1.699	0.317	0.563	1.699	1.699	2.301	3.146
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			125.054								
39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/26/79-07/14/92	3	12.	10.467	18.	1.4	70.653	8.406	**	**	**	**
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/03/70-02/06/79	20	0.1	0.125	0.3	0.05	0.008	0.091	0.05	0.05	0.2	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/03/70-02/06/79	19	0.07	0.092	0.36	0.03	0.005	0.072	0.04	0.05	0.1	0.14
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/26/79-07/14/92	3	5.	4.667	5.	4.	0.333	0.577	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0775

NPS Station ID: SHEN0775
 Location: APPROX. 0.4 MILE BELOW RT340/522 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1B-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070006000100.19
 Description:

LAT/LON: 38.943337/ -78.192782

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.18

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSSF000.19
 Within Park Boundary: No

Date Created: 09/03/88

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 2.70
 Distance from RF3: 0.07

On/Off RF1:
 On/Off RF3:

VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: S FORK SHENANDOAH SECTION: 02 TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Parameter Inventory for Station: SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	105	15.1	15.093	30.3	0.	72.408	8.509	3.4	7.55	23.25	26.12
00023	SAMPLE WEIGHT IN POUNDS	08/17/88-08/17/88	1	0.2	0.2	0.2	0.	0.	0.	**	**	**	**
00024	SAMPLE LENGTH IN INCHES	08/17/88-08/17/88	1	5.9	5.9	5.9	0.	0.	0.	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/09/88-04/02/92	24	2.3	6.004	55.	0.3	119.2	10.918	0.55	1.35	7.575	9.45
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	53	3.4	7.111	46.	0.1	102.186	10.109	0.88	2.	6.35	21.7
00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/03/93	23	16.	19.826	87.	8.	263.423	16.23	10.	14.	19.	36.4
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	11/09/88-06/09/98	10	358.5	373.1	595.	51.	32108.1	179.187	63.4	251.5	554.	593.3
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	95	295.	289.295	618.	152.	4315.891	65.695	198.	249.	328.	357.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	79	9.9	10.166	17.3	6.2	6.458	2.541	6.8	8.2	12.	13.3
00300	OXYGEN, DISSOLVED MG/L	11/09/88-04/02/92	26	10.6	10.727	15.3	7.5	3.7	1.924	7.6	9.15	11.825	13.18
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	102	1.	1.128	4.	0.5	0.408	0.639	0.5	0.875	1.025	2.
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	103	9.	9.01	37.	0.5	24.073	4.906	2.5	6.	11.	14.
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	105	8.4	8.424	9.5	6.9	0.236	0.485	7.8	8.1	8.8	9.004
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	105	8.4	8.094	9.5	6.9	0.345	0.588	7.8	8.1	8.8	9.004
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	105	0.004	0.008	0.126	0.	0.	0.018	0.001	0.002	0.008	0.016
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	102	8.2	8.099	9.	6.9	0.189	0.434	7.5	7.8	8.4	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	102	8.2	7.849	9.	6.9	0.252	0.502	7.5	7.8	8.4	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	102	0.006	0.014	0.126	0.001	0.	0.021	0.003	0.004	0.016	0.032
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	101	118.	113.99	168.	51.	754.53	27.469	72.4	94.	132.	151.
00500	RESIDUE, TOTAL (MG/L)	11/09/88-08/04/92	28	195.	218.5	398.	120.	6182.407	78.628	149.	168.75	223.	393.3
00505	RESIDUE, TOTAL VOLATILE (MG/L)	11/09/88-08/04/92	28	43.	44.214	78.	30.	146.989	12.124	31.8	35.	50.	56.4
00510	RESIDUE, TOTAL FIXED (MG/L)	11/09/88-08/04/92	28	151.5	173.929	354.	90.	5803.106	76.178	108.	123.75	180.25	341.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	103	4.	8.67	101.	1.5	198.738	14.097	1.5	1.5	9.	17.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	102##	1.5	2.245	17.	0.	5.385	2.321	1.	1.5	2.	4.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	103	3.	7.	84.	0.5	142.5	11.937	1.5	1.5	7.	15.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	104##	0.02	0.035	0.34	0.02	0.002	0.041	0.02	0.02	0.02	0.08
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	104	0.01	0.016	0.26	0.005	0.001	0.026	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	104	1.17	1.175	2.08	0.06	0.162	0.402	0.645	0.9	1.433	1.775
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	104	0.3	0.369	1.	0.05	0.031	0.176	0.2	0.3	0.4	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	104	0.1	0.118	0.3	0.05	0.003	0.059	0.05	0.1	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	01/24/89-04/02/92	25	0.08	0.087	0.2	0.01	0.002	0.046	0.036	0.06	0.11	0.174
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	76	2.9	3.196	7.3	0.5	2.36	1.536	1.4	2.3	4.	5.17
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	103	130.	129.379	184.	76.	726.12	26.947	89.4	111.	148.	164.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00940	CHLORIDE,TOTAL IN WATER MG/L	11/09/88-12/01/98	102	10.	11.667	51.	5.	37.65	6.136	6.	8.	14.	17.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	102	14.	19.971	157.	9.	651.672	25.528	11.	12.	17.	21.7
00951	FLUORIDE, TOTAL (MG/L AS F)	11/09/88-04/14/93	32 ##	0.075	0.105	0.26	0.015	0.005	0.068	0.05	0.05	0.15	0.229
00955	SILICA, DISSOLVED (MG/L AS SI02)	06/15/89-02/03/93	26	4.4	4.21	12.1	0.01	11.449	3.384	0.085	0.725	6.975	8.58
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/24/96-07/24/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	07/24/96-07/24/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG.DRY WGT)	07/24/96-07/24/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029	CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG.DRY WGT)	07/24/96-07/24/96	1	18.	18.	18.	18.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/24/96-07/24/96	1	18.	18.	18.	18.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/24/96-07/24/96	1	19.	19.	19.	19.	0.	0.	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/24/96-07/24/96	1	863.	863.	863.	863.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG.DRY WGT)	07/24/96-07/24/96	1	13.	13.	13.	13.	0.	0.	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/24/96-07/24/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/24/96-07/24/96	1	50.	50.	50.	50.	0.	0.	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/24/96-07/24/96	1	12.	12.	12.	12.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/24/96-07/24/96	1	12500.	12500.	12500.	12500.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	07/24/96-07/24/96	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/24/96-07/24/96	1	26500.	26500.	26500.	26500.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/24/89-12/01/98	91 ##	50.	176.374	2100.	50.	118907.814	344.83	50.	50.	100.	380.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/24/89-12/01/98	91 ##	1.699	1.96	3.322	1.699	0.16	0.4	1.699	1.699	2.	2.577
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			91.181								
32240	TANNIN AND LIGNIN (MG/L)	08/04/92-11/16/92	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
34258	B-BHC-BETA WET WGT TISM/G/KG	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34670	PCB - 1260 WET WGT TISM/G/KG	08/17/88-08/17/88	1	9.3	9.3	9.3	9.3	0.	0.	**	**	**	**
34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT,MG/KG	08/17/88-08/17/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34685	ENDRIN WET WGT TISM/G/KG	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34688	HEXACHLOROBENZENE WET WGT TISM/G/KG	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34690	PCB - 1254 WET WGT TISM/G/KG	08/17/88-08/17/88	1	2.4	2.4	2.4	2.4	0.	0.	**	**	**	**
34691	TOXAPHENE WET WGT TISM/G/KG	08/17/88-08/17/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/23/91-07/24/96	2 ##	45.	45.	50.	40.	50.	7.071	**	**	**	**
39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	57.5	57.5	100.	15.	3612.5	60.104	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/23/91-07/24/96	2 ##	260.	260.	500.	20.	115200.	339.411	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	55.	55.	100.	10.	4050.	63.64	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	55.	55.	100.	10.	4050.	63.64	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	57.5	57.5	100.	15.	3612.5	60.104	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/24/96	2 ##	55.	55.	100.	10.	4050.	63.64	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	7.525	7.525	15.	0.05	111.751	10.571	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/24/96	2 ##	40.25	40.25	80.	0.5	3160.125	56.215	**	**	**	**
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	5.025	5.025	10.	0.05	49.501	7.036	**	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	08/17/88-08/17/88	1	12.	12.	12.	12.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/23/91-07/24/96	2 ##	257.5	257.5	500.	15.	117612.5	342.947	**	**	**	**
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	79	0.07	0.074	0.17	0.005	0.002	0.039	0.02	0.04	0.1	0.13
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/24/96-07/24/96	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/23/91-07/24/96	2 ##	55.	55.	100.	10.	4050.	63.64	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/23/91-07/24/96	2 ##	70.	70.	100.	40.	1800.	42.426	**	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	08/17/88-08/17/88	1	5.	5.	5.	5.	0.	0.	**	**	**	**
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81823	PENTACHLORODIBENZO(P)DIOXIN FISH TISSUE WET WGT MG/KG	08/17/88-08/17/88	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	08/17/88-08/17/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-06/13/94	26	3.55	8.088	44.	0.7	114.113	10.682	0.8	1.8	12.	23.87

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0775

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS		24	1	0.04	6	0	0.00	10	1	0.10	8	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	53	0	0.00	19	0	0.00	22	0	0.00	12	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	79	0	0.00	26	0	0.00	33	0	0.00	20	0	0.00			
00300	OXYGEN, DISSOLVED	4.	26	0	0.00	7	0	0.00	10	0	0.00	9	0	0.00			
00400	PH		105	12	0.11	33	2	0.06	43	8	0.19	29	2	0.07			
	Other-Lo Lim.	6.5	105	0	0.00	33	0	0.00	43	0	0.00	29	0	0.00			
00403	PH, LAB		102	1	0.01	32	0	0.00	42	1	0.02	28	0	0.00			
	Other-Lo Lim.	6.5	102	0	0.00	32	0	0.00	42	0	0.00	28	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N		104	0	0.00	32	0	0.00	43	0	0.00	29	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	104	0	0.00	32	0	0.00	43	0	0.00	29	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	102	0	0.00	32	0	0.00	43	0	0.00	27	0	0.00			
	Drinking Water	250.	102	0	0.00	32	0	0.00	43	0	0.00	27	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	102	0	0.00	32	0	0.00	43	0	0.00	27	0	0.00			
00951	FLUORIDE, TOTAL AS F		32	0	0.00	9	0	0.00	14	0	0.00	9	0	0.00			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	91	20	0.22	29	8	0.28	39	6	0.15	23	6	0.26			
82078	TURBIDITY, FIELD	50.	26	0	0.00	7	0	0.00	11	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1988 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	1	10.1	10.1	10.1	10.1	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	1	5.	5.	5.	5.	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	1	9.01	9.01	9.01	9.01	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	1	9.01	9.01	9.01	9.01	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	1	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	1	8.5	8.5	8.5	8.5	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	1	0.003	0.003	0.003	0.003	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	1	145.	145.	145.	145.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	1	4.	4.	4.	4.	0.	0.	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	1	1.	1.	1.	1.	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	1	3.	3.	3.	3.	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	1	3.2	3.2	3.2	3.2	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	1	176.	176.	176.	176.	0.	0.	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	1	26.	26.	26.	26.	0.	0.	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	1	109.	109.	109.	109.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	7	23.9	19.029	28.5	4.	93.999	9.695	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	1	618.	618.	618.	618.	0.	0.	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	5	2.	2.2	3.	1.	0.7	0.837	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	5	10.	11.4	18.	9.	14.3	3.782	**	**	**	**
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	7	8.59	8.516	8.95	7.97	0.192	0.438	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	7	8.59	8.341	8.95	7.97	0.227	0.477	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	7	0.003	0.005	0.011	0.001	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	5	8.	8.	8.4	7.5	0.135	0.367	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	5	8.	7.876	8.4	7.5	0.154	0.393	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	5	0.01	0.013	0.032	0.004	0.	0.011	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	5	92.	93.8	119.	66.	467.7	21.626	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	5	6.	6.4	13.	2.	22.3	4.722	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	4	3.	3.25	5.	2.	1.583	1.258	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	5	1.	3.6	10.	0.5	18.175	4.263	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	5	0.08	0.08	0.13	0.04	0.001	0.032	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	5	0.02	0.021	0.04	0.005	0.	0.014	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	5	1.02	1.084	1.44	0.92	0.042	0.205	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	5	0.6	0.62	0.9	0.4	0.037	0.192	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	5	0.1	0.12	0.2	0.1	0.002	0.045	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	5	2.7	2.6	3.	2.1	0.15	0.387	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	5	146.	134.8	164.	92.	775.2	27.842	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	5	25.	19.2	29.	6.	137.2	11.713	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	5	150.	105.	157.	10.	4497.	67.06	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	5 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	5 ##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			50.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	5	24.8	22.78	29.1	13.4	38.582	6.211	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	3	312.	316.	375.	261.	3261.	57.105	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	5	1.	0.9	1.	0.5	0.05	0.224	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	5	9.	9.2	12.	8.	2.7	1.643	**	**	**	**
00400	PH (STANDARD UNITS)	5	8.87	8.718	9.02	7.89	0.218	0.467	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	5	8.87	8.451	9.02	7.89	0.307	0.554	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	5	0.001	0.004	0.013	0.001	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	5	8.5	8.4	8.6	8.	0.065	0.255	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	5	8.5	8.334	8.6	8.	0.071	0.266	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	5	0.003	0.005	0.01	0.003	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	5	131.	132.4	154.	104.	382.3	19.552	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	5	5.	6.4	12.	3.	11.8	3.435	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	5	3.	3.	5.	2.	1.5	1.225	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	5	2.	3.5	10.	0.5	15.	3.873	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	7 ##	0.02	0.031	0.1	0.02	0.001	0.03	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	7	0.01	0.046	0.26	0.005	0.009	0.094	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	7	1.18	1.214	2.03	0.41	0.259	0.509	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	7	0.4	0.443	0.7	0.2	0.023	0.151	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	7	0.1	0.143	0.3	0.1	0.006	0.079	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	5	2.4	2.6	3.3	1.8	0.405	0.636	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	5	164.	153.6	176.	116.	580.8	24.1	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	5	13.	19.6	51.	9.	313.8	17.714	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	5	20.	19.6	23.	17.	6.8	2.608	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	9.7	12.344	24.	2.8	45.443	6.741	2.8	7.75	18.4	24.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	8	321.	319.625	368.	231.	1969.411	44.378	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	9	1.	1.	2.	0.5	0.188	0.433	0.5	0.75	1.	2.
00340	COD, .25N K2CR2O7 MG/L	9	9.	11.	37.	4.	98.5	9.925	4.	6.5	9.5	37.
00400	PH (STANDARD UNITS)	9	8.79	8.67	9.5	8.2	0.206	0.454	8.2	8.2	8.97	9.5
00400	CONVERTED PH (STANDARD UNITS)	9	8.79	8.498	9.5	8.2	0.239	0.489	8.2	8.2	8.97	9.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.002	0.003	0.006	0.	0.	0.003	0.	0.001	0.006	0.006
00403	PH, LAB, STANDARD UNITS SU	9	8.4	8.389	8.8	7.9	0.106	0.326	7.9	8.1	8.7	8.8
00403	CONVERTED PH, LAB, STANDARD UNITS	9	8.4	8.283	8.8	7.9	0.119	0.344	7.9	8.1	8.7	8.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.004	0.005	0.013	0.002	0.	0.004	0.002	0.002	0.008	0.013
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	8	141.	136.625	157.	96.	520.554	22.816	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	9 ##	2.5	5.5	17.	1.5	31.25	5.59	1.5	1.5	9.5	17.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	9 ##	1.5	1.5	3.	0.5	0.5	0.707	0.5	1.	1.75	3.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	9 ##	2.5	4.722	15.	1.5	21.569	4.644	1.5	1.5	7.5	15.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	9 ##	0.02	0.026	0.07	0.02	0.	0.017	0.02	0.02	0.02	0.07
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	9 ##	0.005	0.011	0.04	0.005	0.	0.011	0.005	0.005	0.01	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	9	1.29	1.171	1.81	0.06	0.31	0.557	0.06	0.805	1.65	1.81
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	9	0.3	0.344	0.6	0.2	0.018	0.133	0.2	0.25	0.45	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	9	0.1	0.139	0.3	0.05	0.006	0.078	0.05	0.1	0.2	0.3
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	9	1.8	2.244	4.2	1.3	0.845	0.919	1.3	1.6	2.8	4.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	9	152.	151.333	172.	112.	333.	18.248	112.	142.	166.	172.
00940	CHLORIDE, TOTAL IN WATER MG/L	9	14.	12.778	18.	8.	13.444	3.667	8.	9.	16.	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	9	17.	17.333	23.	14.	6.5	2.55	14.	15.5	18.	23.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	4 ##	75.	75.	100.	50.	833.333	28.868	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	4 ##	1.849	1.849	2.	1.699	0.03	0.174	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			70.711								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	12	9.85	12.908	25.4	1.8	63.877	7.992	2.82	7.025	19.95	25.37
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	260.	252.	328.	167.	2964.364	54.446	172.7	191.	293.	324.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	8	9.1	9.512	12.6	7.6	2.633	1.623	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	12	1.	1.25	4.	0.5	0.886	0.941	0.5	1.	1.	3.4
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	12	12.5	12.667	19.	2.	26.606	5.158	3.5	10.	17.75	19.
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	12	8.55	8.479	9.3	6.9	0.478	0.691	7.14	8.137	9.025	9.3
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	12	8.547	7.839	9.3	6.9	0.926	0.962	7.14	8.137	9.025	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	12	0.003	0.015	0.126	0.001	0.001	0.035	0.001	0.001	0.007	0.094
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	11	8.4	8.3	8.5	7.7	0.068	0.261	7.74	8.3	8.5	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	11	8.4	8.209	8.5	7.7	0.077	0.278	7.74	8.3	8.5	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	11	0.004	0.006	0.02	0.003	0.	0.005	0.003	0.003	0.005	0.018
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	11	101.	100.455	132.	64.	527.473	22.967	64.6	76.	119.	130.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	12	4.	13.083	101.	1.5	782.038	27.965	1.5	2.	8.75	75.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	12	1.	2.667	17.	0.	21.288	4.614	0.3	1.	1.875	13.1
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	12	3.	10.667	84.	1.	542.015	23.281	1.15	1.625	7.	62.1
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	12 ##	0.02	0.023	0.06	0.02	0.	0.012	0.02	0.02	0.02	0.048
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	12	0.01	0.011	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.027
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	12	1.19	1.252	1.86	0.71	0.082	0.287	0.794	1.115	1.398	1.764
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	12	0.3	0.367	1.	0.1	0.052	0.227	0.13	0.225	0.4	0.85
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	12	0.1	0.142	0.3	0.05	0.006	0.076	0.05	0.1	0.2	0.27
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	12	4.35	4.167	7.3	1.	4.126	2.031	1.12	2.8	6.	7.18
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	12	117.	117.	176.	78.	891.273	29.854	78.6	86.5	140.	166.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	11	9.	8.455	13.	5.	6.873	2.622	5.	6.	10.	12.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	11	14.	14.545	20.	11.	6.673	2.583	11.	13.	16.	19.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	12 ##	75.	116.667	300.	50.	7424.242	86.164	50.	50.	200.	270.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	12 ##	1.849	1.965	2.477	1.699	0.093	0.306	1.699	1.699	2.301	2.424
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			92.152								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	8	0.095	0.093	0.14	0.05	0.001	0.029	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	12	15.75	15.258	26.4	3.3	70.039	8.369	3.84	6.55	23.7	26.28
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	286.	281.917	357.	190.	3343.538	57.823	195.4	231.75	328.	354.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	12	9.5	10.483	17.3	6.8	9.902	3.147	7.01	7.975	12.45	16.58
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	12	1.	1.167	2.	0.5	0.288	0.537	0.5	1.	1.75	2.
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	12	7.	7.792	13.	0.5	12.794	3.577	1.25	7.	10.75	12.7
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	12	8.25	8.196	9.1	6.9	0.348	0.59	7.11	7.85	8.6	9.025
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	12	8.247	7.76	9.1	6.9	0.555	0.745	7.11	7.85	8.6	9.025
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	12	0.006	0.017	0.126	0.001	0.001	0.035	0.001	0.003	0.014	0.096
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	12	8.5	8.433	9.	7.3	0.173	0.416	7.57	8.325	8.6	8.94
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	12	8.5	8.145	9.	7.3	0.264	0.514	7.57	8.325	8.6	8.94
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	12	0.003	0.007	0.05	0.001	0.	0.014	0.001	0.003	0.005	0.037
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	12	116.	113.417	165.	71.	922.447	30.372	72.2	83.25	137.25	158.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	12	7.5	9.542	40.	1.5	122.157	11.052	1.5	1.5	12.	33.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	12	1.5	2.958	15.	1.	15.657	3.957	1.	1.125	2.75	12.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	12	6.5	7.208	25.	1.5	52.066	7.216	1.5	1.5	10.	22.3
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	12 ##	0.02	0.062	0.34	0.02	0.008	0.092	0.02	0.02	0.075	0.268
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	12	0.01	0.012	0.03	0.005	0.	0.008	0.005	0.005	0.02	0.027
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	12	1.245	1.162	1.65	0.59	0.131	0.361	0.611	0.745	1.408	1.632
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	12	0.3	0.367	0.7	0.2	0.024	0.156	0.2	0.225	0.5	0.64
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	12	0.1	0.113	0.2	0.05	0.003	0.057	0.05	0.063	0.175	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	12	2.5	2.842	5.8	0.5	1.692	1.301	0.92	2.175	3.65	5.26
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	12	124.	129.75	184.	86.	942.568	30.701	89.	103.	159.25	178.6
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	12	10.	10.417	16.	6.	13.72	3.704	6.	7.25	14.25	16.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	12	15.5	15.917	22.	12.	9.356	3.059	12.3	14.	17.5	21.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	12 ##	50.	295.833	2100.	50.	338844.697	582.104	50.	50.	300.	1590.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	12 ##	1.699	2.064	3.322	1.699	0.286	0.535	1.699	1.699	2.477	3.106
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			115.951								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	12	0.05	0.064	0.16	0.005	0.002	0.049	0.007	0.023	0.1	0.151

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	13	15.1	14.3	28.1	0.4	86.165	9.283	1.6	4.	23.4	27.26
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	7	1.6	2.557	8.1	0.2	7.206	2.684	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	13	292.	275.846	354.	152.	4898.141	69.987	163.2	202.5	337.	353.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	13	9.9	10.038	15.4	6.6	7.991	2.827	6.68	7.7	12.95	14.56
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	12	1.	0.992	2.	0.5	0.164	0.406	0.5	0.625	1.1	1.76
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	13	10.	8.462	13.	2.5	10.061	3.172	2.5	7.	10.5	12.2
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	13	8.5	8.438	8.9	7.8	0.088	0.296	7.92	8.25	8.65	8.82
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	13	8.5	8.334	8.9	7.8	0.099	0.315	7.92	8.25	8.65	8.82
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	13	0.003	0.005	0.016	0.001	0.	0.004	0.002	0.002	0.006	0.013
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	13	7.8	7.792	8.2	7.2	0.131	0.362	7.28	7.45	8.15	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	13	7.8	7.657	8.2	7.2	0.151	0.388	7.28	7.45	8.15	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	13	0.016	0.022	0.063	0.006	0.	0.018	0.006	0.007	0.036	0.054
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	13	114.	108.692	150.	51.	954.397	30.893	58.2	77.5	132.	145.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	13	3.	11.192	56.	1.5	289.231	17.007	1.5	1.5	15.	48.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	13	1.5	2.231	7.	1.	3.067	1.751	1.	1.5	2.	6.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	13	2.	9.654	49.	1.5	221.808	14.893	1.5	1.5	13.	42.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	13 ##	0.02	0.035	0.11	0.02	0.001	0.031	0.02	0.02	0.04	0.102
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	13	0.01	0.013	0.02	0.005	0.	0.006	0.005	0.01	0.02	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	13	1.31	1.301	1.98	0.46	0.155	0.394	0.652	1.02	1.6	1.876
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	13	0.3	0.354	0.6	0.1	0.018	0.133	0.14	0.3	0.45	0.56
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	13	0.1	0.088	0.2	0.05	0.002	0.042	0.05	0.05	0.1	0.16
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	13	2.8	2.815	7.1	0.5	2.665	1.632	0.5	2.2	3.25	5.86
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	13	124.	122.308	156.	76.	768.231	27.717	78.4	94.	148.	154.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	13	10.	11.	18.	5.	18.5	4.301	5.	7.5	15.	17.2
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	13	15.	14.154	19.	9.	9.141	3.023	9.8	11.5	16.	18.6
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	13 ##	50.	226.923	2100.	50.	318589.744	564.438	50.	50.	100.	1340.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	13 ##	1.699	1.916	3.322	1.699	0.214	0.462	1.699	1.699	2.	2.914
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			82.501								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	13	0.06	0.061	0.11	0.02	0.001	0.027	0.024	0.04	0.075	0.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	11	14.3	13.373	30.1	0.	104.28	10.212	0.22	3.1	22.7	28.8
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	11	2.4	6.255	39.	0.7	120.913	10.996	0.84	1.7	5.4	32.46
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	11	307.	293.727	369.	185.	2327.418	48.243	199.2	263.	323.	361.6
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	11	10.1	10.745	15.3	6.2	9.475	3.078	6.44	8.3	13.1	15.2
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	11	1.3	1.2	2.2	0.5	0.414	0.643	0.5	0.5	1.8	2.16
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	11	10.	9.182	14.	2.5	14.114	3.757	2.5	8.	12.	13.6
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	11	8.7	8.636	9.2	8.	0.173	0.415	8.	8.1	8.9	9.16
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	11	8.7	8.443	9.2	8.	0.214	0.462	8.	8.1	8.9	9.16
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	11	0.002	0.004	0.01	0.001	0.	0.004	0.001	0.001	0.008	0.01

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00403	PH, LAB, STANDARD UNITS SU	11	7.8	7.855	8.4	7.	0.151	0.388	7.12	7.7	8.	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	11	7.8	7.671	8.4	7.	0.188	0.433	7.12	7.7	8.	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.016	0.021	0.1	0.004	0.001	0.027	0.004	0.01	0.02	0.085
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11	110.	107.364	147.	65.	449.055	21.191	70.4	92.	120.	142.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	3.	7.591	51.	1.5	212.541	14.579	1.5	1.5	5.	42.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11 ##	1.5	2.227	7.	1.5	3.068	1.752	1.5	1.5	1.5	6.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11 ##	1.5	6.182	44.	1.5	158.814	12.602	1.5	1.5	4.	36.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11 ##	0.02	0.023	0.05	0.02	0.	0.009	0.02	0.02	0.02	0.044
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11	0.01	0.013	0.03	0.005	0.	0.008	0.005	0.005	0.02	0.028
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11	0.92	1.082	2.08	0.63	0.176	0.42	0.646	0.77	1.2	1.968
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11	0.2	0.264	0.4	0.2	0.007	0.081	0.2	0.2	0.3	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11	0.1	0.1	0.2	0.05	0.002	0.039	0.05	0.1	0.1	0.18
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11	4.1	4.227	6.9	2.4	1.446	1.203	2.54	3.2	4.9	6.5
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11	124.	122.909	155.	78.	461.691	21.487	82.8	111.	140.	153.2
00940	CHLORIDE, TOTAL IN WATER MG/L	11	11.	11.182	15.	5.	8.164	2.857	5.8	10.	13.	15.
00945	SULFATE, TOTAL (MG/L AS SO4)	11	14.	14.	21.	11.	7.	2.646	11.2	12.	15.	19.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11 ##	50.	118.182	600.	50.	27636.364	166.242	50.	50.	100.	520.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11 ##	1.699	1.879	2.778	1.699	0.126	0.355	1.699	1.699	2.	2.683
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			75.714								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11	0.09	0.079	0.11	0.02	0.001	0.033	0.024	0.04	0.11	0.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11	15.	15.545	30.3	2.4	86.483	9.3	3.04	7.1	23.	29.1
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	11	5.2	12.509	46.	0.1	212.477	14.577	0.48	3.2	16.	43.4
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	11	255.	262.727	333.	192.	2024.618	44.996	196.	229.	305.	329.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	11	10.7	10.309	14.1	7.	5.345	2.312	7.14	8.5	12.	13.92
00310	BOD, 5 DAY, 20 DEG C MG/L	11 ##	0.5	1.091	3.	0.5	0.741	0.861	0.5	0.5	2.	2.8
00340	COD, .25N K2CR2O7 MG/L	11	7.	7.545	15.	2.5	21.973	4.688	2.5	2.5	12.	14.6
00400	PH (STANDARD UNITS)	11	8.3	8.255	9.3	7.3	0.319	0.565	7.4	7.8	8.5	9.24
00400	CONVERTED PH (STANDARD UNITS)	11	8.3	7.964	9.3	7.3	0.411	0.641	7.4	7.8	8.5	9.24
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.005	0.011	0.05	0.001	0.	0.014	0.001	0.003	0.016	0.043
00403	PH, LAB, STANDARD UNITS SU	11	8.1	8.036	8.5	7.5	0.093	0.304	7.54	7.8	8.3	8.46
00403	CONVERTED PH, LAB, STANDARD UNITS	11	8.1	7.939	8.5	7.5	0.103	0.321	7.54	7.8	8.3	8.46
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11	0.008	0.012	0.032	0.003	0.	0.008	0.004	0.005	0.016	0.029
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11	102.	100.	135.	70.	499.4	22.347	70.4	81.	120.	132.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	4.	10.	45.	1.5	158.95	12.608	1.5	3.	13.	39.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11 ##	1.5	1.955	5.	1.5	1.223	1.106	1.5	1.5	1.5	4.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11	3.	8.682	40.	1.5	126.664	11.254	1.5	1.5	12.	34.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11 ##	0.02	0.033	0.07	0.02	0.	0.017	0.02	0.02	0.04	0.066
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11	0.02	0.016	0.03	0.005	0.	0.007	0.006	0.01	0.02	0.028
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11	1.5	1.465	1.88	0.79	0.135	0.367	0.842	1.1	1.8	1.878
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11	0.3	0.355	0.8	0.2	0.035	0.186	0.2	0.2	0.5	0.74
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11	0.1	0.109	0.2	0.05	0.004	0.063	0.05	0.05	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	8	3.1	3.288	6.3	1.3	2.776	1.666	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11	133.	118.818	145.	77.	640.964	25.317	79.6	98.	142.	144.8
00940	CHLORIDE, TOTAL IN WATER MG/L	11	9.	8.727	11.	6.	2.218	1.489	6.2	8.	10.	10.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11	13.	13.727	22.	11.	11.218	3.349	11.	11.	16.	20.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	100.	220.	800.	50.	71777.778	267.914	50.	50.	375.	780.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	2.	2.095	2.903	1.699	0.213	0.462	1.699	1.699	2.552	2.891
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			124.573								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	11	0.05	0.062	0.16	0.01	0.002	0.046	0.01	0.04	0.07	0.154

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	12	14.2	15.225	24.7	5.1	58.973	7.679	5.49	8.7	23.35	24.64
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	12	3.6	7.617	33.	2.2	78.522	8.861	2.29	3.1	9.85	27.54
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	301.5	292.083	342.	202.	1606.992	40.087	212.5	272.5	319.	338.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	12	10.2	9.767	13.3	6.2	6.657	2.58	6.32	6.8	11.75	13.27
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	12 ##	1.	0.958	2.	0.5	0.294	0.542	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	12	9.	8.958	16.	2.5	17.112	4.137	3.25	5.25	11.75	15.7
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	12	8.25	8.258	8.7	7.7	0.104	0.323	7.76	8.	8.575	8.7
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	12	8.247	8.151	8.7	7.7	0.117	0.342	7.76	8.	8.575	8.7
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	12	0.006	0.007	0.02	0.002	0.	0.005	0.002	0.003	0.01	0.018
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	12	7.95	8.033	8.4	7.7	0.068	0.261	7.73	7.8	8.35	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	12	7.947	7.969	8.4	7.7	0.072	0.269	7.73	7.8	8.35	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	12	0.011	0.011	0.02	0.004	0.	0.006	0.004	0.005	0.016	0.019
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	12	126.	121.167	151.	74.	489.242	22.119	79.4	109.5	137.75	149.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	12	3.	7.458	41.	1.5	144.884	12.037	1.5	1.5	6.	35.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	12 ##	1.5	1.917	5.	1.5	1.129	1.062	1.5	1.5	1.5	4.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	12 ##	1.5	6.333	36.	1.5	112.606	10.612	1.5	1.5	5.25	30.9
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	12 ##	0.02	0.04	0.19	0.02	0.003	0.051	0.02	0.02	0.02	0.16
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	12	0.015	0.018	0.06	0.005	0.	0.017	0.005	0.005	0.02	0.054
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	12	0.96	1.034	1.86	0.5	0.119	0.345	0.572	0.818	1.208	1.698
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	12	0.4	0.396	1.	0.05	0.061	0.247	0.095	0.225	0.4	0.91
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	12	0.1	0.138	0.2	0.05	0.003	0.057	0.065	0.1	0.2	0.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	12	130.	130.917	160.	89.	379.902	19.491	94.7	122.75	146.75	157.6
00940	CHLORIDE,TOTAL IN WATER MG/L	11/09/88-12/01/98	12	10.	11.	17.	7.	9.455	3.075	7.	9.	13.	16.4
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	12	12.	12.583	16.	10.	3.538	1.881	10.3	11.25	13.75	16.
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/24/89-12/01/98	12	100.	258.333	1200.	50.	136287.879	369.172	50.	50.	325.	1080.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	01/24/89-12/01/98	12	2.	2.115	3.079	1.699	0.231	0.481	1.699	1.699	2.452	3.026
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			130.322								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	12	0.1	0.095	0.17	0.03	0.002	0.043	0.033	0.048	0.128	0.161

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	12	18.05	15.983	26.8	2.2	70.732	8.41	2.95	8.225	23.775	26.65
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	12	2.45	5.1	25.5	0.6	49.765	7.054	0.72	1.225	5.35	21.24
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	327.	311.75	384.	206.	4059.841	63.717	209.3	260.5	371.25	383.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	12	10.1	10.158	13.4	6.4	4.397	2.097	6.91	8.55	11.625	13.25
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	12 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	12	6.	6.167	11.	2.5	10.242	3.2	2.5	2.5	8.75	11.
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	12	8.3	8.3	8.9	7.7	0.115	0.338	7.76	8.1	8.575	8.81
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	12	8.3	8.182	8.9	7.7	0.13	0.36	7.76	8.1	8.575	8.81
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	12	0.005	0.007	0.02	0.001	0.	0.005	0.002	0.003	0.008	0.018
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	12	8.25	7.925	8.6	6.9	0.411	0.641	6.93	7.275	8.5	8.57
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	12	8.247	7.506	8.6	6.9	0.602	0.776	6.93	7.275	8.5	8.57
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	12	0.006	0.031	0.126	0.003	0.002	0.043	0.003	0.003	0.055	0.118
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	12	135.5	127.5	168.	76.	913.364	30.222	76.9	109.25	154.	164.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	12	3.	6.292	24.	1.5	50.203	7.085	1.5	1.5	9.75	21.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	12 ##	1.5	1.75	3.	1.5	0.341	0.584	1.5	1.5	1.5	3.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	12 ##	1.5	5.042	21.	1.5	37.703	6.14	1.5	1.5	6.75	18.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	12 ##	0.02	0.02	0.02	0.02	0.	0.	0.02	0.02	0.02	0.02
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	12 ##	0.005	0.01	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.027
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	12	1.005	0.95	1.46	0.28	0.151	0.388	0.352	0.623	1.325	1.43
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	12	0.3	0.342	0.6	0.2	0.012	0.108	0.23	0.3	0.375	0.57
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	12	0.1	0.104	0.2	0.05	0.001	0.033	0.065	0.1	0.1	0.17
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	12	130.	130.417	165.	93.	688.083	26.231	94.2	103.25	157.75	164.1
00940	CHLORIDE,TOTAL IN WATER MG/L	11/09/88-12/01/98	12	12.5	11.917	18.	6.	16.811	4.1	6.6	8.	16.25	17.7

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1998 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	12	12.	13.167	22.	11.	10.879	3.298	11.	11.	13.75	20.5
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	12 ##	50.	83.333	200.	50.	3333.333	57.735	50.	50.	100.	200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	12 ##	1.699	1.849	2.301	1.699	0.058	0.24	1.699	1.699	2.	2.301
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		70.711									
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	12	0.08	0.073	0.13	0.02	0.001	0.036	0.023	0.033	0.098	0.127

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	33	24.4	23.739	30.3	15.3	14.512	3.81	18.24	21.65	26.35	28.86
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	30	324.	328.2	618.	185.	4677.407	68.392	267.2	301.75	350.	374.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	26	7.8	7.923	9.9	6.2	1.231	1.11	6.54	6.8	8.85	9.43
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	32 ##	1.	0.872	2.	0.5	0.204	0.452	0.5	0.5	1.	1.79
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	32	9.	9.484	37.	2.5	40.121	6.334	2.5	6.25	11.75	14.7
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	33	8.5	8.466	9.02	6.9	0.206	0.454	7.84	8.25	8.86	8.95
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	33	8.5	8.095	9.02	6.9	0.347	0.589	7.84	8.25	8.86	8.95
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	33	0.003	0.008	0.126	0.001	0.	0.022	0.001	0.001	0.006	0.015
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	32	8.35	8.278	8.8	7.	0.123	0.351	7.83	8.125	8.475	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	32	8.347	8.057	8.8	7.	0.174	0.417	7.83	8.125	8.475	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	32	0.004	0.009	0.1	0.002	0.	0.017	0.003	0.003	0.008	0.015
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	32	130.	130.063	157.	65.	380.706	19.512	106.9	119.	146.	154.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	32	3.	6.5	51.	1.5	127.774	11.304	1.5	1.5	5.	12.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	32 ##	1.5	1.922	7.	1.	1.453	1.206	1.15	1.5	1.875	3.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	32 ##	1.5	5.313	44.	0.5	98.835	9.942	1.5	1.5	3.75	10.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	32 ##	0.02	0.028	0.1	0.02	0.	0.02	0.02	0.02	0.02	0.064
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	32	0.01	0.012	0.03	0.005	0.	0.007	0.005	0.005	0.02	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	32	1.035	1.052	1.88	0.41	0.144	0.379	0.599	0.74	1.233	1.7
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	32	0.4	0.416	0.8	0.2	0.016	0.125	0.3	0.3	0.475	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	32	0.1	0.136	0.3	0.05	0.003	0.057	0.1	0.1	0.2	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	23	3.	3.683	7.1	1.3	2.925	1.71	1.96	2.4	4.8	6.9
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	32	144.5	145.813	176.	78.	400.351	20.009	124.	137.25	161.25	171.4
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	32	13.	14.031	51.	5.	62.676	7.917	8.3	10.	15.	17.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	32	15.	19.656	150.	11.	580.039	24.084	11.	12.	18.	22.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	29 ##	50.	156.897	800.	50.	37986.453	194.901	50.	50.	200.	600.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	29 ##	1.699	1.991	2.903	1.699	0.147	0.383	1.699	1.699	2.301	2.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			98.036								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	26	0.1	0.097	0.16	0.01	0.001	0.033	0.057	0.07	0.12	0.14

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	43	7.1	7.063	16.2	0.	15.467	3.933	1.96	4.	9.9	12.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	40	282.5	270.775	384.	152.	4150.025	64.421	187.	207.5	321.25	356.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	33	12.6	12.306	17.3	8.3	3.391	1.842	10.04	10.8	13.25	14.86
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	43	1.	1.265	4.	0.5	0.511	0.715	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	43	8.	8.244	19.	2.5	17.528	4.187	2.5	5.	11.	13.2
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	43	8.6	8.466	9.5	6.9	0.31	0.557	7.74	8.1	8.9	9.16
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	43	8.6	8.052	9.5	6.9	0.486	0.697	7.74	8.1	8.9	9.16
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	43	0.003	0.009	0.126	0.	0.	0.02	0.001	0.001	0.008	0.018
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	42	8.1	8.064	9.	6.9	0.219	0.468	7.36	7.775	8.5	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	42	8.1	7.796	9.	6.9	0.293	0.541	7.36	7.775	8.5	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	42	0.008	0.016	0.126	0.001	0.001	0.023	0.003	0.003	0.017	0.045
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	42	110.	108.31	168.	51.	971.146	31.163	70.	76.	129.	155.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	43	2.5	9.349	101.	1.5	310.804	17.63	1.5	1.5	9.	32.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	42 ##	1.5	2.429	17.	0.	10.653	3.264	1.	1.5	1.5	5.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	43 ##	1.5	7.674	84.	0.5	212.487	14.577	1.5	1.5	7.	23.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	43 ##	0.02	0.037	0.34	0.02	0.003	0.054	0.02	0.02	0.02	0.078
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	43	0.01	0.017	0.26	0.005	0.001	0.039	0.005	0.005	0.02	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	43	1.22	1.223	2.08	0.06	0.21	0.459	0.564	0.92	1.54	1.84
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	43	0.3	0.303	1.	0.05	0.03	0.172	0.2	0.2	0.3	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	43	0.1	0.103	0.3	0.05	0.003	0.059	0.05	0.05	0.1	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	31	2.8	2.945	7.3	0.5	2.193	1.481	1.4	1.8	4.	4.82
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	43	124.	123.488	184.	76.	911.018	30.183	81.6	94.	146.	163.2
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	43	10.	11.186	29.	5.	28.107	5.302	6.	7.	13.	18.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	43	14.	19.349	150.	9.	634.328	25.186	11.	12.	16.	20.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	39 ##	50.	165.385	2100.	50.	138309.717	371.9	50.	100.	300.	
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	39 ##	1.699	1.912	3.322	1.699	0.149	0.385	1.699	1.699	2.477	
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		81.605									
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	33	0.05	0.059	0.16	0.005	0.001	0.038	0.014	0.035	0.085	0.122

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0775

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	11/09/88-12/01/98	29	17.6	17.162	28.1	2.8	37.584	6.131	9.2	12.95	23.25	24.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	25	269.	272.24	353.	180.	1741.607	41.733	214.	246.5	298.	332.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	20	9.35	9.55	15.3	6.2	3.941	1.985	7.41	8.275	10.65	11.96
00310	BOD, 5 DAY, 20 DEG C MG/L	11/09/88-12/01/98	27	1.	1.215	3.	0.5	0.397	0.63	0.5	1.	1.1	2.2
00340	COD, .25N K2CR2O7 MG/L	11/09/88-12/01/98	28	10.	9.643	18.	0.5	15.997	4.	2.45	8.	11.75	16.1
00400	PH (STANDARD UNITS)	11/09/88-12/01/98	29	8.2	8.314	9.3	7.6	0.157	0.397	7.8	8.1	8.595	8.9
00400	CONVERTED PH (STANDARD UNITS)	11/09/88-12/01/98	29	8.2	8.165	9.3	7.6	0.181	0.425	7.8	8.1	8.595	8.9
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	29	0.006	0.007	0.025	0.001	0.	0.006	0.001	0.003	0.008	0.016
00403	PH, LAB, STANDARD UNITS SU	11/09/88-12/01/98	28	7.95	7.946	8.6	7.	0.168	0.41	7.4	7.625	8.275	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	11/09/88-12/01/98	28	7.947	7.755	8.6	7.	0.206	0.454	7.4	7.625	8.275	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	11/09/88-12/01/98	28	0.011	0.018	0.1	0.003	0.	0.02	0.003	0.005	0.024	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	27	104.	103.778	147.	66.	438.333	20.936	77.	87.	119.	136.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11/09/88-12/01/98	28	8.	10.107	56.	1.5	112.155	10.59	1.95	4.	12.75	18.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11/09/88-12/01/98	28	1.75	2.339	7.	1.	2.112	1.453	1.	1.5	3.	5.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11/09/88-12/01/98	28	6.	7.893	49.	1.	89.396	9.455	1.45	2.25	10.	16.3
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	01/24/89-12/01/98	29 ##	0.02	0.041	0.19	0.02	0.001	0.038	0.02	0.02	0.055	0.09
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	29	0.02	0.019	0.06	0.005	0.	0.013	0.005	0.01	0.02	0.04
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	01/24/89-12/01/98	29	1.29	1.239	1.86	0.77	0.096	0.309	0.87	0.93	1.47	1.72
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	01/24/89-12/01/98	29	0.4	0.414	1.	0.2	0.041	0.203	0.2	0.3	0.5	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	01/24/89-12/01/98	29	0.1	0.119	0.3	0.05	0.003	0.056	0.05	0.1	0.1	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11/09/88-09/04/96	22	2.65	3.041	6.4	0.5	1.854	1.362	1.09	2.275	4.05	4.78
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/09/88-12/01/98	28	119.	119.643	160.	82.	392.683	19.816	95.6	101.25	132.25	148.5
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-12/01/98	27	9.	9.63	25.	5.	14.55	3.814	6.	8.	10.	14.2
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-12/01/98	27	14.	21.333	157.	10.	812.538	28.505	11.	12.	17.	28.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	23 ##	50.	219.565	2100.	50.	196531.621	443.319	50.	50.	200.	600.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	01/24/89-12/01/98	23 ##	1.699	2.002	3.322	1.699	0.205	0.453	1.699	1.699	2.301	2.733
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =		100.445									
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-12/01/98	20	0.06	0.07	0.17	0.03	0.001	0.037	0.03	0.04	0.1	0.11

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0776

NPS Station ID: SHEN0776
 Location: N FORK SHEN RT 340 FRONT ROYAL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC
 RF1 Index: 02070006
 RF3 Index: 02070005006400.00
 Description:

LAT/LON: 38.948059/ -78.199170

Depth of Water: 999
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 0.05

Agency: 1112A9WQ
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): UP-POT-097 /SHEN-097 /97 /N FK 097
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0776

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
-----------	------------------	-----	--------	------	---------	---------	----------	-----------	------	------	------	------

***** No Parameter Data Available for this Station *****

Station Inventory for Station: SHEN0777

NPS Station ID: SHEN0777
 Location: APPROX. 0.1 MILE BELOW RT. 340/522 BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1B-SHENANDOAH
 RF1 Index: 02070006
 RF3 Index: 02070007010500.00

LAT/LON: 38.949449/ -78.198337

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 1.13

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BNFS000.57
 Within Park Boundary: No

Date Created: 09/03/88

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.08

On/Off RF1:
 On/Off RF3:

DESCRIPTION: VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: N FORK SHENANDOAH SECTION: 06 TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Parameter Inventory for Station: SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	311	15.	14.637	30.	-0.6	73.497	8.573	2.72	6.8	22.5	25.3
00023	SAMPLE WEIGHT IN POUNDS	07/26/79-07/28/83	3	0.21	3.093	8.9	0.17	25.288	5.029	**	**	**	**
00024	SAMPLE LENGTH IN INCHES	07/26/79-07/28/83	3	6.6	13.473	27.71	6.11	152.072	12.332	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/13/71-04/02/92	25	3.5	4.82	19.	0.5	19.579	4.425	0.96	2.	5.85	12.32
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	54	4.9	13.37	316.	0.2	1885.34	43.421	0.9	2.05	8.	21.
00080	COLOR (PLATINUM-COBALT UNITS)	02/25/91-03/03/93	22	15.	15.5	31.	3.	43.31	6.581	7.	11.75	17.75	26.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	111	330.	320.919	644.	163.	6272.057	79.196	198.	275.	365.	401.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	98	334.	324.459	467.	91.	5209.818	72.179	229.2	273.75	380.	404.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	80	10.15	10.288	18.7	5.4	8.795	2.966	6.71	7.7	12.725	14.
00300p	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	232	10.	10.18	16.	4.2	5.273	2.296	7.4	8.5	11.875	13.27
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	213	1.	1.45	8.	0.5	1.176	1.085	0.5	1.	2.	2.36
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	209	9.	9.77	48.	0.5	40.93	6.398	3.	6.	11.5	17.
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	304	8.38	8.309	9.5	6.32	0.288	0.536	7.6	8.	8.7	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	304	8.38	7.907	9.5	6.32	0.45	0.671	7.6	8.	8.7	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	304	0.004	0.012	0.479	0.	0.001	0.034	0.001	0.002	0.01	0.025
00403p	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	216	8.1	8.027	8.9	6.6	0.141	0.375	7.57	7.9	8.275	8.4
00403p	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	216	8.1	7.806	8.9	6.6	0.19	0.436	7.57	7.9	8.275	8.4
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	216	0.008	0.016	0.251	0.001	0.001	0.028	0.004	0.005	0.013	0.027
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	217	135.	129.253	208.	10.	1126.422	33.562	82.6	105.5	152.	165.4
00500	RESIDUE, TOTAL (MG/L)	03/04/70-08/04/92	44	212.5	220.045	920.	137.	12675.068	112.584	154.	176.25	230.75	246.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/04/70-08/04/92	44	51.	61.75	400.	14.	3231.913	56.85	32.5	40.	60.	92.5
00510	RESIDUE, TOTAL FIXED (MG/L)	03/04/70-07/07/97	45	161.	162.689	796.	10.	10691.946	103.402	103.2	124.	175.	192.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	214	5.5	20.516	800.	0.5	5688.891	75.425	1.5	2.5	10.25	27.
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	211	2.5	3.517	56.	0.	30.358	5.51	1.	1.5	3.	6.8
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	213	3.	14.12	424.	0.	2293.305	47.888	1.5	2.5	7.5	21.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	269##	0.05	0.054	0.6	0.005	0.004	0.061	0.02	0.02	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	269	0.01	0.013	0.26	0.005	0.	0.02	0.005	0.005	0.02	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	262	1.1	1.074	2.55	0.02	0.35	0.592	0.193	0.658	1.493	1.868
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	266	0.3	0.349	2.5	0.05	0.073	0.27	0.2	0.2	0.4	0.5
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	07/05/78-01/04/79	6	1.15	1.215	1.93	0.56	0.368	0.607	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	202##	0.05	0.09	0.9	0.05	0.006	0.079	0.05	0.05	0.1	0.185
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	05/28/91-05/28/91	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	124	0.03	0.046	0.75	0.005	0.005	0.072	0.01	0.02	0.06	0.08

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	177	4.	4.442	22.	0.5	9.088	3.015	1.9	2.6	5.	8.
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	206	154.	153.121	358.	0.	1508.468	38.839	104.7	129.	178.	196.
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	100	10.	11.4	47.	2.5	34.258	5.853	6.	8.	14.	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	144	18.	17.708	28.	0.5	13.841	3.72	14.	16.	20.	22.
00951	FLUORIDE, TOTAL (MG/L AS F)	10/20/87-04/14/93	32 ##	0.075	0.095	0.25	0.015	0.003	0.059	0.05	0.05	0.13	0.157
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/05/89-02/03/93	28	3.85	3.845	8.9	0.05	5.888	2.426	0.39	1.425	5.45	7.33
01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-05/29/85	28 ##	1.	1.268	5.	0.5	1.027	1.014	0.5	0.5	1.375	2.5
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	08/21/79-07/24/96	4 ##	16.	14.425	23.2	2.5	82.889	9.104	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/27/83-07/24/96	3 ##	2.5	2.467	3.85	1.05	1.961	1.4	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-05/29/85	32 ##	5.	4.781	10.	0.5	3.918	1.979	0.8	5.	5.	5.
01028	CADMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/21/79-07/24/96	4 ##	0.498	0.9	2.5	0.105	1.233	1.11	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/21/79-07/24/96	4	19.65	19.1	25.1	12.	31.54	5.616	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-05/29/85	40 ##	5.	5.9	20.	0.5	9.823	3.134	5.	5.	5.	10.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-05/29/85	40 ##	5.	6.875	20.	5.	17.548	4.189	5.	5.	5.	10.
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	08/21/79-07/24/96	4	20.2	22.275	33.	15.7	55.629	7.458	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	11/16/70-01/16/80	11	200.	201.818	500.	50.	20636.364	143.654	50.	100.	300.	476.
01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-05/29/85	38 ##	5.	5.724	20.	0.5	27.428	5.237	1.	1.	8.25	15.3
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	08/21/79-07/24/96	4	31.35	30.2	48.1	10.	411.18	20.278	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/24/96-07/24/96	1	390.	390.	390.	390.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-01/16/80	9	30.	43.333	100.	10.	1400.	37.417	10.	10.	85.	100.
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/17/73-01/04/79	17 ##	50.	39.412	50.	5.	387.132	19.676	5.	27.5	50.	50.
01067	NICKEL, TOTAL (UG/L AS NI)	08/21/79-05/29/85	11 ##	5.	16.364	50.	5.	385.455	19.633	5.	5.	40.	50.
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG, DRY WGT)	08/21/79-07/24/96	4	21.95	22.275	33.4	11.8	131.303	11.459	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/24/96-07/24/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-05/29/85	66	7.5	23.563	240.	0.01	2043.564	45.206	3.518	5.	20.	79.
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	08/21/79-07/24/96	4	65.05	62.875	81.4	40.	357.969	18.92	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/24/96-07/24/96	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/24/96-07/24/96	1	7220.	7220.	7220.	7220.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/27/83-07/24/96	3 ##	3.85	3.55	6.3	0.5	8.477	2.912	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/24/96-07/24/96	1	14200.	14200.	14200.	14200.	0.	0.	**	**	**	**
31505	COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	04/07/70-10/12/70	7	2300.	2555.714	4600.	430.	4047161.905	2011.756	**	**	**	**
31505	LOG COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)	04/07/70-10/12/70	7	3.362	3.226	3.663	2.633	0.227	0.476	**	**	**	**
31505	GM COLIFORM, TOT, MPN, CONFIRMED TEST, 35C (TUBE 31506)				1684.569								
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	279 ##	50.	396.308	8000.	50.	1333795.315	1154.901	50.	50.	200.	700.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	279 ##	1.699	2.05	3.903	1.699	0.28	0.529	1.699	1.699	2.301	2.845
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				112.219								
32234	CHLOROPHYLL, TOTAL (A+B+C) (MG/L)	05/18/78-05/18/78	1	0.59	0.59	0.59	0.59	0.	0.	**	**	**	**
32240	TANNIN AND LIGNIN (MG/L)	08/04/92-08/04/92	1	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
34258	B-BHC-BETA WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34360	ENDOSULFAN, BETA WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34365	ENDOSULFAN, ALPHA WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34480	THALLIUM DRY WGT BOTMG/KG	06/27/83-05/29/85	2	11.9	11.9	15.4	8.4	24.5	4.95	**	**	**	**
34670	PCB - 1260 WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34671	PCB - 1016 TOTWUG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34682	CHLORDANE (TECH MIX & METABS), TISSUE WET WGT, MG/KG	08/18/88-08/18/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34685	ENDRIN WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34686	HEPTACHLOR EPOXIDE WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34687	HEPTACHLOR WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34688	HEXACHLOROBENZENE WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34690	PCB - 1254 WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34691	TOXAPHENE WET WGT TISM/G/KG	08/18/88-08/18/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
38442	DICAMBA (BANVEL) WATER, DISSUG/L	05/29/85-05/29/85	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38451	DICHLORPROP WATER, SUSPUG/L	05/29/85-05/29/85	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
38745	2,4-DB WATER, TOTUG/L	05/29/85-05/29/85	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	08/21/79-05/29/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/23/91-07/24/96	2 ##	42.5	42.5	50.	35.	112.5	10.607	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39309	O P DDT IN AQUATIC ORGANISMS WET WEIGHT BASIS(UG/G)	07/26/79-08/14/85	3 ##	0.005	0.17	0.5	0.005	0.082	0.286	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	4	0.	0.013	0.05	0.	0.001	0.025	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/27/83-07/24/96	3	15.	38.333	100.	0.	2908.333	53.929	**	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE),WHOLE WATER,UG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/23/91-07/24/96	2 ##	35.	35.	50.	20.	450.	21.213	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	57.5	57.5	100.	15.	3612.5	60.104	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/24/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	08/21/79-05/29/85	3	0.	0.017	0.05	0.	0.001	0.029	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	7.525	7.525	15.	0.05	111.751	10.571	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/24/96	2 ##	37.75	37.75	75.	0.5	2775.125	52.679	**	**	**	**
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	07/28/83-07/28/83	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/24/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	05/29/85-05/29/85	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	08/18/88-08/18/88	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/23/91-07/24/96	2 ##	257.5	257.5	500.	15.	117612.5	342.947	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/06/82-07/06/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/27/83-06/27/83	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	08/21/79-07/21/80	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39730	2,4-D IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39740	2,4,5-T IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39760	SILVEX IN WHOLE WATER SAMPLE (UG/L)	05/29/85-05/29/85	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	07/28/83-07/28/83	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	06/07/71-06/07/71	1	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	04/13/82-07/22/85	6	0.	0.017	0.1	0.	0.002	0.041	**	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	63 ##	0.05	0.076	1.	0.025	0.015	0.121	0.05	0.05	0.05	0.1
70507p	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	142	0.05	0.054	0.8	0.005	0.006	0.075	0.01	0.03	0.06	0.09
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-05/29/85	39 ##	0.25	0.253	0.9	0.15	0.027	0.163	0.15	0.15	0.25	0.5
71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	07/28/83-07/28/83	1	3.9	3.9	3.9	3.9	0.	0.	**	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	08/21/79-07/24/96	4 ##	0.1	0.1	0.15	0.05	0.002	0.041	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/23/91-07/24/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
77825	ALACHLOR WHOLE WATER,UG/L	05/29/85-05/29/85	1 ##	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/23/91-07/24/96	2 ##	67.5	67.5	100.	35.	2112.5	45.962	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	08/18/88-08/18/88	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**
81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	08/18/88-08/18/88	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-06/13/94	26	3.35	9.842	140.	0.2	725.208	26.93	0.77	1.2	7.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0777

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----		-----3/20-6/30-----		-----n/a-----					
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim. 50.	25	0	0.00	6	0	0.00	7	0	0.00	12	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim. 50.	54	2	0.04	19	0	0.00	23	2	0.09	12	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim. 4.	80	0	0.00	26	0	0.00	34	0	0.00	20	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim. 4.	232	0	0.00	68	0	0.00	96	0	0.00	68	0	0.00			
00400	PH	Fresh Chronic 9.	304	49	0.16	90	15	0.17	128	23	0.18	86	11	0.13			
		Other-Lo Lim. 6.5	304	1	0.00	90	0	0.00	128	0	0.00	86	1	0.01			
00403	PH, LAB	Fresh Chronic 9.	216	0	0.00	67	0	0.00	90	0	0.00	59	0	0.00			
		Other-Lo Lim. 6.5	216	0	0.00	67	0	0.00	90	0	0.00	59	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water 1.	269	0	0.00	76	0	0.00	116	0	0.00	77	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water 10.	262	0	0.00	73	0	0.00	113	0	0.00	76	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water 10.	6	0	0.00	3	0	0.00	3	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute 860.	100	0	0.00	32	0	0.00	41	0	0.00	27	0	0.00			
		Drinking Water 250.	100	0	0.00	32	0	0.00	41	0	0.00	27	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water 250.	144	0	0.00	43	0	0.00	64	0	0.00	37	0	0.00			
00951	FLUORIDE, TOTAL AS F	Drinking Water 4.	32	0	0.00	9	0	0.00	13	0	0.00	10	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute 360.	28	0	0.00	10	0	0.00	12	0	0.00	6	0	0.00			
		Drinking Water 50.	28	0	0.00	10	0	0.00	12	0	0.00	6	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute 3.9	6 &	2	0.33	2	0	0.00	1	1	1.00	3	1	0.33			
		Drinking Water 5.	6 &	2	0.33	2	0	0.00	1	1	1.00	3	1	0.33			
01034	CHROMIUM, TOTAL	Drinking Water 100.	40	0	0.00	11	0	0.00	18	0	0.00	11	0	0.00			
01042	COPPER, TOTAL	Fresh Acute 18.	40	3	0.08	11	0	0.00	18	1	0.06	11	2	0.18			
		Drinking Water 1300.	40	0	0.00	11	0	0.00	18	0	0.00	11	0	0.00			
01051	LEAD, TOTAL	Fresh Acute 82.	38	0	0.00	11	0	0.00	18	0	0.00	9	0	0.00			
		Drinking Water 15.	38	4	0.11	11	2	0.18	18	2	0.11	9	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute 1400.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
		Drinking Water 100.	17	0	0.00	6	0	0.00	7	0	0.00	4	0	0.00			
01067	NICKEL, TOTAL	Fresh Acute 1400.	11	0	0.00	3	0	0.00	6	0	0.00	2	0	0.00			
		Drinking Water 100.	11	0	0.00	3	0	0.00	6	0	0.00	2	0	0.00			
01092	ZINC, TOTAL	Fresh Acute 120.	66	3	0.05	18	2	0.11	28	0	0.00	20	1	0.05			
		Drinking Water 5000.	66	0	0.00	18	0	0.00	28	0	0.00	20	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim. 1000.	7	4	0.57	4	3	0.75				3	1	0.33			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim. 200.	279	77	0.28	79	19	0.24	123	32	0.26	77	26	0.34			
34356	ENDOSULFAN, BETA, TOTAL	Fresh Acute 0.22	1	0	0.00							1	0	0.00			
34361	ENDOSULFAN, ALPHA, TOTAL	Fresh Acute 0.22	1	0	0.00							1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute 20.	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water 1.	3	0	0.00	2	0	0.00				1	0	0.00			
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute 1.1	3	0	0.00	2	0	0.00				1	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute 0.6	3	0	0.00	2	0	0.00				1	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute 1050.	3	0	0.00	2	0	0.00				1	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute 3.	4	0	0.00	3	0	0.00				1	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute 2.	1	0	0.00							1	0	0.00			
		Drinking Water 0.2	1	0	0.00							1	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute 2.4	2	0	0.00	2	0	0.00									
		Drinking Water 2.	2	0	0.00	2	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute 2.5	3	0	0.00	2	0	0.00				1	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute 0.18	3	0	0.00	2	0	0.00				1	0	0.00			
		Drinking Water 2.	3	0	0.00	2	0	0.00				1	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute 0.73	1	0	0.00							1	0	0.00			
		Drinking Water 3.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

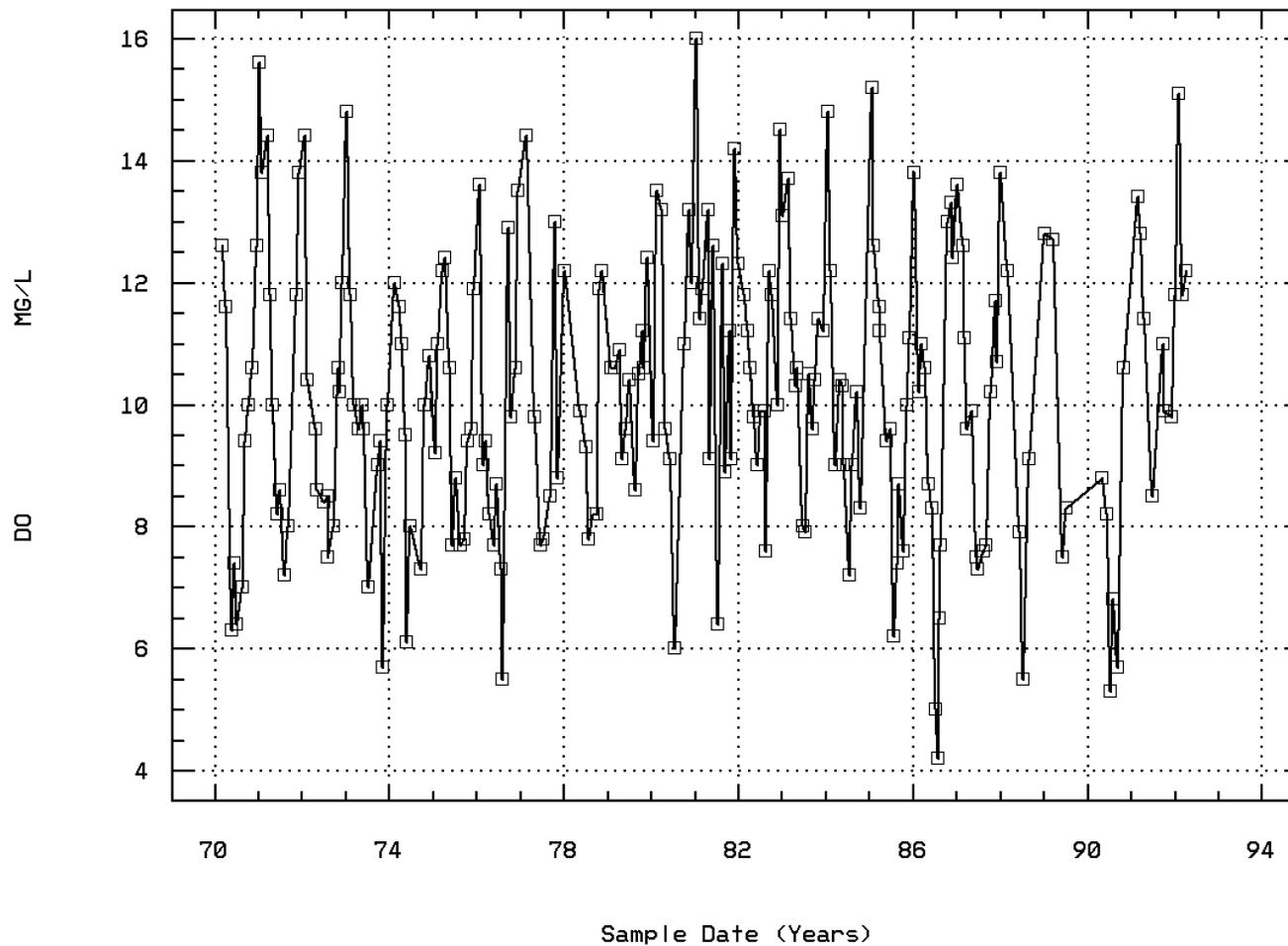
EPA Water Quality Criteria Analysis for Station: SHEN0777

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.4	1	0	0.00							1	0	0.00			
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
39480 METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	2	0	0.00	2	0	0.00									
39630 ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	1	0	0.00	1	0	0.00									
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	2	0	0.00	2	0	0.00									
	Drinking Water	1.	2	0	0.00	2	0	0.00									
39730 2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	1	0	0.00							1	0	0.00			
39760 SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	1	0	0.00							1	0	0.00			
39782 LINDANE IN WHOLE WATER SAMPLE	Fresh Acute	2.	1	0	0.00							1	0	0.00			
	Drinking Water	0.2	1	0	0.00							1	0	0.00			
50060 CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	6	1	0.17	3	1	0.33	2	0	0.00	1	0	0.00			
71900 MERCURY, TOTAL	Fresh Acute	2.4	39	0	0.00	12	0	0.00	18	0	0.00	9	0	0.00			
	Drinking Water	2.	39	0	0.00	12	0	0.00	18	0	0.00	9	0	0.00			
82078 TURBIDITY, FIELD	Other-Hi Lim.	50.	26	1	0.04	7	0	0.00	11	0	0.00	8	1	0.13			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station: SHEN0777 Parameter Code: 00300

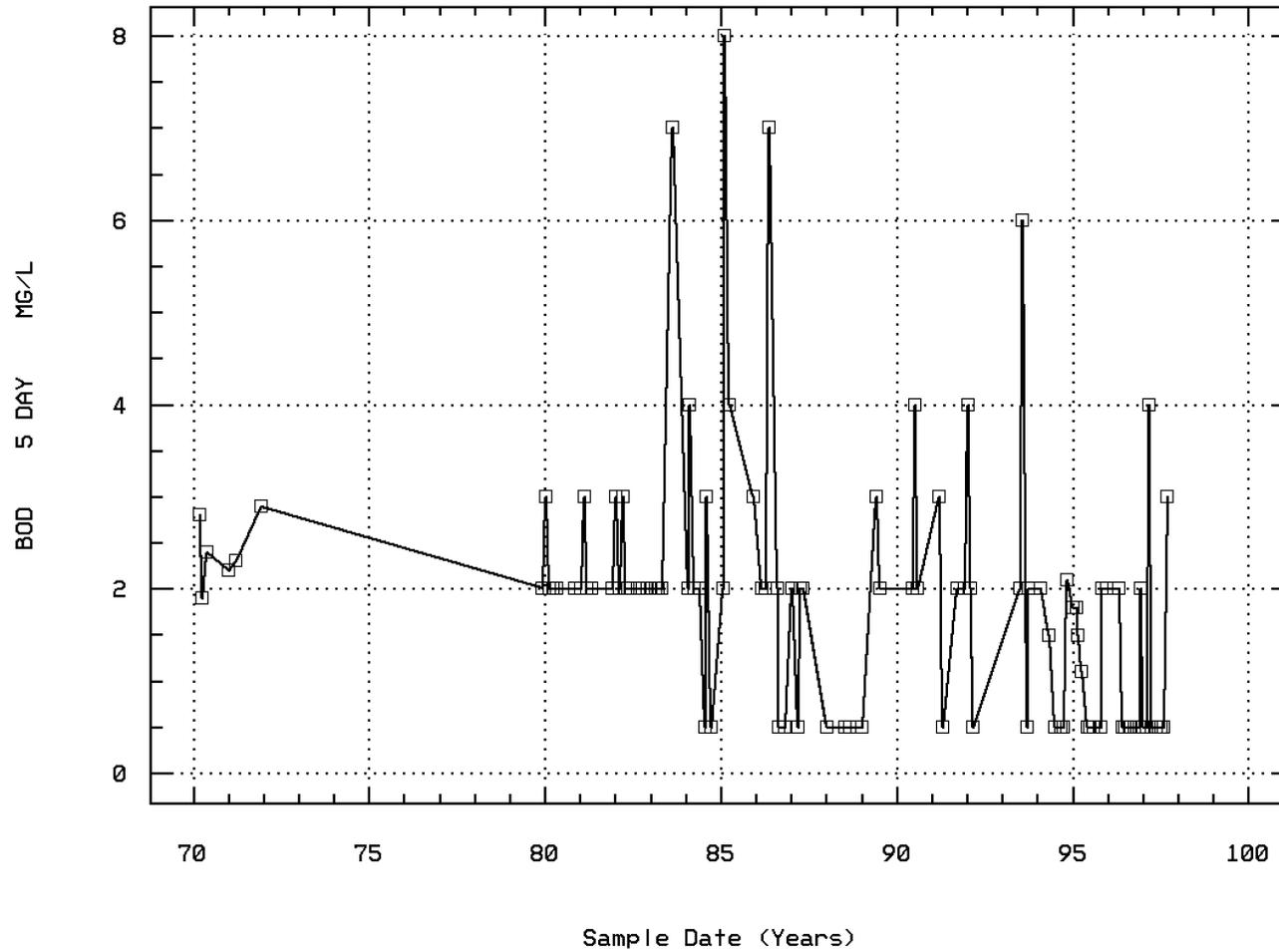
OXYGEN, DISSOLVED



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00310

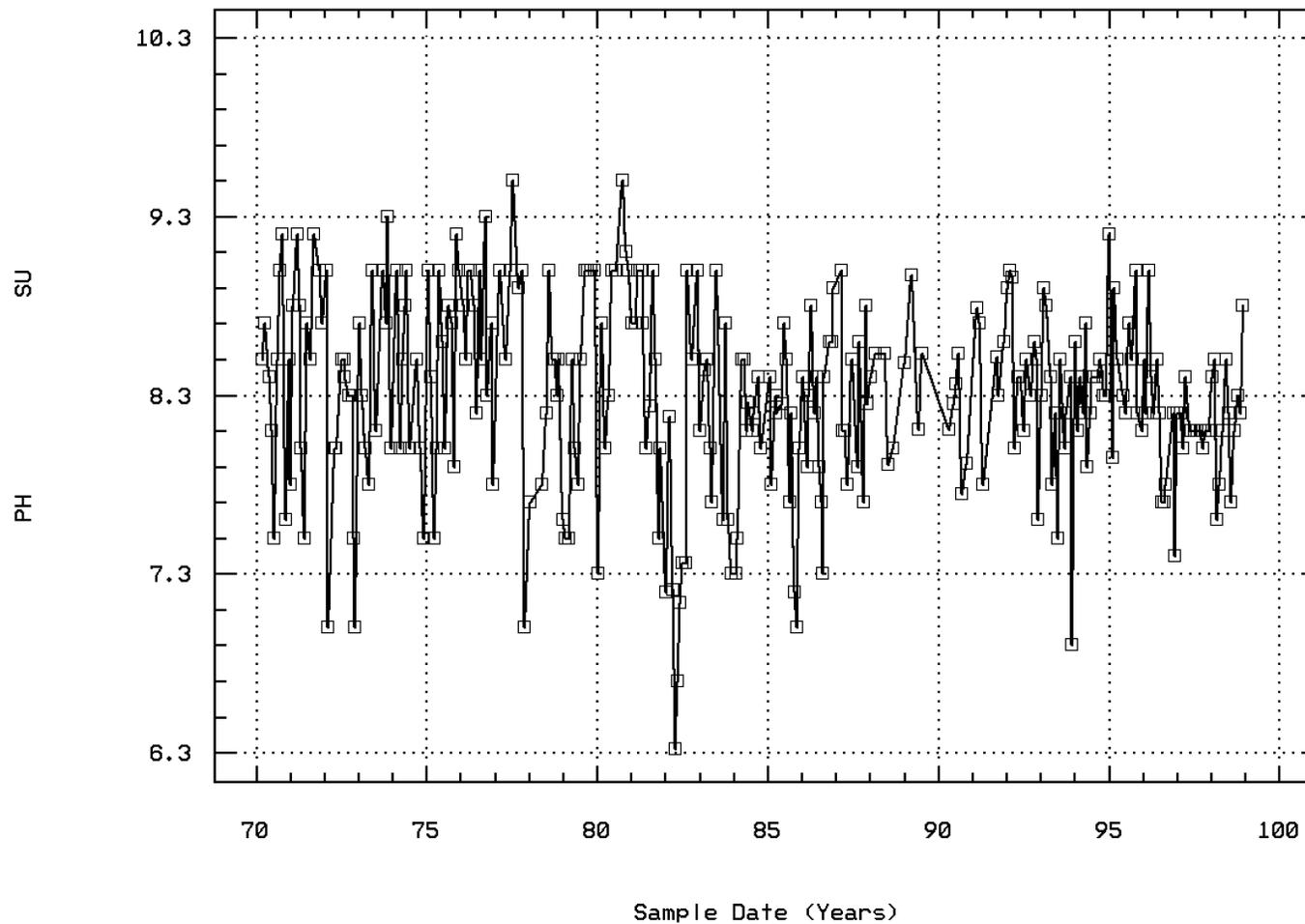
BOD, 5 DAY, 20 DEG C



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00400

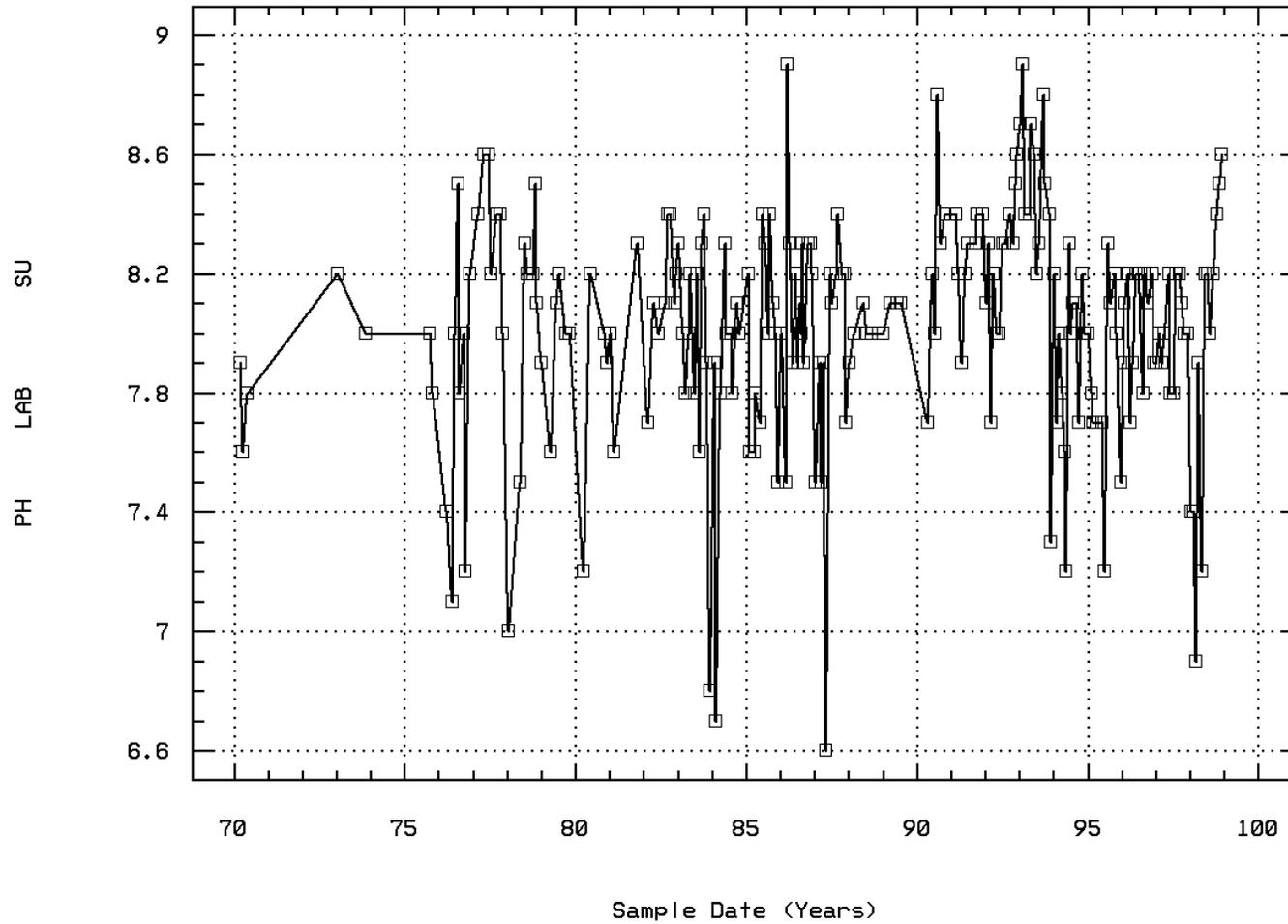
PH (STANDARD UNITS)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00403

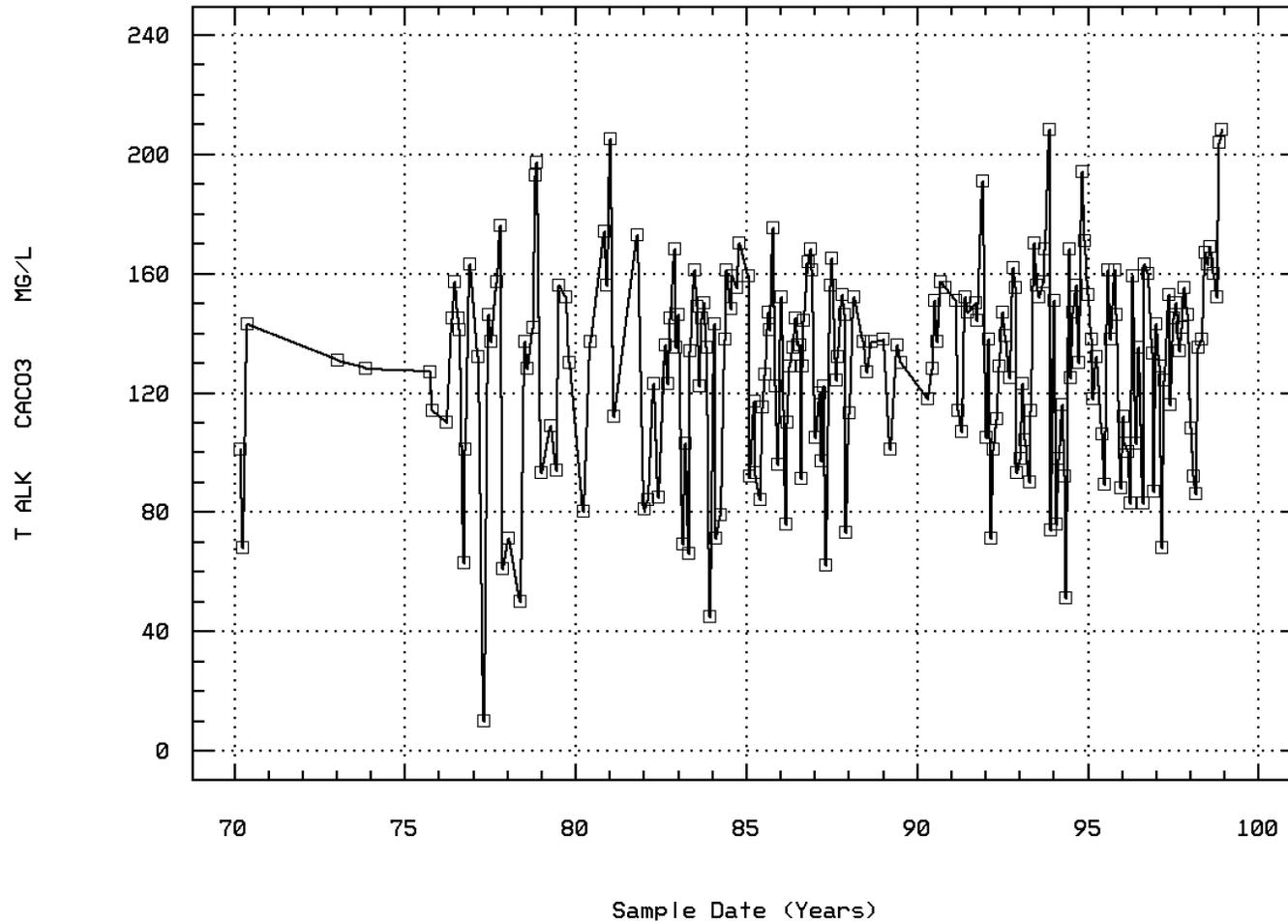
PH, LAB, STANDARD UNITS



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00410

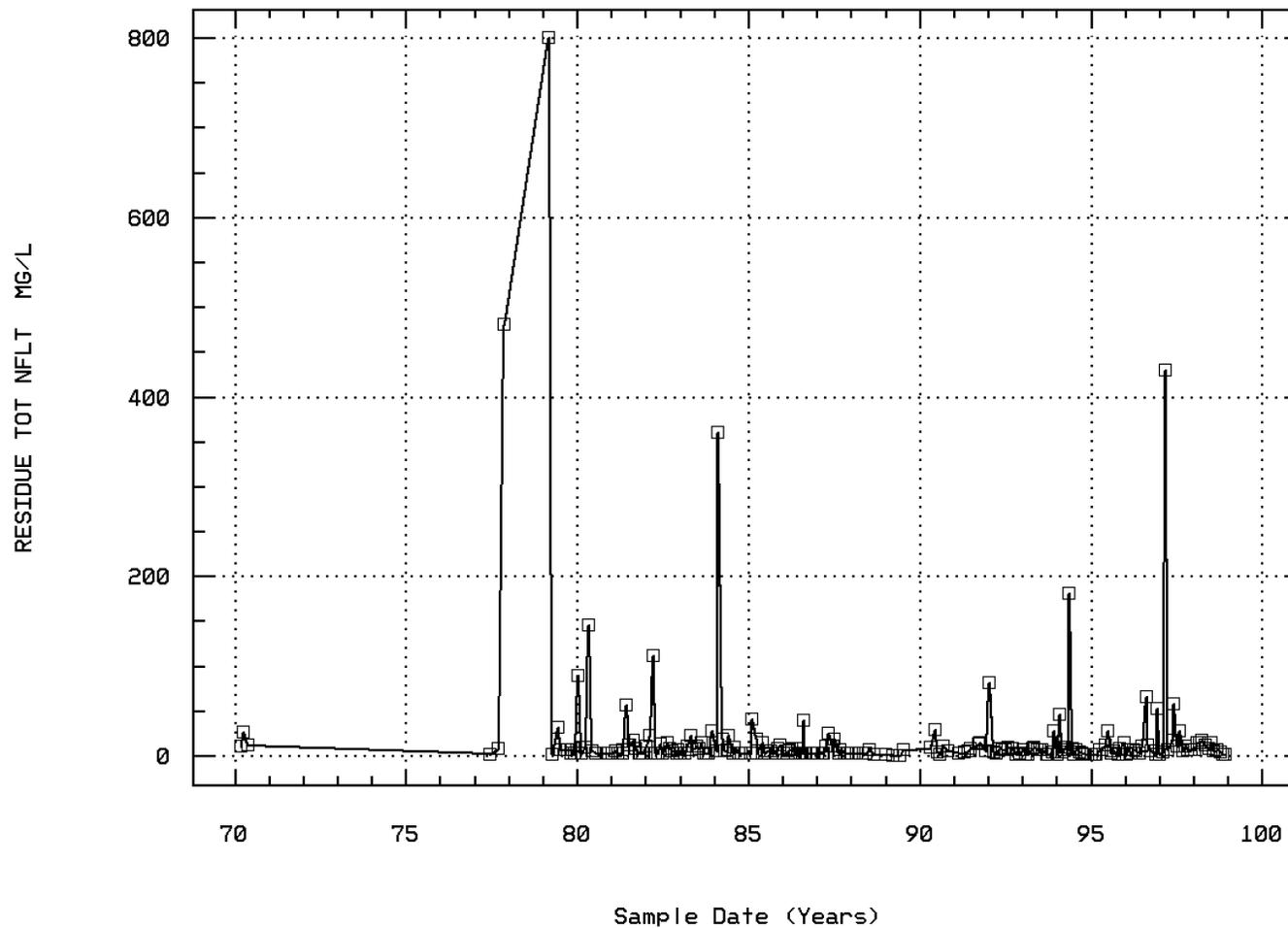
ALKALINITY, TOTAL (MG/L AS CaCO3)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00530

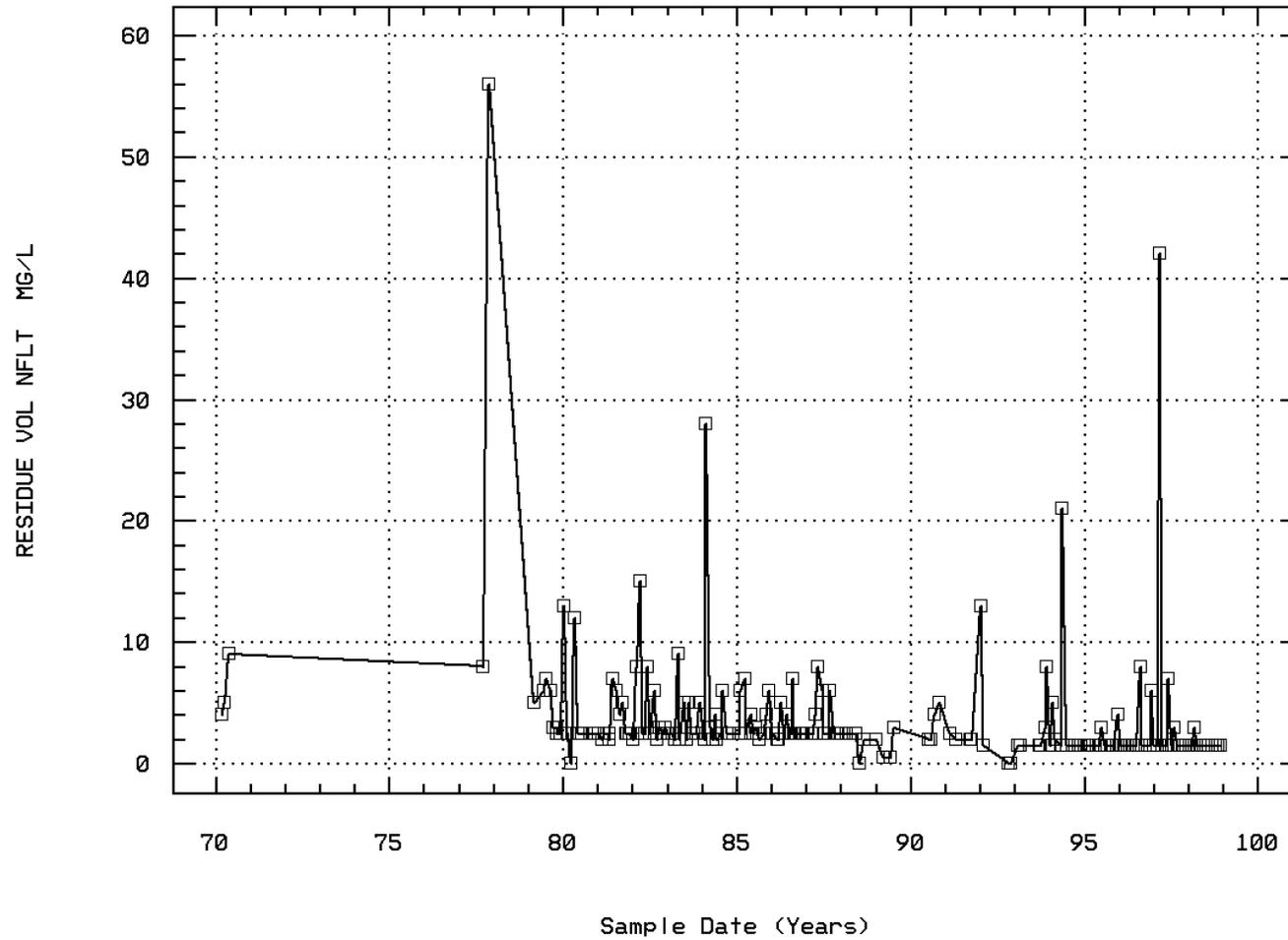
RESIDUE, TOTAL NONFILTRABLE (MG/L)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00535

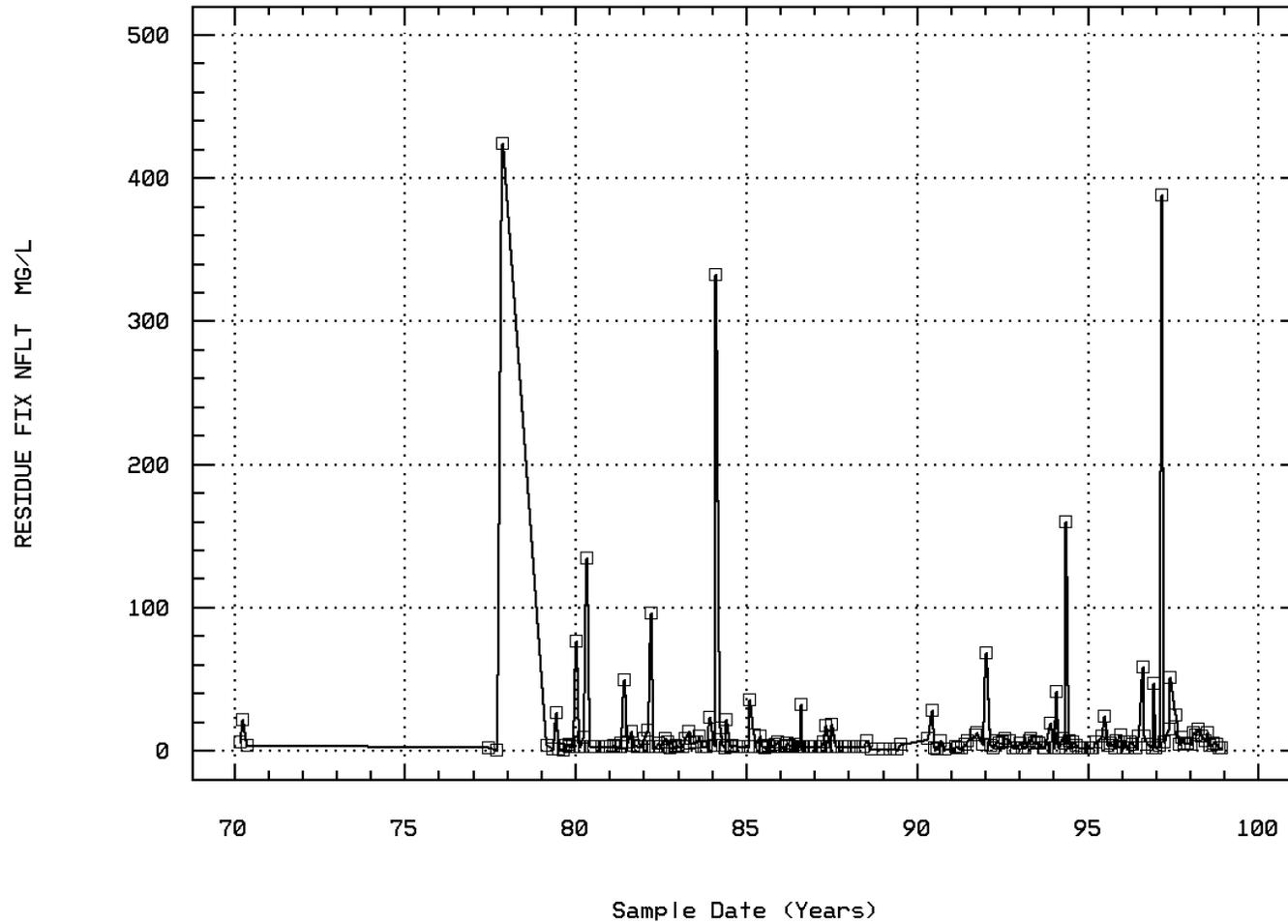
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00540

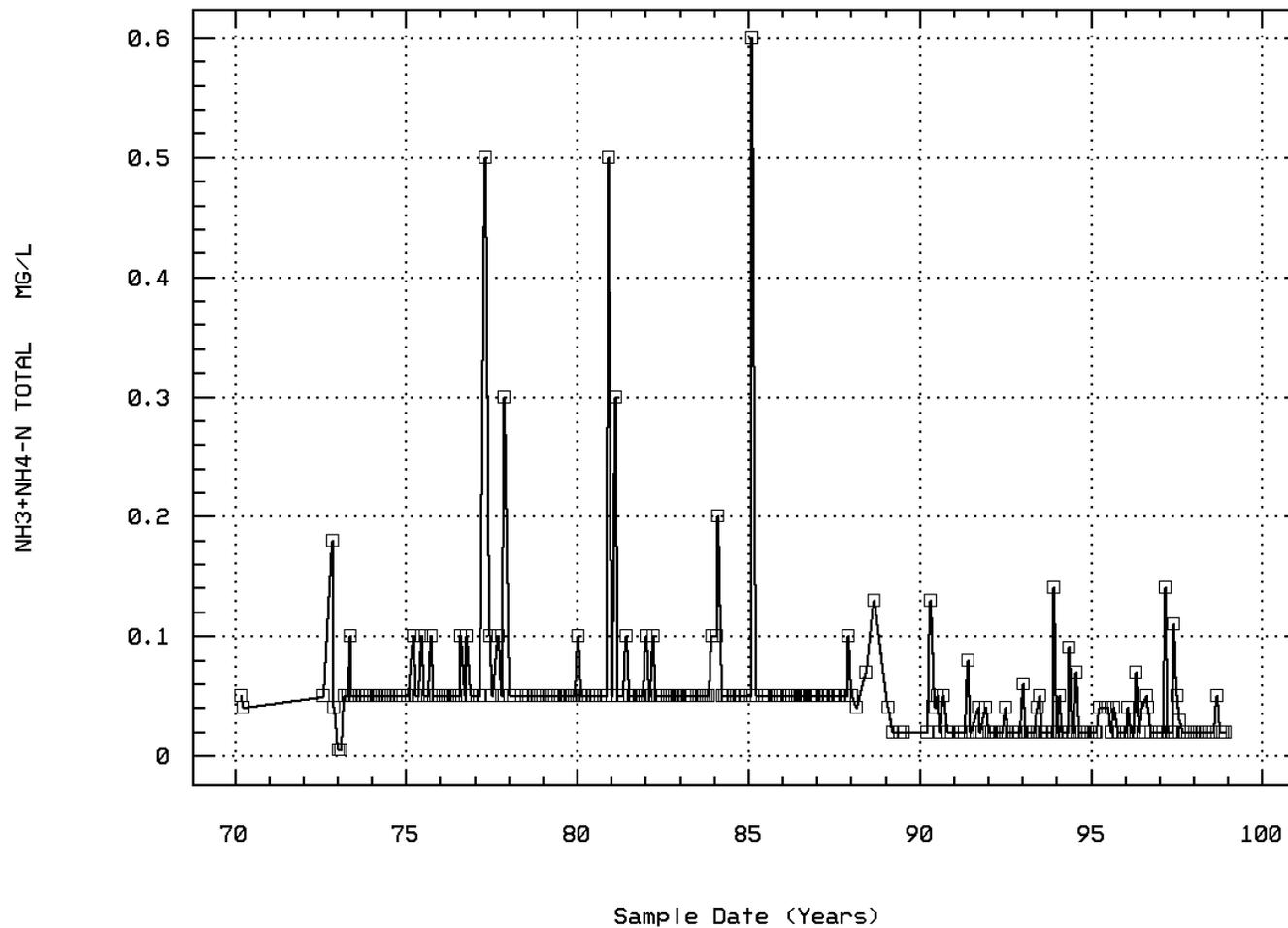
RESIDUE, FIXED NONFILTRABLE (MG/L)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00610

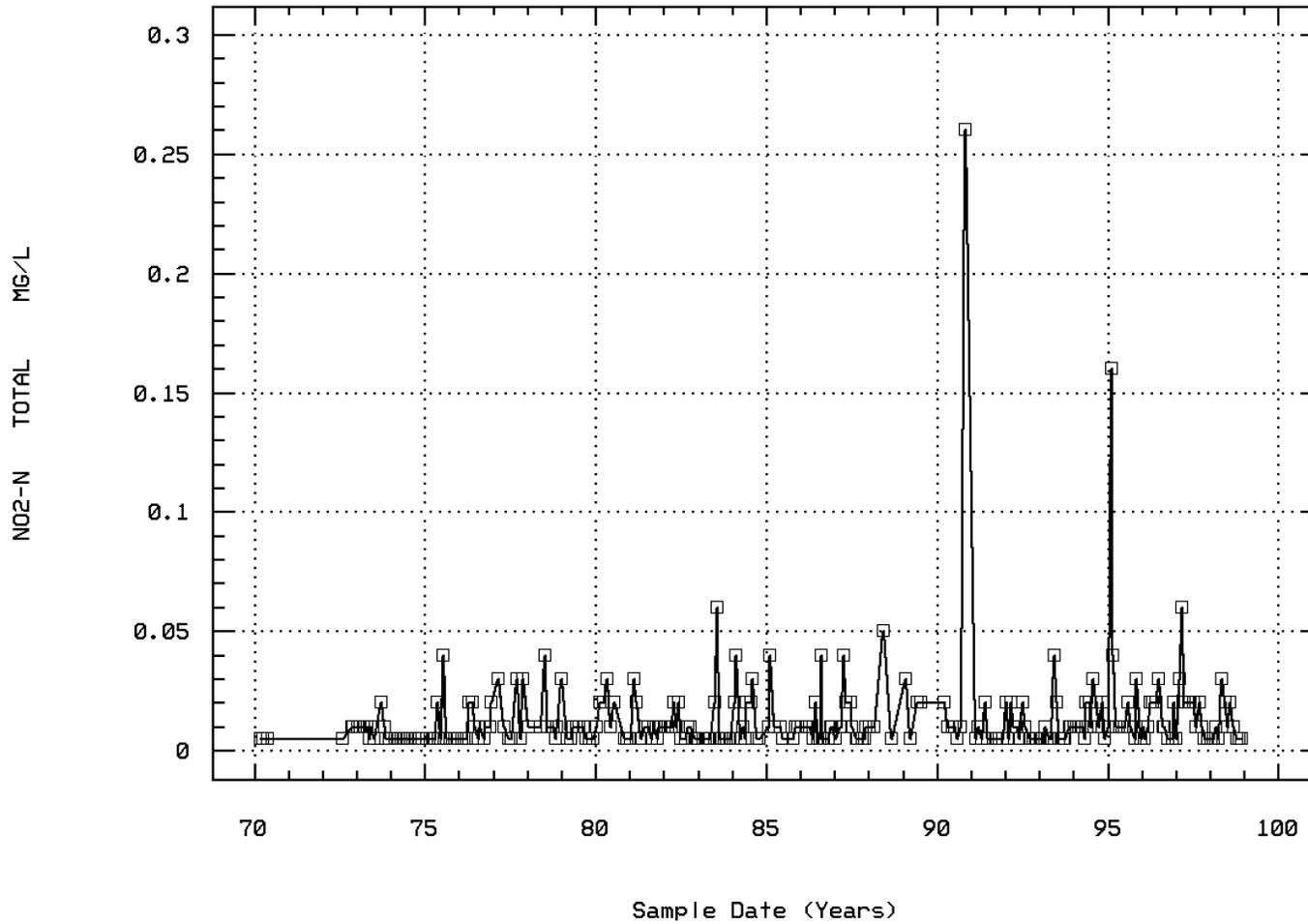
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00615

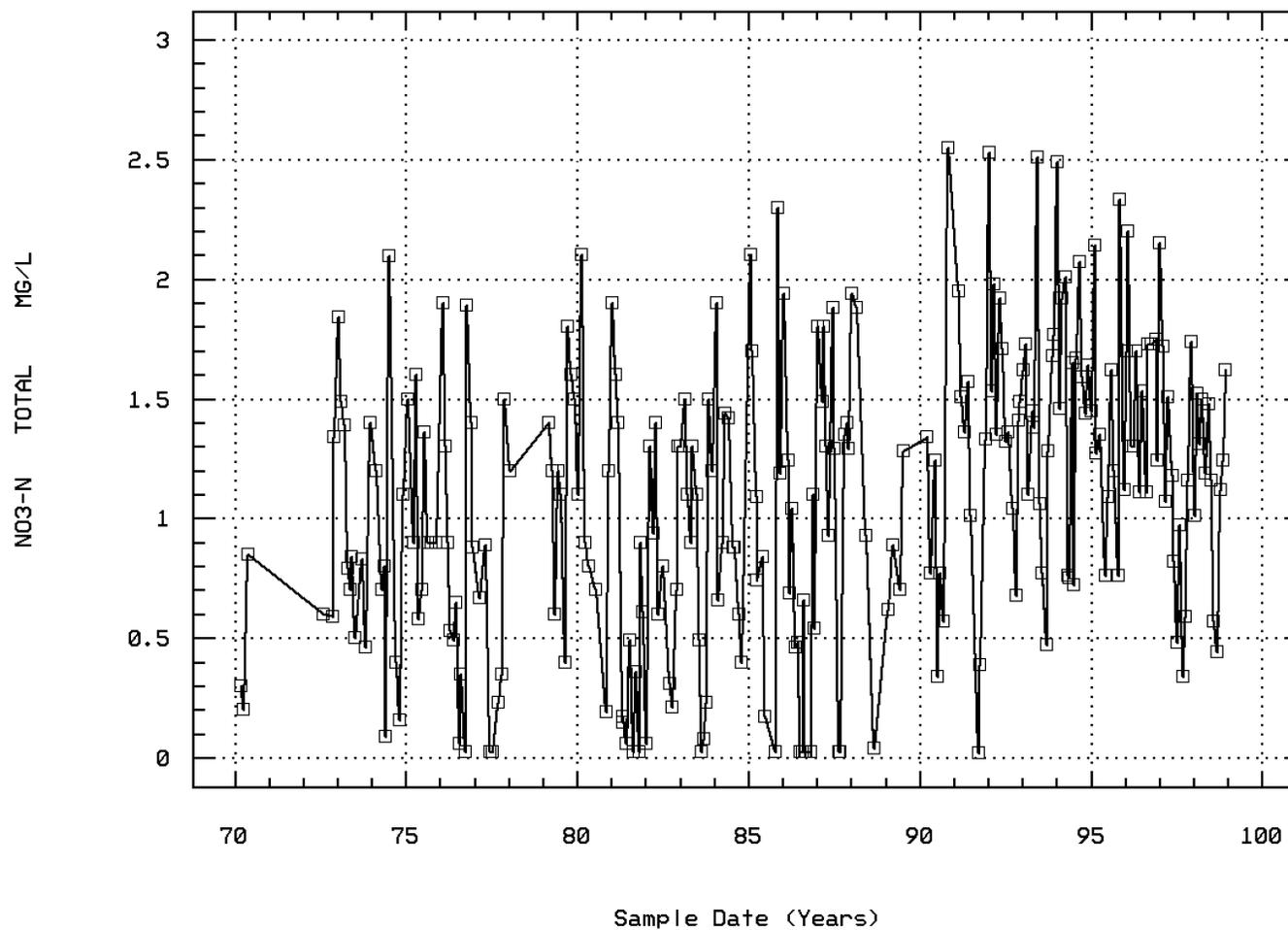
NITRITE NITROGEN, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00620

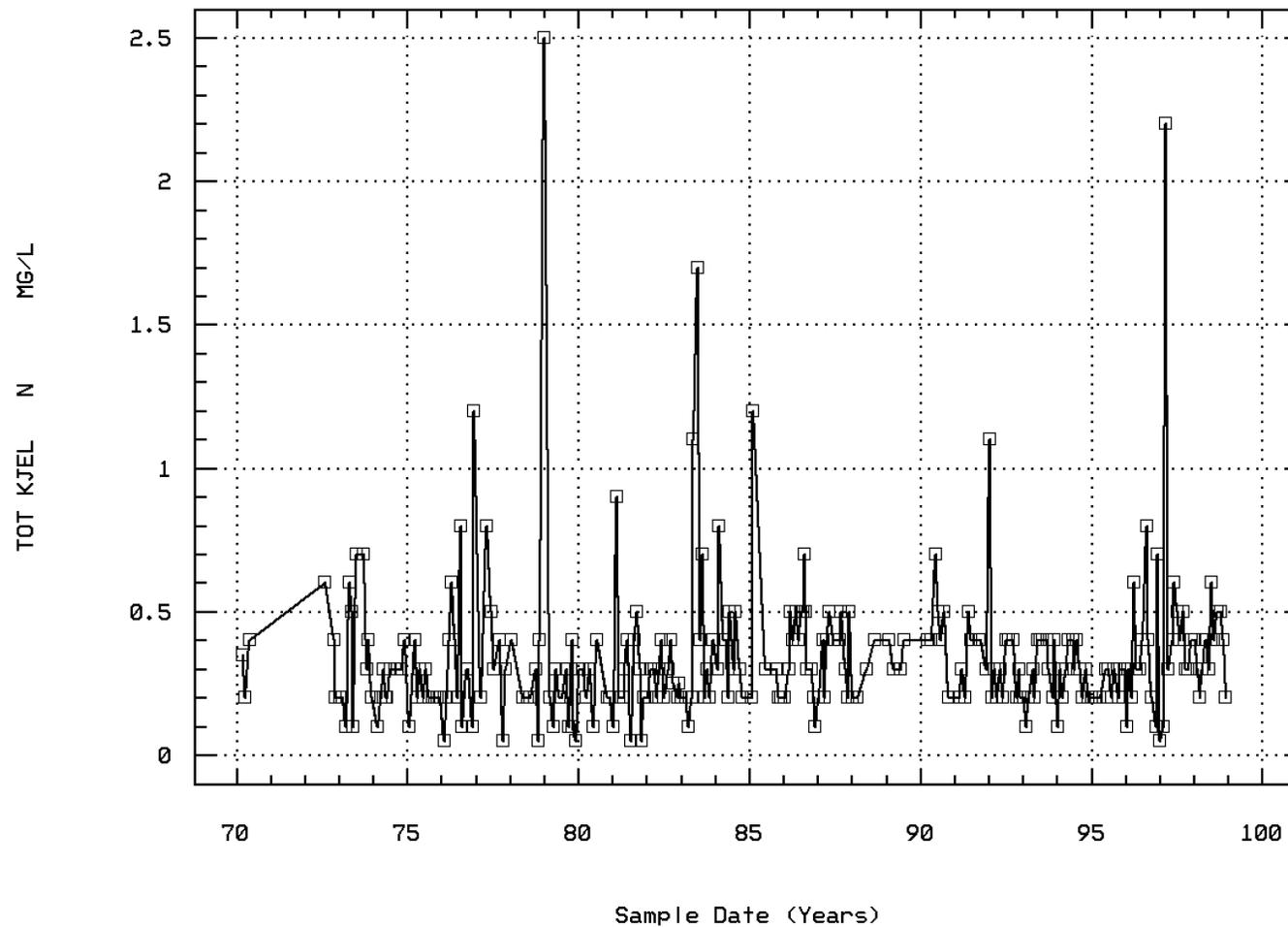
NITRATE NITROGEN, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00625

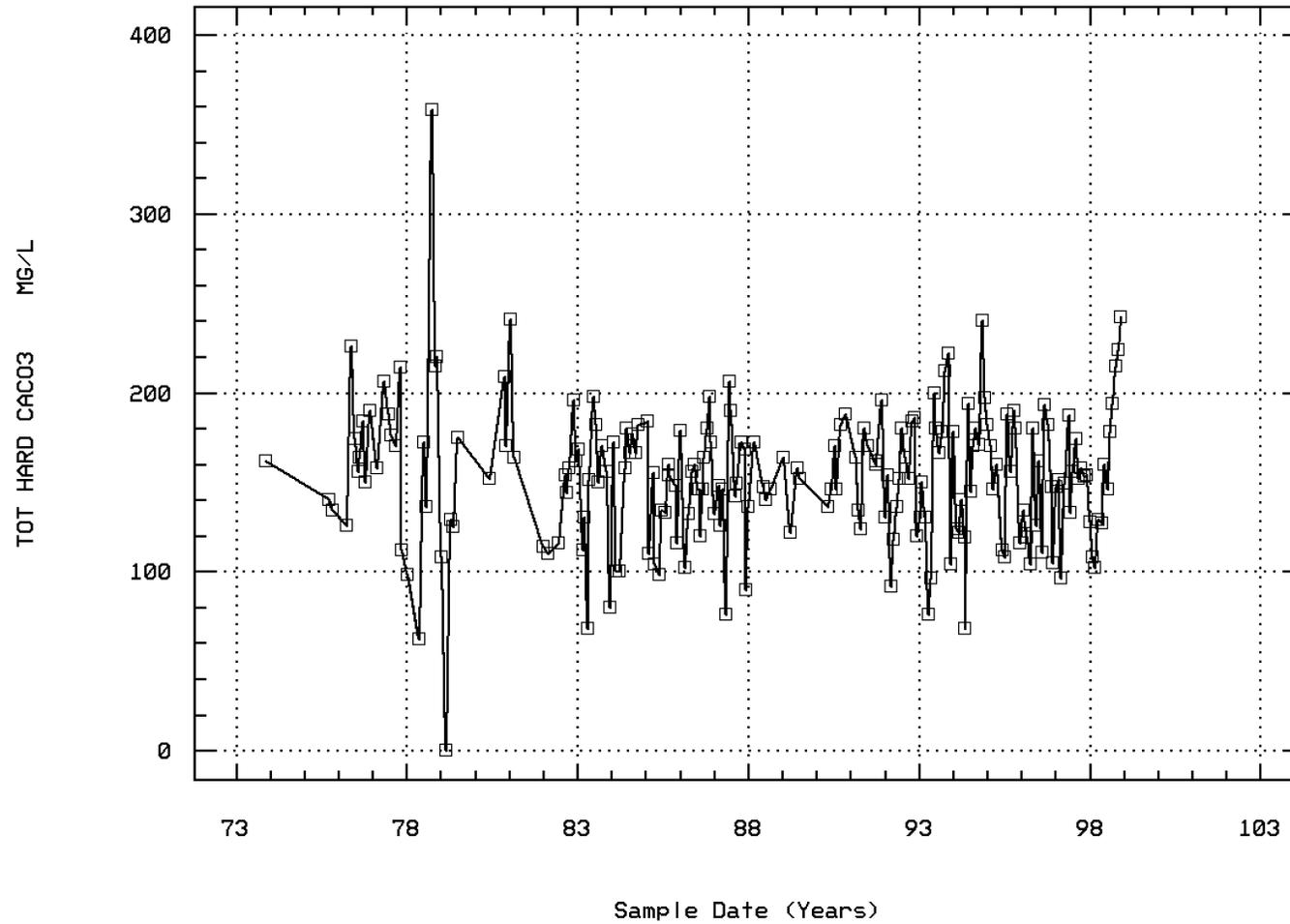
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00900

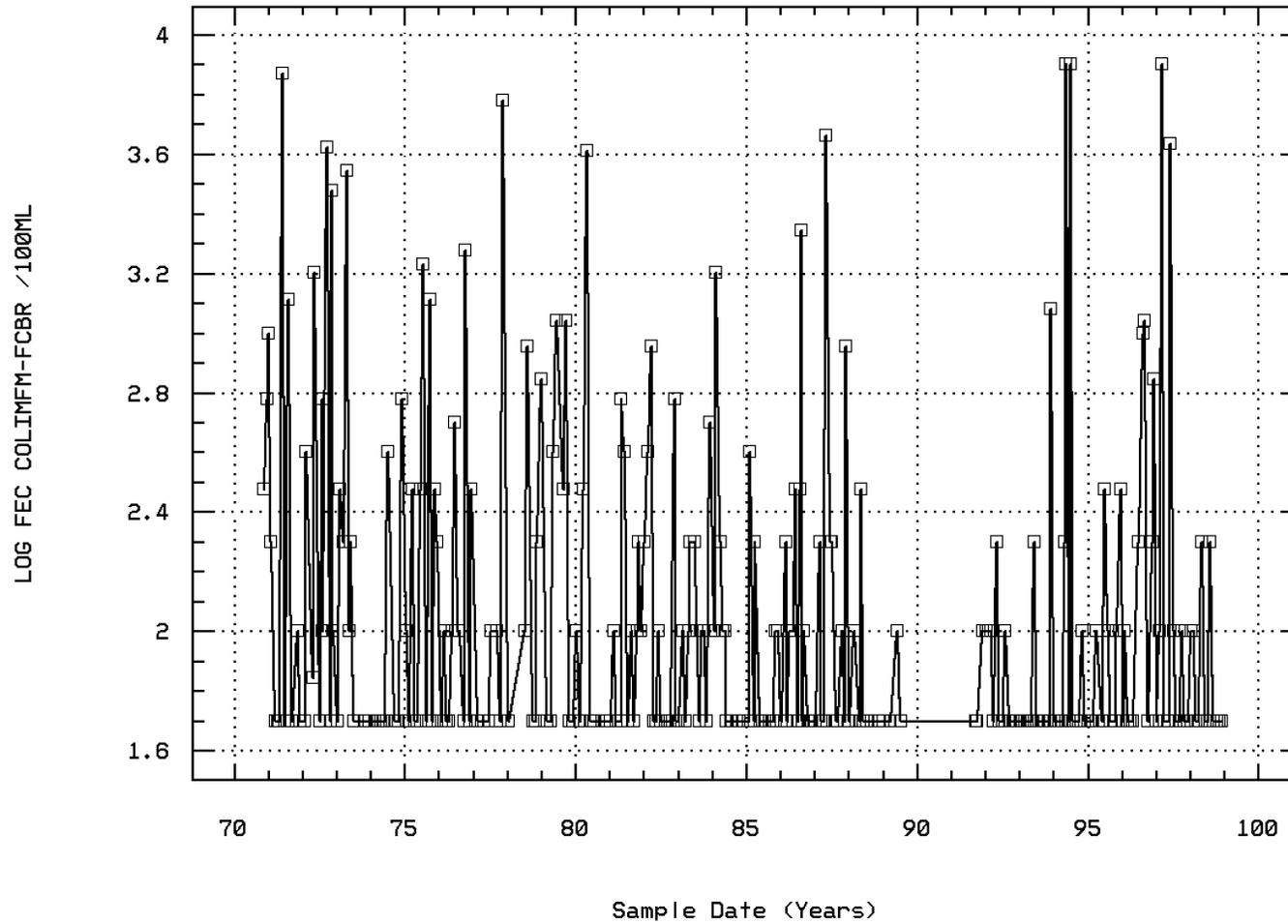
HARDNESS, TOTAL (MG/L AS CaCO3)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

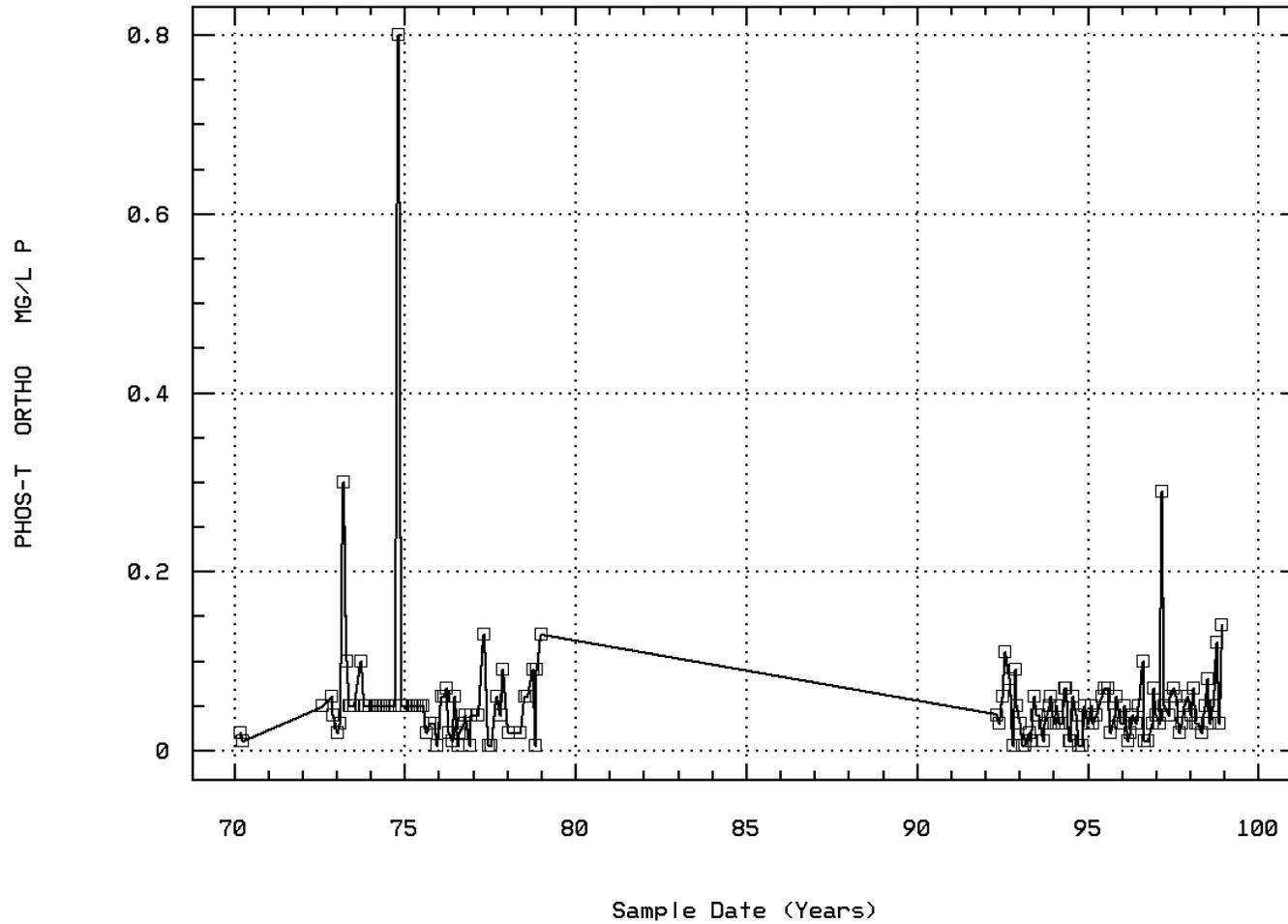
Station: SHEN0777 Parameter Code: 31616

LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 70507
PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Annual Analysis for 1970 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	10	20.55	16.72	25.6	4.4	80.346	8.964	4.46	6.65	24.7	25.6
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	11	9.4	9.391	12.6	6.3	5.549	2.356	6.32	7.	11.6	12.6
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	3	2.4	2.367	2.8	1.9	0.203	0.451	**	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.5	8.455	9.2	7.5	0.299	0.547	7.52	8.1	9.	9.16
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.5	8.123	9.2	7.5	0.419	0.648	7.52	8.1	9.	9.16
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	11	0.003	0.008	0.032	0.001	0.	0.011	0.001	0.001	0.008	0.03
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	3	7.8	7.767	7.9	7.6	0.023	0.153	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	3	7.8	7.748	7.9	7.6	0.024	0.154	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	3	0.016	0.018	0.025	0.013	0.	0.007	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	3	101.	104.	143.	68.	1413.	37.59	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	3	12.	16.	26.	10.	76.	8.718	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	3	5.	6.	9.	4.	7.	2.646	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	3	6.	10.	21.	3.	93.	9.644	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	2	0.045	0.045	0.05	0.04	0.	0.007	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	3##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	3	0.3	0.45	0.85	0.2	0.123	0.35	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	3	0.35	0.317	0.4	0.2	0.011	0.104	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	2	450.	450.	600.	300.	45000.	212.132	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	2	2.628	2.628	2.778	2.477	0.045	0.213	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			424.264								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	3##	0.025	0.05	0.1	0.025	0.002	0.043	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	11	15.6	14.1	28.9	-0.6	128.59	11.34	0.44	6.7	27.8	28.9
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	11	11.8	11.2	15.6	7.2	8.728	2.954	7.36	8.2	13.8	15.36
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	3	2.3	2.467	2.9	2.2	0.143	0.379	**	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.7	8.564	9.2	7.5	0.319	0.564	7.56	8.	9.	9.2
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.7	8.196	9.2	7.5	0.467	0.684	7.56	8.	9.	9.2
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	11	0.002	0.006	0.032	0.001	0.	0.01	0.001	0.001	0.01	0.028
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	11##	50.	936.364	7400.	50.	4787045.455	2187.932	50.	50.	1000.	6180.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	11##	1.699	2.225	3.869	1.699	0.581	0.762	1.699	1.699	3.	3.718
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			167.987								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	11	15.	15.3	30.	4.4	68.928	8.302	4.52	5.6	22.2	28.78
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	11	9.6	9.836	14.4	7.5	4.081	2.02	7.6	8.4	10.6	13.92
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.3	8.045	9.	7.	0.407	0.638	7.	7.5	8.5	8.9
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.3	7.605	9.	7.	0.62	0.787	7.	7.5	8.5	8.9
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	11	0.005	0.025	0.1	0.001	0.001	0.038	0.001	0.003	0.032	0.1
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	3	0.05	0.09	0.18	0.04	0.006	0.078	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	3	0.01	0.008	0.01	0.005	0.	0.003	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	3	0.6	0.843	1.339	0.59	0.185	0.43	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	3	0.4	0.4	0.6	0.2	0.04	0.2	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	11	100.	929.091	4200.	50.	2025709.091	1423.274	50.	50.	1600.	3960.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	11	2.	2.421	3.623	1.699	0.558	0.747	1.699	1.699	3.204	3.594
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			263.396								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	3##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	3	0.05	0.05	0.06	0.04	0.	0.01	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	11	12.2	12.636	27.2	1.1	71.745	8.47	1.32	5.6	20.	26.2
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	11	9.6	9.718	14.8	5.7	5.458	2.336	5.96	9.	10.	14.2
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	10	8.5	8.49	9.3	7.8	0.268	0.517	7.82	8.	9.	9.27
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	10	8.455	8.257	9.3	7.8	0.328	0.573	7.82	8.	9.	9.27
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	10	0.004	0.006	0.016	0.001	0.	0.005	0.001	0.001	0.01	0.015
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	2	8.1	8.1	8.2	8.	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	2	8.089	8.089	8.2	8.	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	2	0.008	0.008	0.01	0.006	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	2	129.5	129.5	131.	128.	4.5	2.121	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	11##	0.05	0.046	0.1	0.005	0.001	0.025	0.005	0.05	0.05	0.09
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	11	0.01	0.009	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.018
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	11	0.84	1.021	1.839	0.46	0.198	0.445	0.468	0.7	1.399	1.769
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	11	0.3	0.364	0.7	0.1	0.053	0.229	0.1	0.2	0.6	0.7
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	1	162.	162.	162.	162.	0.	0.	**	**	**	**
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	10##	75.	455.	3500.	50.	1152472.222	1073.533	50.	50.	225.	3180.
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	10##	1.849	2.112	3.544	1.699	0.347	0.589	1.699	1.699	2.345	3.437
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			129.363								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	11##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	11##	0.05	0.077	0.3	0.02	0.006	0.078	0.022	0.05	0.1	0.26

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	9	15.	15.056	26.1	5.	60.54	7.781	5.	6.4	21.95	26.1
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	9	10.	9.589	12.	6.1	4.179	2.044	6.1	7.65	11.3	12.
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	9	8.5	8.367	9.	7.5	0.273	0.522	7.5	8.	8.9	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	9	8.5	8.1	9.	7.5	0.353	0.594	7.5	8.	8.9	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	9	0.003	0.008	0.032	0.001	0.	0.01	0.001	0.001	0.01	0.032
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	9##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	9##	0.005	0.005	0.005	0.005	0.	0.	0.005	0.005	0.005	0.005
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	9	0.8	0.839	2.099	0.09	0.381	0.617	0.09	0.28	1.149	2.099
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	9	0.3	0.256	0.4	0.1	0.008	0.088	0.1	0.2	0.3	0.4
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	9##	50.	150.	600.	50.	41875.	204.634	50.	50.	225.	600.
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	9##	1.699	1.919	2.778	1.699	0.193	0.439	1.699	1.699	2.151	2.778
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			83.028								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	9##	0.05	0.156	1.	0.05	0.1	0.317	0.05	0.05	0.05	1.
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	9##	0.05	0.133	0.8	0.05	0.063	0.25	0.05	0.05	0.05	0.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	14.7	13.883	23.9	2.2	72.254	8.5	2.2	4.175	21.925	23.57
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	12	9.5	9.858	12.4	7.7	3.032	1.741	7.7	8.05	11.675	12.34
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.65	8.508	9.2	7.5	0.295	0.543	7.62	8.	9.	9.14
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.647	8.188	9.2	7.5	0.408	0.638	7.62	8.	9.	9.14
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.002	0.006	0.032	0.001	0.	0.009	0.001	0.001	0.01	0.026
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	2	7.9	7.9	8.	7.8	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	2	7.889	7.889	8.	7.8	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	2	0.013	0.013	0.016	0.01	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	2	120.5	120.5	127.	114.	84.5	9.192	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	11 ##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	10 ##	0.005	0.01	0.04	0.005	0.	0.012	0.005	0.005	0.009	0.038
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	10	0.9	1.034	1.599	0.58	0.115	0.339	0.592	0.85	1.394	1.589
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	10	0.2	0.23	0.4	0.1	0.007	0.082	0.11	0.2	0.3	0.39
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	2	137.	137.	140.	134.	18.	4.243	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12	150.	370.833	1700.	50.	296571.97	544.584	50.	50.	300.	1580.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12	2.151	2.214	3.23	1.699	0.312	0.558	1.699	1.699	2.477	3.195
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			163.796								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	10 ##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	10 ##	0.05	0.038	0.05	0.005	0.	0.016	0.007	0.028	0.05	0.05

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	17.85	15.842	27.2	2.2	73.186	8.555	3.37	6.975	24.	26.54
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	12	9.2	9.683	13.6	5.5	6.54	2.557	6.04	7.825	12.325	13.57
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	1	1.	1.	1.	0.	0.	0.	**	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.75	8.658	9.3	7.8	0.175	0.419	7.92	8.35	9.	9.21
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.747	8.454	9.3	7.8	0.221	0.47	7.92	8.35	9.	9.21
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.002	0.004	0.016	0.001	0.	0.004	0.001	0.001	0.005	0.013
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	8	7.9	7.775	8.5	7.1	0.248	0.498	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	8	7.889	7.546	8.5	7.1	0.308	0.555	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	8	0.013	0.028	0.079	0.003	0.001	0.029	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	8	143.	128.125	163.	63.	1155.839	33.998	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	0.01	0.01	0.02	0.005	0.	0.006	0.005	0.005	0.018	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	0.765	0.864	1.899	0.025	0.41	0.64	0.036	0.385	1.374	1.896
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.3	0.387	1.199	0.05	0.113	0.336	0.065	0.125	0.55	1.079
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	8	169.	171.25	226.	126.	900.5	30.008	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12	100.	279.167	1900.	50.	278844.697	528.057	50.	50.	250.	1480.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12	2.	2.079	3.279	1.699	0.248	0.498	1.699	1.699	2.358	3.105
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			119.989								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	12 ##	0.05	0.067	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	12	0.035	0.035	0.07	0.005	0.001	0.023	0.005	0.013	0.06	0.067

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	7	2.3	7.657	24.5	0.	102.506	10.125	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	7	8.8	10.	14.4	7.7	7.037	2.653	**	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	7	9.	8.7	9.5	7.	0.647	0.804	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	7	9.	7.813	9.5	7.	1.565	1.251	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	7	0.001	0.015	0.1	0.	0.001	0.037	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	7	8.4	8.371	8.6	8.	0.046	0.214	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	7	8.4	8.323	8.6	8.	0.048	0.22	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	7	0.004	0.005	0.01	0.003	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	7	137.	117.	176.	10.	3522.	59.346	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	3	8.	163.333	480.	2.	75217.333	274.258	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	2	32.	32.	56.	8.	1152.	33.941	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	3	2.	142.	424.	0.	59644.	244.221	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	7	0.1	0.164	0.5	0.05	0.03	0.173	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	7	0.01	0.016	0.03	0.005	0.	0.013	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	7	0.35	0.527	1.5	0.025	0.287	0.536	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	7	0.3	0.364	0.8	0.05	0.057	0.239	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	2	11.5	11.5	15.	8.	24.5	4.95	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	7	176.	174.857	214.	112.	1155.81	33.997	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	7 ##	50.	914.286	6000.	50.	5029761.905	2242.713	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	7 ##	1.699	2.082	3.778	1.699	0.58	0.761	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				120.783								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	7 ##	0.05	0.079	0.2	0.05	0.003	0.057	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	7	0.04	0.053	0.13	0.005	0.002	0.045	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	9	15.	15.	25.	0.5	91.438	9.562	0.5	6.25	24.	25.
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	9	9.9	10.211	12.2	7.8	3.694	1.922	7.8	8.2	12.2	12.2
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	9	8.3	8.244	9.	7.7	0.195	0.442	7.7	7.75	8.5	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	9	8.3	8.065	9.	7.7	0.232	0.481	7.7	7.75	8.5	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	9	0.005	0.009	0.02	0.001	0.	0.008	0.001	0.003	0.018	0.02
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	7	8.2	7.971	8.5	7.	0.279	0.528	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	7	8.2	7.64	8.5	7.	0.407	0.638	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	7	0.006	0.023	0.1	0.003	0.001	0.035	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	7	137.	131.143	197.	50.	3087.81	55.568	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	7 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	7	0.01	0.014	0.04	0.005	0.	0.012	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	1	1.199	1.199	1.199	1.199	0.	0.	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	7	0.2	0.25	0.4	0.05	0.016	0.126	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	7	172.	180.143	358.	62.	9526.143	97.602	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	6 ##	75.	225.	900.	50.	112750.	335.783	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	6 ##	1.849	2.059	2.954	1.699	0.25	0.5	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C				114.471								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	7 ##	0.05	0.057	0.1	0.05	0.	0.019	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	7	0.06	0.049	0.09	0.005	0.001	0.035	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	15	13.9	13.8	22.5	0.	46.086	6.789	3.6	7.	19.	22.2
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	10	334.5	337.2	644.	202.	15257.289	123.52	205.1	252.5	366.25	616.6
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	14	10.6	10.421	12.4	8.6	0.916	0.957	8.85	9.6	10.975	11.8
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	8	1.	1.125	2.	1.	0.125	0.354	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	10	8.	8.35	16.	0.5	23.336	4.831	0.65	5.75	11.25	15.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	15	8.5	8.413	9.	7.5	0.406	0.637	7.5	7.8	9.	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	15	8.5	8.02	9.	7.5	0.572	0.756	7.5	7.8	9.	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	15	0.003	0.01	0.032	0.001	0.	0.012	0.001	0.001	0.016	0.032
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	6	8.	7.967	8.2	7.6	0.043	0.207	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	6	8.	7.921	8.2	7.6	0.045	0.213	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	6	0.01	0.012	0.025	0.006	0.	0.007	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	6	119.5	122.333	156.	93.	782.667	27.976	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	10	6.	86.6	800.	1.	62912.878	250.824	1.1	2.375	13.25	723.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	10	3.	3.7	7.	1.	4.622	2.15	1.	2.125	6.	6.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	10	2.5	4.3	26.	0.	59.9	7.74	0.05	0.5	3.25	23.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	11 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	11 ##	0.005	0.009	0.03	0.005	0.	0.007	0.005	0.005	0.01	0.026
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	10	1.3	1.24	1.8	0.4	0.2	0.448	0.42	0.975	1.6	1.78
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	11	0.2	0.405	2.5	0.05	0.494	0.703	0.06	0.1	0.3	2.08
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	10 ##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	10	0.015	0.021	0.06	0.005	0.	0.016	0.006	0.01	0.03	0.057
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	9	5.	4.5	9.	0.5	6.	2.449	0.5	2.5	5.5	9.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	5	125.	107.4	175.	0.	4220.3	64.964	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	10 ##	175.	385.	1100.	50.	187805.556	433.365	50.	50.	800.	1100.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	10 ##	2.088	2.25	3.041	1.699	0.367	0.606	1.699	1.699	2.894	3.041
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
	GEOMETRIC MEAN =			177.906									
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	1	0.13	0.13	0.13	0.13	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	11	10.	12.691	29.	4.7	61.483	7.841	4.7	6.5	18.	27.8
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	8	356.5	314.25	435.	167.	11873.357	108.965	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	12	11.5	11.067	13.5	6.	5.882	2.425	6.93	9.175	13.2	13.5
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	8	2.	1.75	3.	1.	0.5	0.707	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	8	9.	10.25	22.	2.	48.214	6.944	**	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.85	8.633	9.5	7.3	0.382	0.618	7.51	8.075	9.	9.38
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.825	8.154	9.5	7.3	0.633	0.796	7.51	8.075	9.	9.38
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.001	0.007	0.05	0.	0.	0.014	0.	0.001	0.009	0.038
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	4	7.95	7.825	8.2	7.2	0.189	0.435	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	4	7.947	7.638	8.2	7.2	0.236	0.485	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	4	0.011	0.023	0.063	0.006	0.001	0.027	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	4	146.5	136.75	174.	80.	1659.583	40.738	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	8 ##	3.75	32.375	146.	2.5	2997.554	54.75	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	8 ##	2.5	4.688	13.	0.	24.067	4.906	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	8 ##	2.5	28.938	134.	2.5	2449.317	49.491	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	8 ##	0.05	0.113	0.5	0.05	0.025	0.158	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	8	0.015	0.015	0.03	0.005	0.	0.009	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	8	0.95	0.999	2.1	0.19	0.294	0.542	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	8	0.25	0.25	0.4	0.1	0.009	0.093	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	8 ##	0.05	0.106	0.3	0.05	0.009	0.094	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	8	0.035	0.038	0.09	0.005	0.001	0.031	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	8	8.5	7.75	11.	2.	9.357	3.059	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	3	170.	177.	209.	152.	849.	29.138	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	8 ##	50.	593.75	4100.	50.	2014598.214	1419.365	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	8 ##	1.699	2.073	3.613	1.699	0.463	0.68	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C												
	GEOMETRIC MEAN =			118.33									

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	20.4	15.292	28.	0.6	90.132	9.494	1.38	6.4	22.8	26.86
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	12	367.5	377.417	522.	206.	7389.902	85.965	237.2	322.	435.25	515.7
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	12	11.65	11.358	16.	6.4	6.963	2.639	7.15	9.1	13.05	15.46
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12	1.	1.5	3.	1.	0.455	0.674	1.	1.	2.	2.7
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	12	8.5	10.25	22.	2.	34.205	5.848	2.3	6.25	14.75	20.2
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.7	8.485	9.	7.5	0.244	0.493	7.6	8.	9.	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.7	8.199	9.	7.5	0.334	0.578	7.6	8.	9.	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	11	0.002	0.006	0.032	0.001	0.	0.009	0.001	0.001	0.01	0.027
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	3	8.	7.967	8.3	7.6	0.123	0.351	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	3	8.	7.874	8.3	7.6	0.136	0.369	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	3	0.01	0.013	0.025	0.005	0.	0.01	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	3	173.	163.333	205.	112.	2232.333	47.248	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	12###	3.75	10.	56.	2.5	231.318	15.209	2.5	2.5	11.	44.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	12##	2.5	3.417	7.	2.	2.856	1.69	2.	2.5	4.75	6.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	12###	2.75	7.833	49.	2.5	177.288	13.315	2.5	2.5	5.75	38.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12##	0.05	0.075	0.3	0.05	0.005	0.072	0.05	0.05	0.05	0.24
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	0.01	0.01	0.03	0.005	0.	0.008	0.005	0.005	0.01	0.027
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	0.425	0.641	1.9	0.025	0.437	0.661	0.025	0.082	1.275	1.81
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.25	0.3	0.9	0.05	0.056	0.236	0.05	0.125	0.4	0.78
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	12##	0.075	0.083	0.2	0.05	0.002	0.044	0.05	0.05	0.1	0.17
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	11	0.06	0.059	0.14	0.02	0.001	0.033	0.022	0.03	0.07	0.128
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	12	7.5	6.625	10.	0.5	8.051	2.837	1.25	5.	9.	9.7
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	2	202.5	202.5	241.	164.	2964.5	54.447	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12	100.	154.167	600.	50.	29753.788	172.493	50.	50.	175.	540.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12	2.	2.015	2.778	1.699	0.137	0.37	1.699	1.699	2.226	2.725
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			103.437								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	14	19.75	15.693	24.3	0.5	78.533	8.862	2.	5.375	24.2	24.25
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	12	330.5	316.417	401.	194.	4721.538	68.713	207.2	250.	383.5	400.4
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	14	10.3	10.75	14.5	7.6	2.893	1.701	8.3	9.875	11.9	13.4
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12	2.	1.833	3.	1.	0.515	0.718	1.	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	12	10.5	10.833	23.	5.	27.424	5.237	5.	6.5	14.25	20.9
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	7.36	7.611	9.	6.32	0.746	0.864	6.434	7.155	8.42	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	7.36	7.071	9.	6.32	1.064	1.031	6.434	7.155	8.42	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.044	0.085	0.479	0.001	0.018	0.135	0.001	0.004	0.07	0.395
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	8	8.1	8.125	8.4	7.7	0.051	0.225	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	8	8.1	8.07	8.4	7.7	0.054	0.233	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	8	0.008	0.009	0.02	0.004	0.	0.005	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	9	123.	120.	168.	81.	933.75	30.557	81.	84.5	140.5	168.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	7.	16.583	111.	2.5	919.992	30.331	2.5	2.5	13.75	84.3
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	2.75	4.75	15.	2.	15.386	3.923	2.	2.5	7.5	12.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	4.	12.667	96.	2.	701.242	26.481	2.15	2.5	8.	71.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12##	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	0.01	0.01	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	0.87	0.802	1.4	0.06	0.195	0.442	0.105	0.383	1.225	1.37
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.275	0.275	0.4	0.2	0.005	0.072	0.2	0.2	0.3	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	12##	0.075	0.1	0.2	0.05	0.004	0.064	0.05	0.05	0.175	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	12	0.04	0.062	0.2	0.01	0.004	0.064	0.01	0.013	0.075	0.194
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	12	5.	4.917	9.	1.	4.811	2.193	1.3	4.	6.75	8.4
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	8	149.	144.25	196.	110.	880.5	29.673	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	2	22.	22.	22.	22.	0.	0.	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12##	50.	212.5	900.	50.	77784.091	278.898	50.	50.	350.	810.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616p LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12 ##	1.699	2.044	2.954	1.699	0.235	0.484	1.699	1.699	2.527	2.901
31616p GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN = 110.668											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	14.	15.558	28.5	2.	73.801	8.591	3.05	8.95	24.25	27.6
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	12	312.	293.833	350.	163.	3743.97	61.188	170.8	275.5	339.	349.7
00300 OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	12	10.55	10.675	13.7	7.9	2.966	1.722	7.93	9.775	11.4	13.52
00310 BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12	1.	1.833	7.	1.	2.879	1.697	1.	1.	2.	5.5
00340 COD, 25N K2CR2O7 MG/L	03/01/79-12/01/98	12	7.	7.792	20.	0.5	24.43	4.943	1.85	5.	9.75	17.9
00400p PH (STANDARD UNITS)	03/04/70-12/01/98	10	8.05	8.094	9.	7.3	0.306	0.553	7.33	7.6	8.55	8.97
00400p CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	10	8.047	7.83	9.	7.3	0.384	0.62	7.33	7.6	8.55	8.97
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	10	0.009	0.015	0.05	0.001	0.	0.016	0.001	0.003	0.025	0.048
00403 PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	12	8.	7.942	8.4	6.8	0.188	0.434	7.04	7.8	8.275	8.37
00403 CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	12	8.	7.641	8.4	6.8	0.287	0.536	7.04	7.8	8.275	8.37
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.01	0.023	0.158	0.004	0.002	0.043	0.004	0.005	0.016	0.118
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	12	134.5	118.75	161.	45.	1505.477	38.8	51.3	77.5	148.25	157.7
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	7.5	9.458	28.	2.5	71.339	8.446	2.5	2.5	14.	26.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	2.5	3.542	9.	2.	4.43	2.105	2.	2.125	5.	7.8
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	5.5	6.958	23.	2.5	37.203	6.099	2.5	2.5	9.5	20.
00610p NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.085
00615p NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.005	0.011	0.06	0.005	0.	0.016	0.005	0.005	0.005	0.048
00620p NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	1.1	0.894	1.5	0.025	0.297	0.545	0.042	0.295	1.3	1.5
00625p NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.25	0.475	1.7	0.1	0.228	0.477	0.13	0.2	0.625	1.52
00665 PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	12 ##	0.05	0.067	0.15	0.05	0.001	0.033	0.05	0.05	0.088	0.135
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	12	0.04	0.043	0.08	0.02	0.	0.021	0.02	0.023	0.065	0.077
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	12	3.	4.333	13.	1.	9.515	3.085	1.3	3.	5.	10.9
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	11	151.	142.273	198.	68.	1690.018	41.11	70.4	112.	170.	194.8
00945 SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	11	19.	17.318	23.	0.5	34.714	5.892	3.6	17.	20.	22.6
31616p FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12	100.	133.333	500.	50.	16060.606	126.73	50.	50.	175.	410.
31616p LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12	2.	2.008	2.699	1.699	0.094	0.306	1.699	1.699	2.226	2.58
31616p GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN = 101.877											

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	10	18.	16.45	26.	2.	62.312	7.894	2.5	9.25	22.2	25.98
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	10	319.5	303.3	378.	189.	4745.122	68.885	189.4	238.	357.75	377.7
00300 OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	10	9.6	10.04	14.8	7.2	4.654	2.157	7.31	8.825	10.85	14.54
00310 BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	10	1.5	1.7	4.	0.5	1.289	1.135	0.5	0.875	2.25	3.9
00340 COD, 25N K2CR2O7 MG/L	03/01/79-12/01/98	10	6.5	8.75	26.	0.5	47.958	6.925	0.95	5.75	11.5	24.7
00400p PH (STANDARD UNITS)	03/04/70-12/01/98	10	8.15	8.086	8.5	7.3	0.162	0.402	7.32	7.875	8.425	8.5
00400p CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	10	8.147	7.887	8.5	7.3	0.206	0.453	7.32	7.875	8.425	8.5
00400p MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	10	0.007	0.013	0.05	0.003	0.	0.015	0.003	0.004	0.015	0.048
00403 PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	9	8.	7.844	8.3	6.7	0.208	0.456	6.7	7.8	8.05	8.3
00403 CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	9	8.	7.497	8.3	6.7	0.344	0.586	6.7	7.8	8.05	8.3
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	9	0.01	0.032	0.2	0.005	0.004	0.063	0.005	0.009	0.016	0.2
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	9	148.	136.	170.	71.	1292.75	35.955	71.	108.5	160.	170.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	10	5.5	43.45	360.	2.5	12421.858	111.453	2.5	2.5	20.	326.3
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	10	2.5	5.45	28.	2.	64.303	8.019	2.	2.	4.5	25.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	10	3.	38.75	332.	2.	10661.681	103.255	2.05	2.5	17.25	300.9
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	10 ##	0.05	0.07	0.2	0.05	0.002	0.048	0.05	0.05	0.063	0.19
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	10	0.015	0.016	0.04	0.005	0.	0.012	0.005	0.005	0.023	0.039
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	10	0.89	1.008	1.9	0.4	0.206	0.454	0.42	0.645	1.425	1.854
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	10	0.35	0.39	0.8	0.2	0.032	0.179	0.2	0.275	0.5	0.77
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	10 ##	0.05	0.06	0.1	0.05	0.	0.021	0.05	0.05	0.063	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	10	0.02	0.032	0.1	0.005	0.001	0.032	0.006	0.01	0.043	0.098
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	10	3.5	5.85	22.	0.5	37.558	6.128	0.75	3.	8.	20.6
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	9	166.	155.667	182.	100.	1053.	32.45	100.	129.	178.5	182.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	9	17.	18.111	27.	6.	35.611	5.968	6.	16.5	22.5	27.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	10 ##	75.	235.	1600.	50.	232250.	481.923	50.	50.	125.	1460.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	10 ##	1.849	2.	3.204	1.699	0.222	0.471	1.699	1.699	2.075	3.114
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			100.								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	16.35	15.108	25.4	0.5	84.423	9.188	0.95	7.375	24.75	25.34
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	11	300.	296.364	399.	217.	2642.055	51.401	221.6	241.	324.	385.6
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	12	9.8	10.05	15.2	6.2	6.195	2.489	6.56	7.875	11.5	14.42
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12	1.	2.083	8.	1.	4.447	2.109	1.	1.	2.75	6.8
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	12	7.	11.917	38.	4.	114.629	10.706	4.3	5.25	16.	35.
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.2	8.021	8.7	7.	0.263	0.513	7.06	7.725	8.375	8.64
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.2	7.697	8.7	7.	0.378	0.615	7.06	7.725	8.375	8.64
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.006	0.002	0.1	0.002	0.001	0.03	0.002	0.004	0.019	0.099
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	12	8.	7.967	8.4	7.5	0.104	0.323	7.53	7.625	8.275	8.4
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	12	8.	7.862	8.4	7.5	0.116	0.341	7.53	7.625	8.275	8.4
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.01	0.014	0.032	0.004	0.	0.01	0.004	0.005	0.024	0.03
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	12	119.5	122.25	175.	84.	828.568	28.785	86.4	93.75	145.5	170.2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	11	5.	10.273	41.	2.5	132.318	11.503	2.5	2.5	14.	36.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	11	3.	3.818	7.	2.	3.064	1.75	2.1	2.5	6.	6.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	11	3.	7.364	35.	2.	93.955	9.693	2.1	2.5	10.	30.2
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	9 ##	0.05	0.111	0.6	0.05	0.034	0.183	0.05	0.05	0.05	0.6
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	9	0.01	0.012	0.04	0.005	0.	0.011	0.005	0.008	0.01	0.04
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	9	1.09	1.128	2.3	0.025	0.627	0.792	0.025	0.455	1.9	2.3
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	6	0.25	0.4	1.2	0.2	0.156	0.395	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	6 ##	0.075	0.208	0.9	0.05	0.115	0.34	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	9	0.03	0.118	0.75	0.02	0.057	0.238	0.02	0.025	0.07	0.75
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	12	5.	5.667	19.	2.	19.152	4.376	2.3	4.	5.	15.4
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	11	134.	136.	184.	98.	726.6	26.956	99.2	110.	155.	179.2
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	7	20.	18.714	22.	13.	10.571	3.251	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	11 ##	50.	104.545	400.	50.	11727.273	108.293	50.	50.	100.	360.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	11 ##	1.699	1.891	2.602	1.699	0.096	0.309	1.699	1.699	2.	2.542
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			77.72								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	13	16.9	15.638	30.	0.5	94.809	9.737	1.9	6.5	24.15	29.24
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	14	328.5	334.5	421.	197.	3938.269	62.756	229.5	300.25	391.5	418.
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	13	10.2	9.592	13.8	4.2	10.007	3.163	4.52	7.1	12.7	13.6

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00310	BOD, 5 DAY, 20 DEG C MG/L	14	1.	1.571	7.	0.5	2.687	1.639	0.5	1.	2.	4.5
00340	COD, .25N K2CR2O7 MG/L	14	11.	10.857	22.	2.	24.286	4.928	4.	7.	13.5	19.
00400p	PH (STANDARD UNITS)	13	8.4	8.262	8.9	7.3	0.208	0.456	7.46	7.9	8.6	8.86
00400p	CONVERTED PH (STANDARD UNITS)	13	8.4	8.012	8.9	7.3	0.275	0.524	7.46	7.9	8.6	8.86
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	13	0.004	0.01	0.05	0.001	0.	0.013	0.001	0.003	0.013	0.038
00403	PH, LAB, STANDARD UNITS SU	14	8.15	8.129	8.9	7.5	0.101	0.317	7.7	7.9	8.3	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	14	8.147	8.028	8.9	7.5	0.112	0.334	7.7	7.9	8.3	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	14	0.007	0.009	0.032	0.001	0.	0.007	0.003	0.005	0.013	0.022
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	14	136.	134.	168.	76.	706.	26.571	83.5	124.25	154.25	166.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	14 ##	2.5	6.393	39.	2.5	92.853	9.636	2.5	2.5	7.25	23.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	14 ##	2.5	3.036	7.	2.	1.941	1.393	2.	2.5	2.875	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	14 ##	2.5	4.964	32.	2.5	61.095	7.816	2.5	2.5	3.25	18.5
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	14 ##	0.05	0.05	0.05	0.05	0.	0.	0.05	0.05	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	14	0.01	0.011	0.04	0.005	0.	0.009	0.005	0.005	0.01	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	14	0.51	0.591	1.94	0.025	0.335	0.578	0.025	0.025	1.055	1.59
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	14	0.4	0.386	0.7	0.1	0.026	0.161	0.15	0.275	0.5	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	14 ##	0.075	0.082	0.2	0.05	0.002	0.042	0.05	0.05	0.1	0.15
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	14	0.02	0.03	0.1	0.005	0.001	0.03	0.005	0.009	0.045	0.09
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	14	4.	4.357	8.	2.	1.632	1.277	3.	4.	5.	6.5
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	13	156.	153.923	198.	102.	686.41	26.199	109.2	139.	175.5	190.8
00945	SULFATE, TOTAL (MG/L AS SO4)	6	19.5	19.167	23.	15.	10.167	3.189	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	14 ##	75.	260.714	2200.	50.	319684.066	565.406	50.	50.	225.	1250.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	14 ##	1.849	2.035	3.342	1.699	0.228	0.478	1.699	1.699	2.345	2.91
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =			108.401					

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12	12.4	13.692	25.8	1.	79.821	8.934	1.9	5.25	24.25	25.71
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	12	338.	311.417	408.	172.	6942.265	83.32	172.	231.75	383.	403.8
00300	OXYGEN, DISSOLVED MG/L	12	10.05	9.958	13.6	7.3	4.463	2.112	7.36	7.625	11.55	13.3
00310	BOD, 5 DAY, 20 DEG C MG/L	12	1.	1.208	2.	0.5	0.248	0.498	0.65	1.	1.75	2.
00340	COD, .25N K2CR2O7 MG/L	12	8.5	9.167	18.	2.	24.515	4.951	2.6	5.25	12.5	17.7
00400p	PH (STANDARD UNITS)	10	8.175	8.275	9.	7.7	0.191	0.437	7.71	7.875	8.65	8.98
00400p	CONVERTED PH (STANDARD UNITS)	10	8.169	8.107	9.	7.7	0.222	0.471	7.71	7.875	8.65	8.98
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	10	0.007	0.008	0.02	0.001	0.	0.006	0.001	0.002	0.013	0.02
00403	PH, LAB, STANDARD UNITS SU	12	8.	7.867	8.4	6.6	0.244	0.494	6.87	7.55	8.2	8.34
00403	CONVERTED PH, LAB, STANDARD UNITS	12	7.989	7.481	8.4	6.6	0.407	0.638	6.87	7.55	8.2	8.34
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	12	0.01	0.033	0.251	0.004	0.005	0.069	0.005	0.006	0.029	0.185
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	12	123.	121.25	165.	62.	1050.75	32.415	65.3	99.	151.25	162.3
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	12 ##	2.5	7.292	25.	2.5	57.066	7.554	2.5	2.5	10.	23.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	12 ##	2.5	3.667	8.	2.5	3.697	1.923	2.5	2.5	5.5	7.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	12 ##	2.5	5.292	18.	2.5	33.566	5.794	2.5	2.5	5.125	17.7
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	12 ##	0.05	0.054	0.1	0.05	0.	0.014	0.05	0.05	0.05	0.085
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	12	0.01	0.012	0.04	0.005	0.	0.01	0.005	0.005	0.018	0.034
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	12	1.325	1.215	1.88	0.025	0.381	0.617	0.025	1.02	1.723	1.856
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	12	0.4	0.367	0.5	0.2	0.013	0.115	0.2	0.225	0.475	0.5
00665	PHOSPHORUS, TOTAL (MG/L AS P)	12 ##	0.05	0.079	0.2	0.05	0.002	0.045	0.05	0.05	0.1	0.17
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	12	0.03	0.036	0.09	0.005	0.001	0.025	0.007	0.02	0.058	0.081
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	8	4.	3.875	5.	3.	0.411	0.641	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	12	147.	145.417	206.	76.	1395.72	37.359	80.2	127.5	171.	201.2
00945	SULFATE, TOTAL (MG/L AS SO4)	5	19.	18.8	20.	16.	2.7	1.643	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12 ##	75.	541.667	4600.	50.	1690378.788	1300.146	50.	50.	200.	3490.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	12 ##	1.849	2.143	3.663	1.699	0.386	0.621	1.699	1.699	2.301	3.45
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =			138.94					

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	5	21.4	15.36	26.8	0.8	132.883	11.527	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	5	339.	336.4	386.	294.	1639.3	40.488	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	5	9.1	9.7	13.8	5.5	11.075	3.328	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	5 ##	0.5	0.7	1.	0.5	0.075	0.274	**	**	**
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	5	9.	11.	19.	7.	23.5	4.848	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	5	8.4	8.274	8.53	7.91	0.089	0.298	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	5	8.4	8.191	8.53	7.91	0.097	0.312	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	5	0.004	0.006	0.012	0.003	0.	0.004	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	5	8.	8.	8.1	7.9	0.005	0.071	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	5	8.	7.995	8.1	7.9	0.005	0.071	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	5	0.01	0.01	0.013	0.008	0.	0.002	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	5	137.	133.2	152.	113.	207.2	14.394	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	5 ##	2.5	3.3	7.	2.	4.325	2.08	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	5 ##	2.5	1.9	2.5	0.	1.175	1.084	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	5 ##	2.5	3.	7.	0.5	5.75	2.398	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	4	0.06	0.073	0.13	0.04	0.002	0.04	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	4	0.01	0.019	0.05	0.005	0.	0.021	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	4	1.405	1.198	1.94	0.04	0.809	0.9	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	4	0.25	0.275	0.4	0.2	0.009	0.096	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	4 ##	0.05	0.063	0.1	0.05	0.001	0.025	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	4	0.03	0.033	0.04	0.03	0.	0.005	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	3	2.3	2.267	2.7	1.8	0.203	0.451	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	5	146.	148.2	172.	136.	197.2	14.043	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	4	19.	19.	21.	17.	2.667	1.633	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	8 ##	50.	87.5	300.	50.	7678.571	87.627	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	8 ##	1.699	1.834	2.477	1.699	0.079	0.28	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			68.213							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	6	25.2	18.4	25.4	2.2	116.576	10.797	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	3	342.	318.333	347.	266.	2060.333	45.391	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	1	315.	315.	315.	315.	0.	0.	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	6	8.3	9.517	12.8	7.5	6.402	2.53	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	4	1.5	1.625	3.	0.5	1.229	1.109	**	**	**
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	4	8.5	10.25	20.	4.	48.25	6.946	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	6	8.505	8.455	8.97	8.11	0.103	0.321	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	6	8.504	8.366	8.97	8.11	0.112	0.335	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	6	0.003	0.004	0.008	0.001	0.	0.003	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	4	8.1	8.075	8.1	8.	0.002	0.05	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	4	8.1	8.073	8.1	8.	0.003	0.05	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	4	0.008	0.008	0.01	0.008	0.	0.001	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	4	133.	126.25	138.	101.	294.917	17.173	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	4 ##	1.25	2.5	7.	0.5	9.5	3.082	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	4 ##	1.25	1.5	3.	0.5	1.5	1.225	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	4 ##	0.5	1.375	4.	0.5	3.063	1.75	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	4 ##	0.02	0.025	0.04	0.02	0.	0.01	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	4	0.02	0.019	0.03	0.005	0.	0.01	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	4	0.795	0.873	1.28	0.62	0.087	0.294	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	4	0.35	0.35	0.4	0.3	0.003	0.058	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	4	0.1	0.087	0.1	0.05	0.001	0.025	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	4	0.04	0.04	0.07	0.01	0.001	0.026	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	4	2.65	2.625	3.9	1.3	1.129	1.063	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	4	155.	149.	164.	122.	348.	18.655	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00940	CHLORIDE,TOTAL IN WATER MG/L	03/23/89-12/01/98	3	10.	10.667	13.	9.	4.333	2.082	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	3	19.	18.333	20.	16.	4.333	2.082	**	**	**	**
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	4 ##	50.	62.5	100.	50.	625.	25.	**	**	**	**
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	4 ##	1.699	1.774	2.	1.699	0.023	0.151	**	**	**	**
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			59.46								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1990 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	6	23.35	21.933	27.6	12.9	27.227	5.218	**	**	**	**
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	1	359.	359.	359.	359.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	5	333.	284.	369.	91.	12364.	111.194	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	6	7.5	7.567	10.6	5.3	4.067	2.017	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	6	1.5	1.833	4.	1.	1.367	1.169	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	6	8.5	8.5	13.	6.	6.7	2.588	**	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	6	8.18	8.153	8.53	7.75	0.083	0.287	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	6	8.174	8.075	8.53	7.75	0.09	0.3	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	6	0.007	0.008	0.018	0.003	0.	0.006	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	6	8.25	8.233	8.8	7.7	0.139	0.372	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	6	8.247	8.108	8.8	7.7	0.158	0.397	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	6	0.006	0.008	0.02	0.002	0.	0.007	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	6	144.	141.	157.	118.	253.2	15.912	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	6	7.	10.	29.	2.	97.6	9.879	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	6	2.	2.5	5.	1.	2.7	1.643	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	6	4.5	7.667	28.	0.5	109.767	10.477	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	7	0.04	0.047	0.13	0.02	0.002	0.039	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	7	0.01	0.046	0.26	0.005	0.009	0.094	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	7	0.77	1.083	2.55	0.34	0.542	0.736	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	7	0.4	0.443	0.7	0.2	0.023	0.151	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	7	0.1	0.093	0.1	0.05	0.	0.019	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	6	0.04	0.04	0.07	0.02	0.	0.02	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	6	2.45	2.867	5.5	2.	1.767	1.329	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	6	158.	161.333	188.	136.	465.067	21.565	**	**	**	**
00940	CHLORIDE,TOTAL IN WATER MG/L	03/23/89-12/01/98	6	11.5	17.667	47.	10.	211.467	14.542	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	6	17.	18.333	25.	15.	13.867	3.724	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	7	11.6	13.657	22.5	6.8	33.266	5.768	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	8	353.	349.875	462.	244.	4475.839	66.902	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	7	11.	10.971	13.4	8.5	3.009	1.735	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	8	1.	1.438	3.	0.5	0.674	0.821	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	8	8.	8.375	14.	3.	14.839	3.852	**	**	**	**
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	6	8.555	8.45	8.79	7.8	0.13	0.36	**	**	**	**
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	6	8.553	8.3	8.79	7.8	0.157	0.396	**	**	**	**
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	6	0.003	0.005	0.016	0.002	0.	0.005	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	8	8.3	8.263	8.4	7.9	0.028	0.169	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	8	8.3	8.229	8.4	7.9	0.03	0.172	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	8	0.005	0.006	0.013	0.004	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	8	148.5	144.5	191.	107.	662.	25.729	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	8	5.	6.563	14.	1.	22.531	4.747	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	6	2.	1.75	2.5	1.	0.375	0.612	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	8	4.	5.563	12.	2.	16.103	4.013	**	**	**	**
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	8 ##	0.02	0.033	0.08	0.02	0.	0.021	**	**	**	**
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	8 ##	0.005	0.008	0.02	0.005	0.	0.005	**	**	**	**
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	8	1.345	1.143	1.95	0.02	0.414	0.643	**	**	**	**
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	8	0.35	0.338	0.5	0.2	0.011	0.106	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	7	0.1	0.079	0.1	0.05	0.001	0.027	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	8	0.025	0.033	0.08	0.005	0.001	0.027	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	8	2.35	2.438	4.1	1.4	0.806	0.898	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	8	163.	161.25	196.	124.	539.357	23.224	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	8	12.	14.875	24.	7.	44.982	6.707	**	**	**	**
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	8	18.	18.25	23.	14.	8.214	2.866	**	**	**	**
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	3 ##	50.	66.667	100.	50.	833.333	28.868	**	**	**	**
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	3 ##	1.699	1.799	2.	1.699	0.03	0.174	**	**	**	**
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			62.996								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	9.9	12.15	25.3	1.	67.148	8.194	1.9	5.	18.625	24.94
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	308.5	315.333	402.	220.	3381.333	58.149	225.1	274.	361.5	397.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	8	8.05	9.075	13.1	6.7	5.091	2.256	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	4	12.	12.725	15.1	11.8	2.542	1.595	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12	1.	1.292	4.	0.5	0.839	0.916	0.65	1.	1.	3.4
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	12	9.5	10.75	23.	6.	20.023	4.475	6.3	8.25	12.5	20.3
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.45	8.438	9.	7.6	0.17	0.412	7.72	8.15	8.825	8.988
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.447	8.245	9.	7.6	0.21	0.459	7.72	8.15	8.825	8.988
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.004	0.006	0.025	0.001	0.	0.007	0.001	0.002	0.007	0.021
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	12	8.3	8.225	8.6	7.7	0.06	0.245	7.79	8.025	8.375	8.57
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	12	8.3	8.155	8.6	7.7	0.066	0.256	7.79	8.025	8.375	8.57
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.005	0.007	0.02	0.003	0.	0.005	0.003	0.004	0.009	0.017
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	12	127.	123.	162.	71.	745.273	27.3	77.6	102.	145.	159.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	5.	11.083	81.	1.	492.811	22.199	1.	2.25	8.	59.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	1.	1.875	13.	0.	12.46	3.53	0.	1.	1.	9.55
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	4.	9.333	68.	1.	347.697	18.647	1.	2.	7.	50.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.02	0.022	0.04	0.02	0.	0.006	0.02	0.02	0.02	0.034
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.008	0.01	0.02	0.005	0.	0.006	0.005	0.005	0.018	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	1.45	1.527	2.53	0.68	0.225	0.474	0.788	1.328	1.868	2.365
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.3	0.35	1.1	0.2	0.063	0.25	0.2	0.2	0.4	0.89
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	12	0.1	0.108	0.2	0.05	0.002	0.047	0.05	0.1	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	4	0.04	0.068	0.16	0.03	0.004	0.062	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	12	3.6	3.658	9.5	0.5	5.801	2.408	0.77	1.75	4.875	8.15
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	12	152.	147.333	186.	92.	851.879	29.187	99.8	122.5	176.	185.4
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	11	10.	10.727	16.	6.	12.218	3.495	6.2	8.	14.	15.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	11	19.	19.	23.	17.	4.	2.	17.	17.	20.	22.8
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12 ##	50.	79.167	200.	50.	2026.515	45.017	50.	50.	100.	170.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12 ##	1.699	1.849	2.301	1.699	0.041	0.203	1.699	1.699	2.	2.211
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			70.711								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	8	0.055	0.058	0.11	0.005	0.001	0.034	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	14.5	14.842	26.3	4.	68.49	8.276	4.24	5.75	23.475	25.91
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	332.5	328.667	460.	199.	6293.697	79.333	210.4	272.5	392.	444.1
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	12	10.6	10.992	18.7	6.7	11.975	3.461	6.85	7.825	13.075	17.29
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12	1.	1.542	6.	0.5	2.157	1.469	0.65	1.	1.75	4.8
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	12	8.5	8.292	12.	2.5	8.566	2.927	3.25	6.	11.	11.7
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.25	8.158	8.9	6.9	0.308	0.555	7.08	7.85	8.475	8.87
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.247	7.747	8.9	6.9	0.493	0.702	7.08	7.85	8.475	8.87
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.006	0.018	0.126	0.001	0.001	0.035	0.001	0.003	0.014	0.098
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	12	8.45	8.433	8.9	7.3	0.172	0.414	7.57	8.325	8.7	8.87
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	12	8.447	8.145	8.9	7.3	0.262	0.512	7.57	8.325	8.7	8.87
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.004	0.007	0.05	0.001	0.	0.014	0.001	0.002	0.005	0.037
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	12	137.5	134.5	208.	74.	1592.273	39.903	78.8	99.5	165.25	196.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	6.	6.583	27.	1.5	48.72	6.98	1.5	1.5	7.75	21.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	1.25	1.917	8.	1.	3.992	1.998	1.	1.	1.5	6.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	5.	5.167	19.	1.	24.97	4.997	1.15	1.5	6.75	15.7
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.02	0.038	0.14	0.02	0.001	0.035	0.02	0.02	0.048	0.116
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.005	0.01	0.04	0.005	0.	0.01	0.005	0.005	0.01	0.034
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	1.415	1.402	2.51	0.47	0.281	0.53	0.56	1.07	1.718	2.288
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.3	0.292	0.4	0.1	0.012	0.108	0.13	0.2	0.4	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	12 ##	0.05	0.067	0.1	0.05	0.001	0.025	0.05	0.05	0.1	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	12	2.5	2.942	5.	1.9	0.966	0.983	1.93	2.225	3.575	4.82
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	12	158.	153.667	222.	76.	2237.697	47.304	82.	110.5	195.	219.
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	12	10.5	12.667	22.	5.	39.333	6.272	5.3	6.75	19.5	21.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	12	17.5	17.5	21.	14.	4.455	2.111	14.3	15.5	19.	20.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12 ##	50.	158.333	1200.	50.	109469.697	330.862	50.	50.	50.	900.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12 ##	1.699	1.864	3.079	1.699	0.176	0.42	1.699	1.699	1.699	2.846
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			73.141								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	12	0.03	0.03	0.06	0.005	0.	0.02	0.005	0.01	0.048	0.06

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	13	14.7	14.238	27.5	0.4	84.738	9.205	1.4	4.15	24.	26.54
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	7	1.1	1.414	3.7	0.3	1.348	1.161	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	13	355.	319.462	460.	139.	8199.936	90.553	164.2	251.5	383.	439.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	13	10.7	10.469	14.9	6.2	9.399	3.066	6.44	7.2	13.6	14.5
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12	1.	1.092	2.1	0.5	0.283	0.532	0.5	0.625	1.375	2.07
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	13	9.	12.077	48.	5.	122.077	11.049	5.4	7.	11.5	34.
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	13	8.4	8.338	8.7	7.9	0.044	0.21	7.98	8.2	8.45	8.66
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	13	8.4	8.289	8.7	7.9	0.047	0.216	7.98	8.2	8.45	8.66
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	13	0.004	0.005	0.013	0.002	0.	0.003	0.002	0.004	0.006	0.011
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	13	8.	7.915	8.3	7.2	0.093	0.305	7.36	7.7	8.15	8.26
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	13	8.	7.797	8.3	7.2	0.108	0.329	7.36	7.7	8.15	8.26
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	13	0.01	0.016	0.063	0.005	0.	0.015	0.006	0.007	0.02	0.048
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	13	130.	128.846	194.	51.	1704.641	41.287	61.	95.	162.	184.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	13	4.	21.077	181.	1.5	2448.494	49.482	1.5	1.5	8.5	127.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	13	1.5	3.154	21.	1.	29.849	5.463	1.	1.	1.75	14.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	13	3.	18.423	160.	1.5	1922.244	43.843	1.5	1.5	7.5	112.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	13 ##	0.02	0.032	0.09	0.02	0.001	0.023	0.02	0.02	0.035	0.082
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	13	0.01	0.014	0.03	0.005	0.	0.007	0.005	0.01	0.02	0.026
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	13	1.64	1.552	2.49	0.72	0.292	0.541	0.732	1.1	1.965	2.322
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	13	0.3	0.338	1.	0.1	0.048	0.218	0.14	0.2	0.4	0.76
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	13 ##	0.05	0.085	0.2	0.05	0.003	0.055	0.05	0.05	0.1	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	13	2.6	3.108	11.	0.5	6.481	2.546	0.74	1.95	3.35	8.12
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	13	170.	157.538	240.	68.	1941.769	44.066	88.4	123.	187.	222.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00940	CHLORIDE,TOTAL IN WATER MG/L	03/23/89-12/01/98	13	11.	12.538	22.	3.	37.436	6.118	4.2	6.5	17.5	21.2
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	13	17.	17.615	28.	11.	22.923	4.788	11.8	13.5	21.	26.
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	13 ##	50.	1288.462	8000.	50.	8874230.769	2978.965	50.	50.	150.	8000.
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	13 ##	1.699	2.108	3.903	1.699	0.667	0.816	1.699	1.699	2.151	3.903
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	128.095								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	13	0.03	0.035	0.07	0.005	0.001	0.024	0.005	0.01	0.055	0.07

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	11	13.1	12.945	28.4	0.7	95.255	9.76	0.8	3.1	22.6	27.26
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	11	4.5	6.945	22.	0.8	42.001	6.481	0.92	2.7	9.5	20.6
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	11	364.	341.273	407.	237.	3512.618	59.267	243.2	270.	390.	406.4
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	11	10.1	10.855	16.4	6.6	10.513	3.242	6.64	8.4	13.7	16.02
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	11	1.1	1.2	2.	0.5	0.41	0.64	0.5	0.5	1.8	2.
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	11	10.	10.045	14.	2.5	12.223	3.496	3.2	8.	13.	14.
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.5	8.505	9.2	7.95	0.162	0.403	7.98	8.2	8.9	9.16
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	11	8.5	8.36	9.2	7.95	0.185	0.43	7.98	8.2	8.9	9.16
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	11	0.003	0.004	0.011	0.001	0.	0.003	0.001	0.001	0.006	0.011
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	11	7.8	7.836	8.3	7.2	0.105	0.323	7.26	7.7	8.1	8.28
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	11	7.8	7.72	8.3	7.2	0.119	0.346	7.26	7.7	8.1	8.28
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	11	0.016	0.019	0.063	0.005	0.	0.017	0.005	0.008	0.02	0.057
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	11	138.	130.	161.	88.	700.4	26.465	88.2	106.	153.	161.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	11	5.	7.545	27.	1.5	62.773	7.923	1.5	1.5	12.	24.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	11 ##	1.5	1.864	4.	1.5	0.705	0.839	1.5	1.5	1.5	3.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	11	5.	6.545	24.	1.5	45.373	6.736	1.5	1.5	10.	21.4
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	11 ##	0.02	0.027	0.04	0.02	0.	0.01	0.02	0.02	0.04	0.04
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	11	0.01	0.028	0.16	0.005	0.002	0.045	0.005	0.01	0.03	0.136
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	11	1.27	1.372	2.33	0.76	0.251	0.501	0.76	1.09	1.62	2.292
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	11	0.2	0.245	0.3	0.2	0.003	0.052	0.2	0.2	0.3	0.3
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	11	0.1	0.087	0.2	0.05	0.002	0.045	0.05	0.05	0.1	0.18
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	11	3.9	4.173	6.6	2.	1.948	1.396	2.2	3.1	4.9	6.54
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	11	160.	155.273	190.	108.	957.818	30.949	108.8	116.	182.	189.6
00940	CHLORIDE,TOTAL IN WATER MG/L	03/23/89-12/01/98	11	11.	10.818	16.	5.	9.364	3.06	5.4	10.	13.	15.6
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	11	20.	19.	23.	14.	7.8	2.793	14.	18.	21.	22.6
31616p	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	11 ##	50.	109.091	300.	50.	9409.091	97.	50.	50.	100.	300.
31616p	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-12/01/98	11 ##	1.699	1.923	2.477	1.699	0.093	0.305	1.699	1.699	2.	2.477
31616p	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C			GEOMETRIC MEAN =	83.666								
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	11	0.04	0.045	0.07	0.02	0.	0.018	0.022	0.03	0.06	0.07

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	12.5	13.492	29.7	0.	86.703	9.311	0.81	5.35	21.075	27.54
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	12	5.15	13.442	67.	0.2	433.364	20.817	0.71	3.	10.425	60.7
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	290.5	296.5	386.	210.	3852.091	62.065	213.6	236.5	359.	384.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	12	10.1	10.342	14.4	6.8	7.355	2.712	6.95	7.7	13.2	14.28
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12 ##	0.75	0.917	2.	0.5	0.311	0.557	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	12	8.	9.167	18.	2.5	31.015	5.569	2.5	6.	15.25	18.
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.2	8.15	9.	7.4	0.194	0.44	7.49	7.725	8.475	8.85
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.2	7.958	9.	7.4	0.234	0.483	7.49	7.725	8.475	8.85

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.006	0.011	0.04	0.001	0.	0.011	0.002	0.003	0.019	0.034
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	12	8.1	8.033	8.2	7.7	0.033	0.183	7.73	7.9	8.2	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	12	8.1	7.996	8.2	7.7	0.035	0.187	7.73	7.9	8.2	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.008	0.01	0.02	0.006	0.	0.005	0.006	0.006	0.013	0.019
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	12	107.5	118.417	163.	83.	927.538	30.456	83.	90.25	153.	162.1
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	6.	14.583	66.	1.5	458.947	21.423	1.5	3.	11.75	62.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	12##	1.5	2.417	8.	1.5	4.765	2.183	1.5	1.5	1.5	7.4
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	5.	12.583	58.	1.5	362.356	19.036	1.5	1.5	10.	54.7
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12##	0.02	0.032	0.07	0.02	0.	0.016	0.02	0.02	0.04	0.064
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	0.01	0.014	0.03	0.005	0.	0.008	0.005	0.006	0.02	0.027
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	1.615	1.533	2.2	1.11	0.107	0.327	1.11	1.255	1.73	2.065
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.3	0.367	0.8	0.1	0.052	0.227	0.1	0.2	0.55	0.77
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	12##	0.05	0.087	0.2	0.05	0.003	0.057	0.05	0.05	0.1	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	9	3.1	3.589	7.7	1.9	3.201	1.789	1.9	2.45	4.35	7.7
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	12	131.	140.917	193.	104.	988.629	31.442	104.3	113.	175.5	189.7
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	12	7.5	7.167	10.	2.5	6.652	2.579	2.5	6.	9.	10.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	12	16.	15.5	19.	12.	4.273	2.067	12.3	13.5	16.75	18.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	11	100.	322.727	1100.	50.	165681.818	407.04	50.	50.	700.	1080.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	11	2.	2.18	3.041	1.699	0.308	0.555	1.699	1.699	2.845	3.033
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			151.464								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	12	0.03	0.038	0.1	0.01	0.001	0.027	0.01	0.013	0.05	0.091

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	13.75	14.658	24.5	4.7	57.057	7.554	5.15	8.2	22.65	24.2
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	12	6.35	34.017	316.	0.2	7925.703	89.026	1.52	5.075	17.2	227.8
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	331.	315.583	378.	185.	2384.992	48.836	210.2	305.75	341.	367.8
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	12	9.15	9.475	13.6	5.7	6.564	2.562	5.88	7.175	11.675	13.15
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12##	0.75	1.167	4.	0.5	1.288	1.135	0.5	0.5	1.	3.7
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	12	8.5	11.833	45.	2.5	133.379	11.549	2.5	6.25	12.5	37.8
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.1	8.125	8.4	8.	0.011	0.106	8.	8.1	8.175	8.34
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.1	8.114	8.4	8.	0.011	0.106	8.	8.1	8.175	8.34
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.008	0.008	0.01	0.004	0.	0.002	0.005	0.007	0.008	0.01
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	12	8.	8.008	8.2	7.8	0.021	0.144	7.8	7.9	8.175	8.2
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	12	8.	7.987	8.2	7.8	0.021	0.146	7.8	7.9	8.175	8.2
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.01	0.01	0.016	0.006	0.	0.003	0.006	0.007	0.013	0.016
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	12	142.5	133.75	155.	68.	570.205	23.879	82.4	125.25	149.	154.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	8.5	48.708	430.	1.5	14660.475	121.08	2.25	5.25	25.25	318.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	12##	1.5	5.458	42.	1.5	134.975	11.618	1.5	1.5	2.625	31.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	11	6.	46.591	388.	1.5	13031.141	114.154	1.8	4.	25.	320.6
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12##	0.02	0.041	0.14	0.02	0.002	0.041	0.02	0.02	0.045	0.131
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	0.02	0.019	0.06	0.005	0.	0.015	0.005	0.006	0.02	0.051
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	1.115	1.144	2.15	0.34	0.306	0.553	0.382	0.648	1.668	2.027
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.4	0.504	2.2	0.05	0.31	0.557	0.065	0.3	0.5	1.72
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	12	0.1	0.117	0.5	0.05	0.015	0.123	0.05	0.05	0.1	0.38
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	12	152.5	150.833	187.	96.	480.152	21.912	107.1	147.5	157.5	183.1
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	12	9.5	9.917	16.	7.	6.265	2.503	7.3	8.	11.	14.8
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	12	15.5	15.125	20.	2.5	19.278	4.391	5.95	14.25	17.	19.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12##	50.	1079.167	8000.	50.	6232935.606	2496.585	50.	50.	100.	6890.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12##	1.699	2.119	3.903	1.699	0.614	0.784	1.699	1.699	2.	3.822
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			131.557								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	12	0.05	0.067	0.29	0.02	0.005	0.072	0.023	0.033	0.06	0.224

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

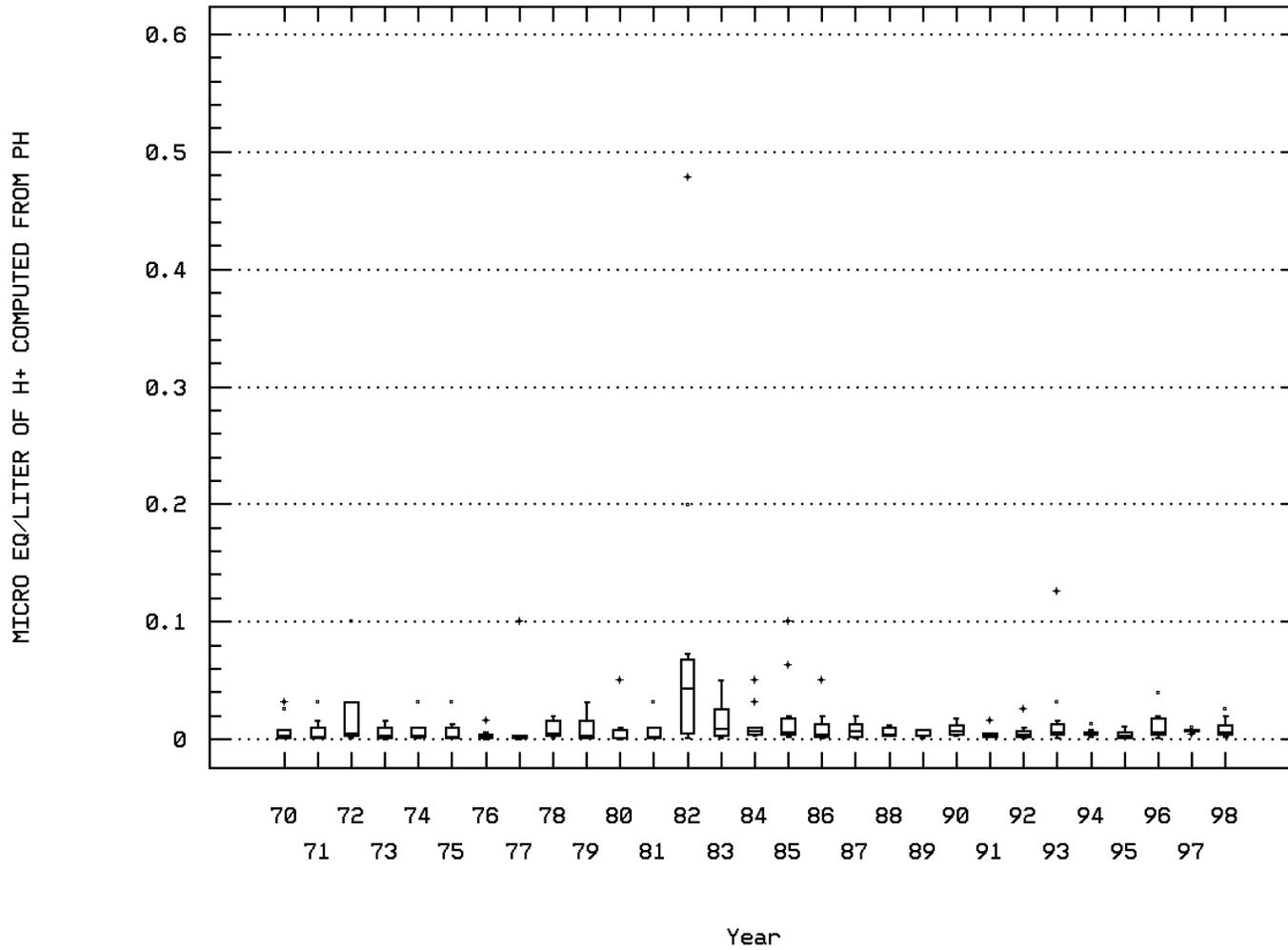
Annual Analysis for 1998 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	12	17.6	15.692	25.9	2.6	63.486	7.968	3.11	9.25	23.625	25.78
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	05/04/94-12/01/98	12	5.05	5.517	18.7	1.4	21.365	4.622	1.4	2.15	6.55	15.34
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	1	175.	175.	175.	175.	0.	0.	**	**	**	**
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	12	388.	356.917	467.	216.	6813.72	82.545	224.7	294.25	433.25	461.
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	12	10.5	10.433	15.5	5.4	11.501	3.391	5.58	7.575	13.1	15.47
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	12 ##	1.	1.	1.	1.	0.	0.	1.	1.	1.	1.
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	12	7.	6.292	11.	2.5	12.839	3.583	2.5	2.5	9.75	11.
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.2	8.183	8.8	7.6	0.125	0.354	7.63	7.875	8.475	8.71
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	12	8.2	8.053	8.8	7.6	0.144	0.379	7.63	7.875	8.475	8.71
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.006	0.009	0.025	0.002	0.	0.007	0.002	0.003	0.014	0.024
00403	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	12	8.1	7.908	8.6	6.9	0.306	0.553	6.99	7.4	8.35	8.57
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	12	8.089	7.574	8.6	6.9	0.428	0.654	6.99	7.4	8.35	8.57
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	12	0.008	0.027	0.126	0.003	0.001	0.037	0.003	0.005	0.04	0.107
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	12	156.	148.5	208.	86.	1524.455	39.044	87.8	114.75	168.5	206.8
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	7.	8.583	17.	1.5	28.947	5.38	1.5	4.25	14.	16.1
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	12 ##	1.5	1.625	3.	1.5	0.188	0.433	1.5	1.5	1.5	2.55
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	12	6.	7.167	15.	1.5	21.561	4.643	1.5	3.25	11.75	14.1
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.02	0.023	0.05	0.02	0.	0.009	0.02	0.02	0.02	0.041
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12 ##	0.008	0.011	0.03	0.005	0.	0.008	0.005	0.005	0.018	0.027
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	12	1.215	1.18	1.62	0.44	0.134	0.366	0.479	1.038	1.495	1.59
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	12	0.4	0.375	0.6	0.2	0.015	0.122	0.2	0.3	0.475	0.57
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	12	0.1	0.117	0.2	0.05	0.003	0.054	0.05	0.1	0.175	0.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	12	153.	162.75	242.	102.	2233.841	47.264	103.8	127.25	209.75	236.6
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	12	11.	10.5	15.	5.	12.818	3.58	5.3	7.	14.	14.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	12	17.5	16.75	21.	12.	10.205	3.194	12.3	13.25	19.75	20.7
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12 ##	50.	83.333	200.	50.	3333.333	57.735	50.	50.	100.	200.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	12 ##	1.699	1.849	2.301	1.699	0.058	0.24	1.699	1.699	2.	2.301
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			70.711								
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	12	0.045	0.058	0.14	0.02	0.001	0.038	0.023	0.03	0.078	0.134

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0777 Parameter Code: 00400

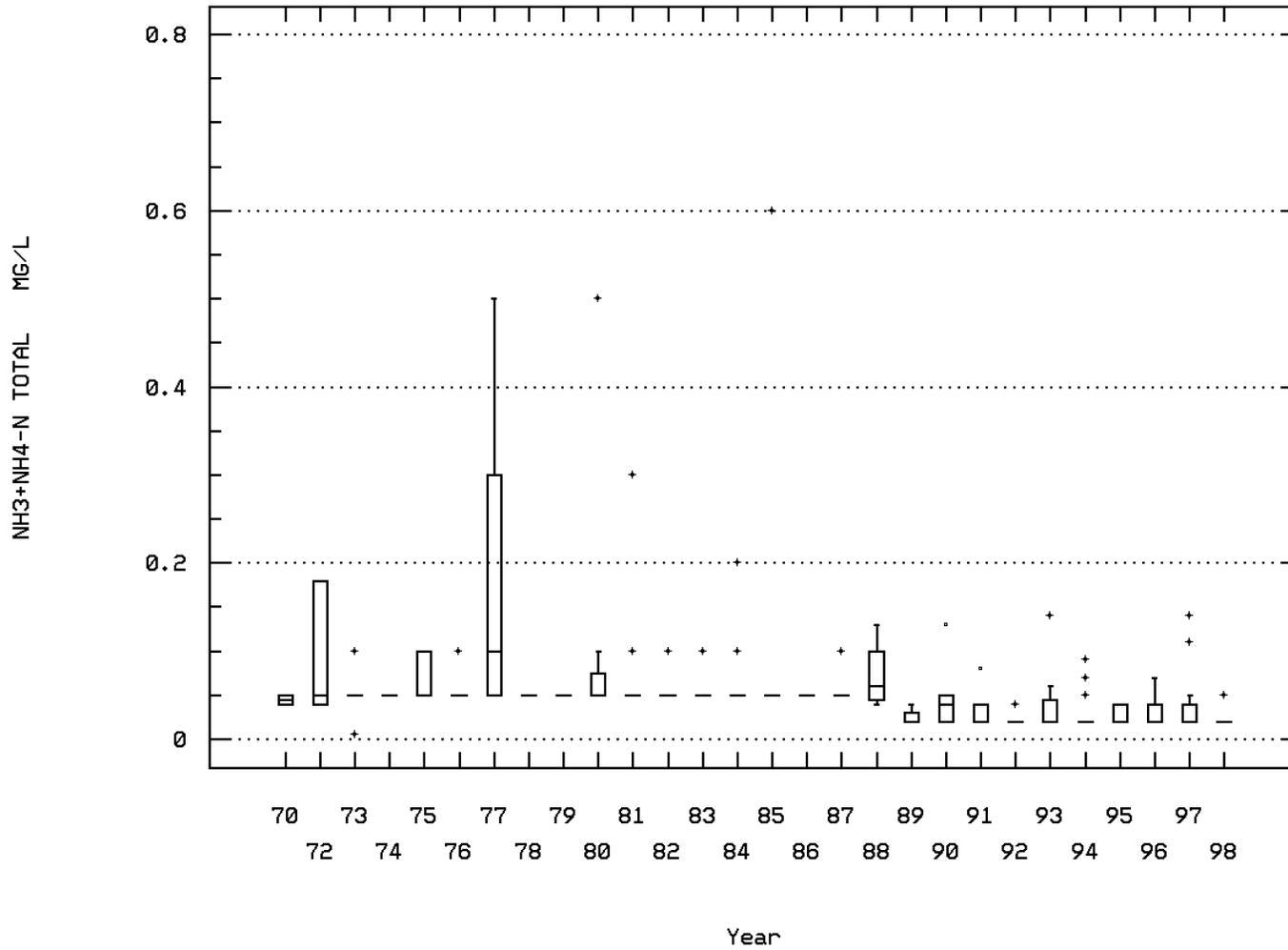
MICRO EQ/LITER OF H+ COMPUTED FROM PH



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00610

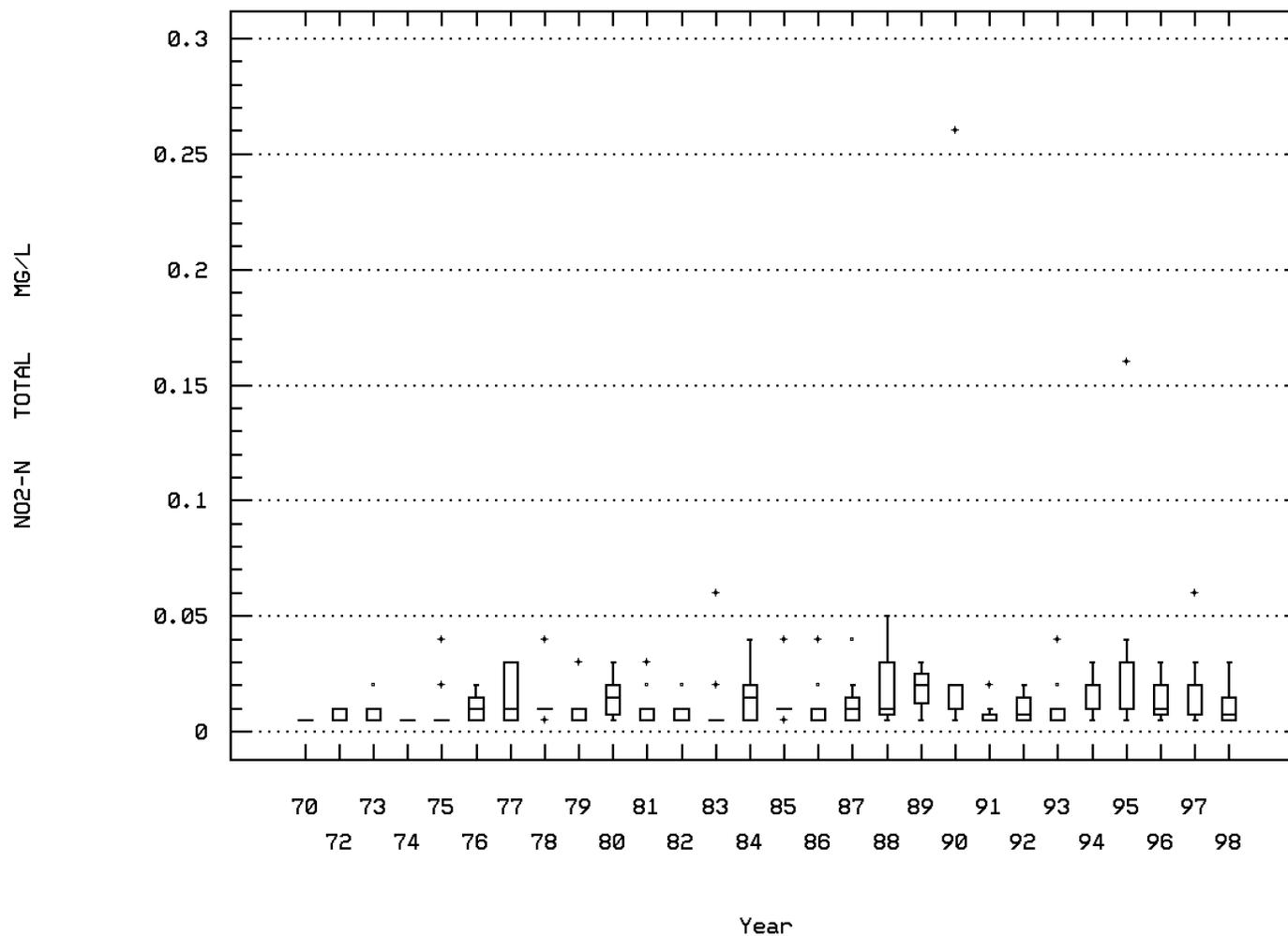
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00615

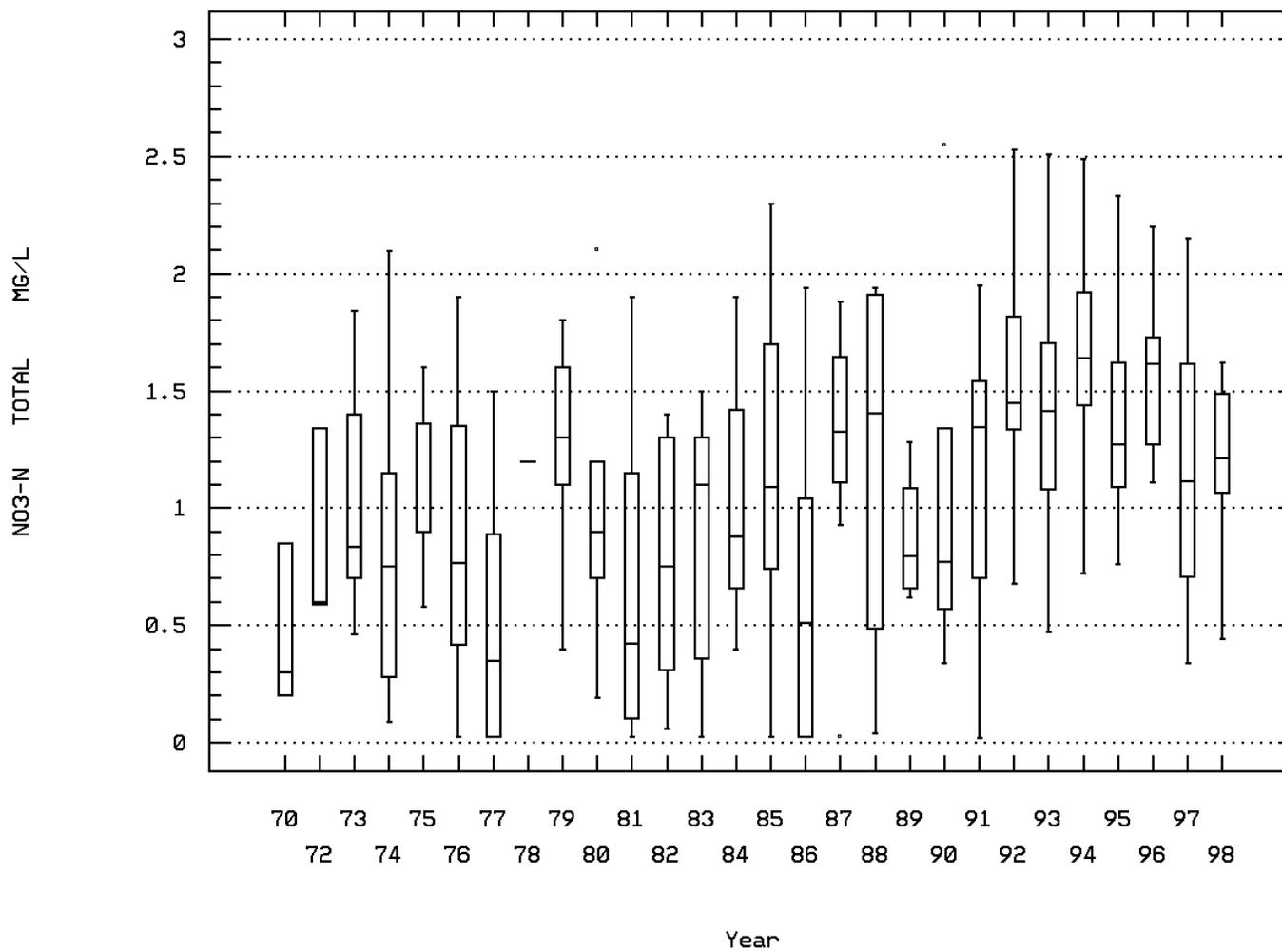
NITRITE NITROGEN, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00620

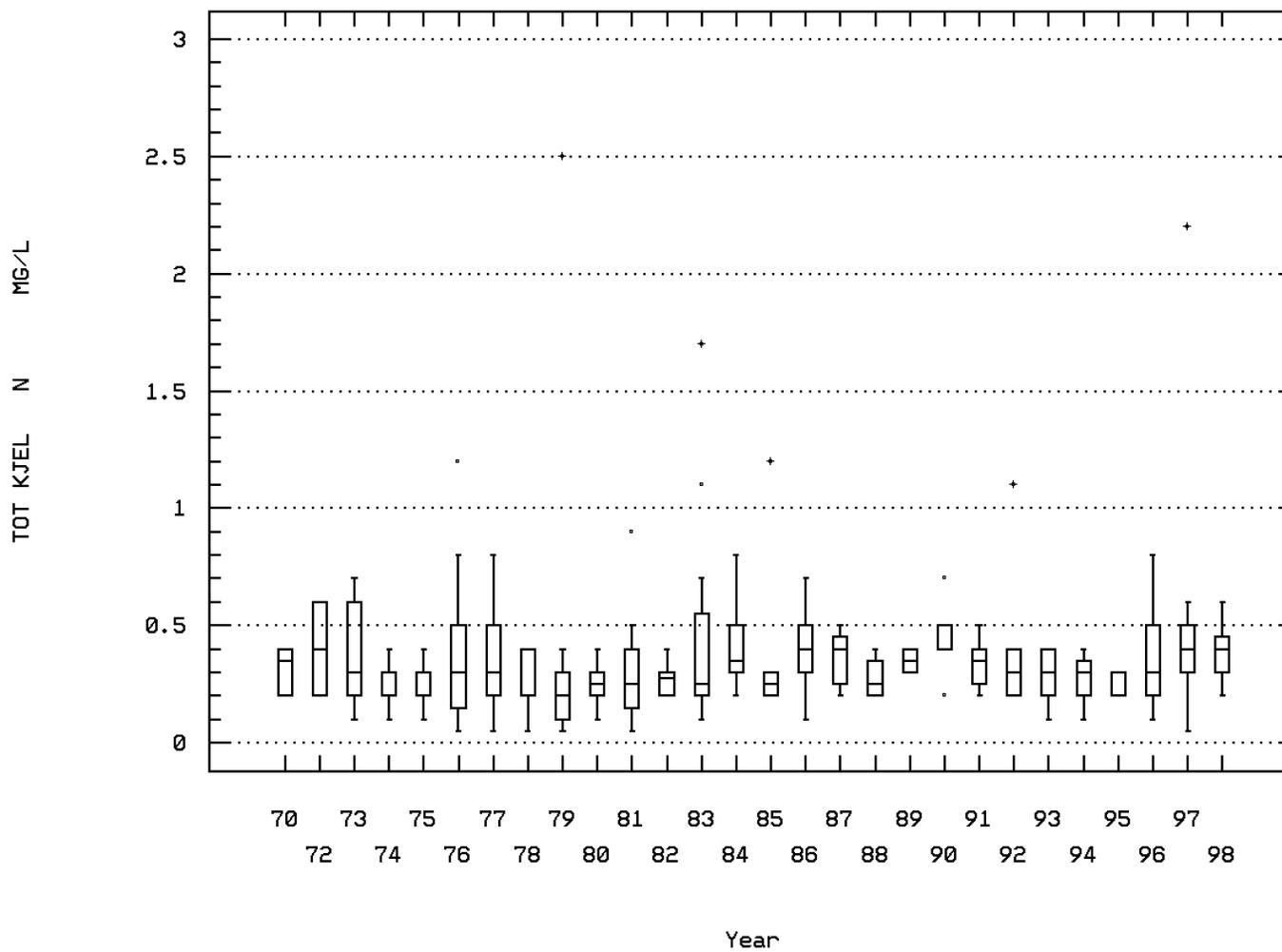
NITRATE NITROGEN, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00625

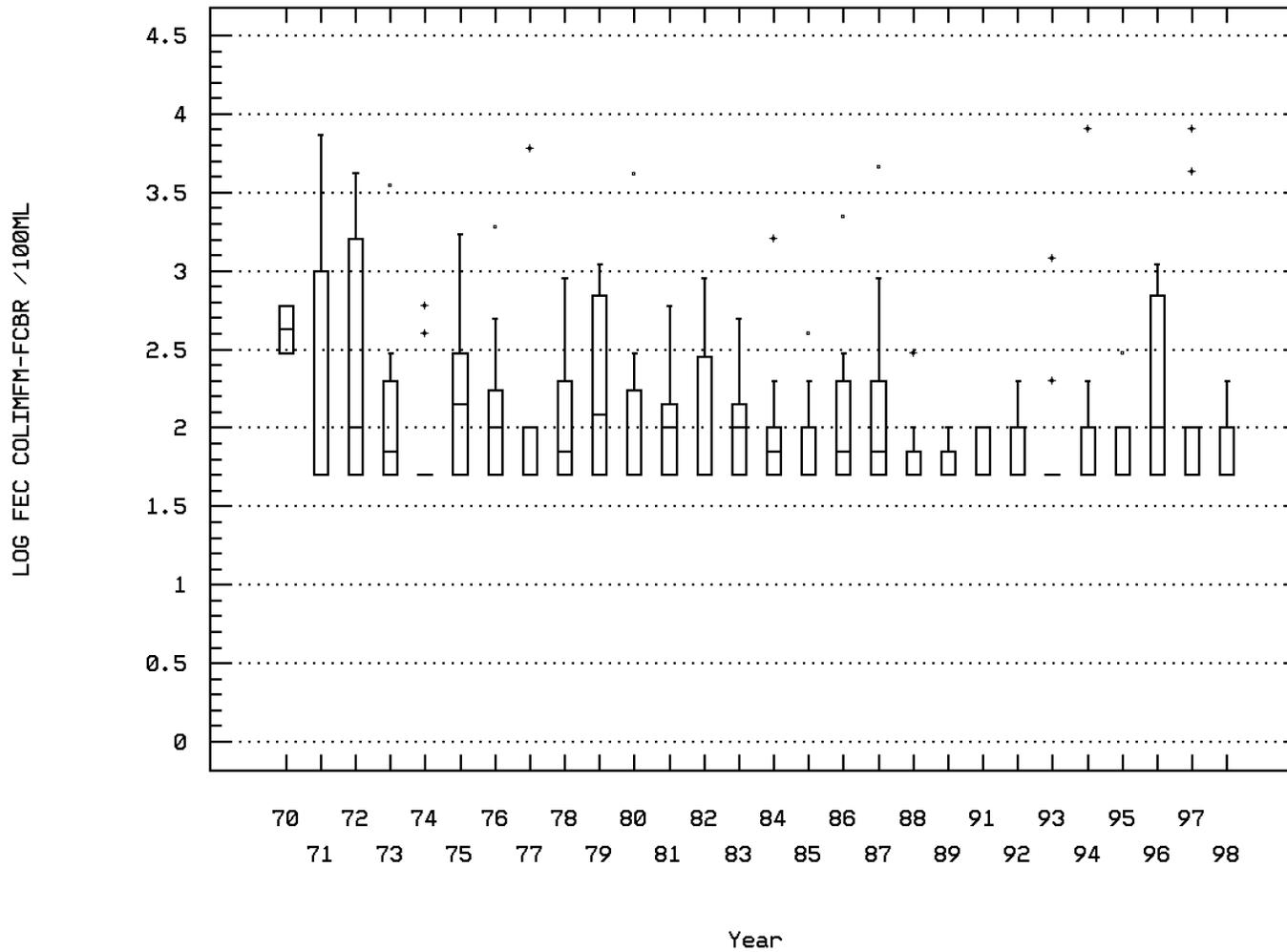
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 31616

LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	94	24.	22.998	30.	0.	21.209	4.605	18.1	21.075	25.425	28.05
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/13/71-04/02/92	6	5.	4.55	6.8	1.7	4.027	2.007	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	32	352.	351.156	441.	262.	1205.814	34.725	320.	329.	370.75	393.7
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	31	362.	345.161	447.	91.	4467.273	66.838	250.2	328.	387.	402.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	26	7.2	7.873	13.1	5.4	3.7	1.924	5.91	6.675	8.725	11.24
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	68	8.2	8.369	12.9	4.2	3.27	1.808	5.97	7.3	9.75	10.55
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	63	1.	1.262	7.	0.5	1.37	1.17	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	63	10.	10.437	28.	0.5	34.318	5.858	2.5	6.	14.	19.6
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	90	8.4	8.35	9.5	7.3	0.239	0.489	7.7	8.075	8.53	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	90	8.4	8.088	9.5	7.3	0.309	0.556	7.7	8.075	8.53	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	90	0.004	0.008	0.05	0.	0.	0.01	0.001	0.003	0.008	0.02
00403p	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	67	8.2	8.142	8.8	7.2	0.077	0.278	7.8	8.	8.3	8.4
00403p	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	67	8.2	8.029	8.8	7.2	0.09	0.3	7.8	8.	8.3	8.4
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	67	0.006	0.009	0.063	0.002	0.	0.01	0.004	0.005	0.01	0.016
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	67	144.	139.821	169.	63.	398.301	19.957	122.8	130.	152.	160.2
00500	RESIDUE, TOTAL (MG/L)	03/04/70-08/04/92	13	224.	222.692	250.	182.	381.064	19.521	189.6	208.5	237.5	248.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/04/70-08/04/92	13	55.	84.308	400.	14.	9823.231	99.112	23.2	41.5	84.	291.2
00510p	RESIDUE, TOTAL FIXED (MG/L)	03/04/70-07/07/97	14	176.	153.929	196.	10.	2889.148	53.751	46.5	121.5	192.	194.5
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	63	6.	8.762	66.	1.5	100.273	10.014	2.5	2.5	11.	16.2
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	63	2.	2.746	8.	0.	3.499	1.871	1.	1.5	3.	6.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	62	3.5	6.653	58.	0.	80.611	8.978	1.5	2.5	7.25	12.7
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	76 ##	0.05	0.046	0.13	0.02	0.	0.021	0.02	0.033	0.05	0.05
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	76	0.01	0.012	0.06	0.005	0.	0.011	0.005	0.005	0.018	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	73	0.66	0.763	2.099	0.02	0.331	0.575	0.025	0.325	1.14	1.65
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	76	0.4	0.382	0.8	0.05	0.024	0.154	0.2	0.3	0.5	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	59 ##	0.05	0.081	0.2	0.05	0.002	0.04	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	32	0.02	0.026	0.07	0.005	0.	0.019	0.007	0.01	0.038	0.06
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	54	4.05	4.731	13.	1.	6.27	2.504	2.25	2.875	5.125	9.
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	65	162.	165.031	358.	108.	1004.999	31.702	140.	147.5	177.5	188.8
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	32	13.5	14.641	47.	2.5	59.584	7.719	8.3	10.25	17.	22.7
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	43	18.	17.674	25.	12.	5.558	2.358	14.4	16.	19.	20.
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-05/29/85	11 ##	5.	5.045	10.	0.5	4.523	2.127	1.4	5.	5.	9.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-05/29/85	11 ##	5.	5.	5.	0.	0.	0.	5.	5.	5.	5.
01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-05/29/85	11 ##	5.	6.045	19.	0.5	35.023	5.918	0.6	1.	8.	18.2
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-05/29/85	18	20.	43.337	240.	0.06	4405.577	66.375	4.506	5.	40.	186.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	79 ##	50.	391.772	8000.	50.	1149194.255	1072.005	50.	50.	100.	1100.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	79 ##	1.699	2.048	3.903	1.699	0.302	0.55	1.699	1.699	2.	3.041
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	79 ##	1.699	2.048	3.903	1.699	0.302	0.55	1.699	1.699	2.	3.041
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	17 ##	0.05	0.062	0.1	0.05	0.	0.022	0.05	0.05	0.075	0.1
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	43	0.05	0.048	0.12	0.005	0.001	0.03	0.01	0.02	0.06	0.096
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-05/29/85	12 ##	0.25	0.229	0.5	0.15	0.01	0.099	0.15	0.15	0.25	0.425

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	131	6.	6.766	20.9	-0.6	21.79	4.668	1.	3.2	10.	13.1
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/13/71-04/02/92	7	3.4	5.2	19.	1.	38.4	6.197	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	47	336.	326.745	644.	163.	10006.933	100.035	186.2	268.	394.	426.2
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	41	317.	323.585	467.	185.	6415.149	80.095	216.8	263.	384.	457.2
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	34	12.9	12.768	18.7	8.7	3.86	1.965	10.15	11.35	13.925	15.15
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	96	11.8	11.774	16.	5.7	3.368	1.835	9.4	10.6	13.075	14.26
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	90	1.	1.584	8.	0.5	1.163	1.079	0.55	1.	2.	3.
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	88	8.	9.483	45.	0.5	45.399	6.738	2.95	6.	11.	16.1
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	128	8.4	8.293	9.3	6.9	0.352	0.594	7.49	7.905	8.8	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	128	8.4	7.867	9.3	6.9	0.536	0.732	7.49	7.905	8.8	9.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	128	0.004	0.014	0.126	0.001	0.001	0.023	0.001	0.002	0.012	0.032
00403p	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	90	8.	7.999	8.9	6.7	0.164	0.405	7.5	7.875	8.2	8.4
00403p	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	90	8.	7.754	8.9	6.7	0.225	0.474	7.5	7.875	8.2	8.4
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	90	0.01	0.018	0.2	0.001	0.001	0.03	0.004	0.006	0.013	0.032
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	91	131.	129.033	208.	45.	1518.654	38.97	74.4	98.	156.	175.8
00500	RESIDUE, TOTAL (MG/L)	03/04/70-08/04/92	14	226.	262.857	920.	137.	36737.209	191.67	156.5	197.25	239.75	585.
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/04/70-08/04/92	14	58.	58.429	124.	32.	533.802	23.104	32.5	42.	65.25	100.5
00510p	RESIDUE, TOTAL FIXED (MG/L)	03/04/70-07/07/97	14	169.	204.429	796.	104.	29492.264	171.733	117.5	149.	174.5	493.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	90	2.5	31.9	800.	1.	12704.349	112.714	1.5	2.5	7.25	45.5
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	89 ##	2.5	4.208	56.	0.	60.982	7.809	1.5	1.5	2.75	6.
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	90 ##	2.5	20.05	424.	0.5	4846.287	69.615	1.5	2.	5.	33.8
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	117 ##	0.05	0.059	0.6	0.005	0.006	0.079	0.02	0.02	0.05	0.1
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	116	0.01	0.014	0.26	0.005	0.001	0.028	0.005	0.005	0.01	0.03
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	113	1.389	1.328	2.55	0.025	0.312	0.558	0.56	1.04	1.7	1.968
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	116	0.2	0.312	2.5	0.05	0.113	0.337	0.1	0.2	0.3	0.4
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	89 ##	0.05	0.094	0.9	0.05	0.011	0.106	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	54	0.03	0.057	0.75	0.005	0.011	0.103	0.01	0.02	0.06	0.1
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	71	3.9	4.315	22.	0.5	14.018	3.744	1.14	2.	5.	7.8
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	86	152.	151.64	242.	0.	1777.645	42.162	102.	119.75	180.5	210.5
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	41	10.	10.671	22.	2.5	18.62	4.315	6.	8.	13.	16.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	64	20.	18.844	28.	0.5	19.618	4.429	13.5	17.	21.	23.
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-05/29/85	18 ##	5.	6.944	20.	5.	15.114	3.888	5.	5.	10.	11.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-05/29/85	18 ##	5.	6.667	20.	5.	14.706	3.835	5.	5.	6.25	11.
01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-05/29/85	18 ##	5.	6.083	20.	1.	32.831	5.73	1.	1.375	9.25	18.2
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-05/29/85	28 ##	5.	16.073	110.	0.01	708.033	26.609	4.502	5.	10.	46.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	123 ##	50.	299.593	8000.	50.	890799.014	943.821	50.	50.	200.	600.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	123 ##	1.699	2.019	3.903	1.699	0.225	0.474	1.699	1.699	2.301	2.778
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			104.366								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	27 ##	0.05	0.096	1.	0.05	0.033	0.182	0.05	0.05	0.1	0.1
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	61	0.04	0.064	0.8	0.005	0.012	0.109	0.005	0.03	0.06	0.09
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-05/29/85	18 ##	0.2	0.214	0.5	0.15	0.008	0.087	0.15	0.15	0.25	0.275

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-12/01/98	86	18.35	17.488	27.8	6.7	30.515	5.524	9.34	13.025	21.925	25.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	04/13/71-04/02/92	12	3.35	4.733	14.	0.5	19.802	4.45	0.62	1.625	8.55	13.16
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	03/01/79-01/05/98	32	297.	282.125	408.	167.	3652.113	60.433	190.2	237.25	329.25	342.7
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	07/10/89-12/01/98	26	297.5	301.154	398.	139.	3491.575	59.09	234.9	268.75	338.	391.3
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-12/01/98	20	8.55	9.21	16.4	6.8	4.788	2.188	7.2	7.775	10.425	11.54
00300	OXYGEN, DISSOLVED MG/L	03/04/70-04/02/92	68	9.6	9.741	14.4	6.1	2.97	1.723	7.68	8.6	10.6	12.42
00310p	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-12/01/98	60	1.	1.445	7.	0.5	0.968	0.984	1.	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	03/01/79-12/01/98	58	8.5	9.483	48.	0.5	42.035	6.483	5.	7.	11.	13.1
00400p	PH (STANDARD UNITS)	03/04/70-12/01/98	86	8.255	8.29	9.2	6.32	0.246	0.496	7.8	8.	8.625	9.
00400p	CONVERTED PH (STANDARD UNITS)	03/04/70-12/01/98	86	8.255	7.824	9.2	6.32	0.466	0.682	7.8	8.	8.625	9.
00400p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	86	0.006	0.015	0.479	0.001	0.003	0.055	0.001	0.002	0.01	0.016
00403p	PH, LAB, STANDARD UNITS SU	03/04/70-12/01/98	59	8.	7.939	8.7	6.6	0.158	0.397	7.4	7.7	8.2	8.4
00403p	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-12/01/98	59	8.	7.706	8.7	6.6	0.213	0.461	7.4	7.7	8.2	8.4
00403p	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-12/01/98	59	0.01	0.02	0.251	0.002	0.001	0.035	0.004	0.006	0.02	0.04
00410p	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-12/01/98	59	122.	117.593	170.	10.	1117.797	33.433	68.	94.	143.	159.
00500	RESIDUE, TOTAL (MG/L)	03/04/70-08/04/92	17	175.	182.765	238.	148.	843.316	29.04	149.6	157.	213.	226.8
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/04/70-08/04/92	17	46.	47.235	85.	19.	237.691	15.417	23.	38.5	57.	68.2
00510p	RESIDUE, TOTAL FIXED (MG/L)	03/04/70-07/07/97	17	129.	135.529	179.	93.	717.64	26.789	100.2	117.	164.	175.
00530p	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-12/01/98	61	8.	15.861	181.	0.5	885.668	29.76	2.5	4.5	13.5	28.4
00535p	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-12/01/98	59	2.	3.297	21.	0.	12.225	3.496	1.	1.	4.	8.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

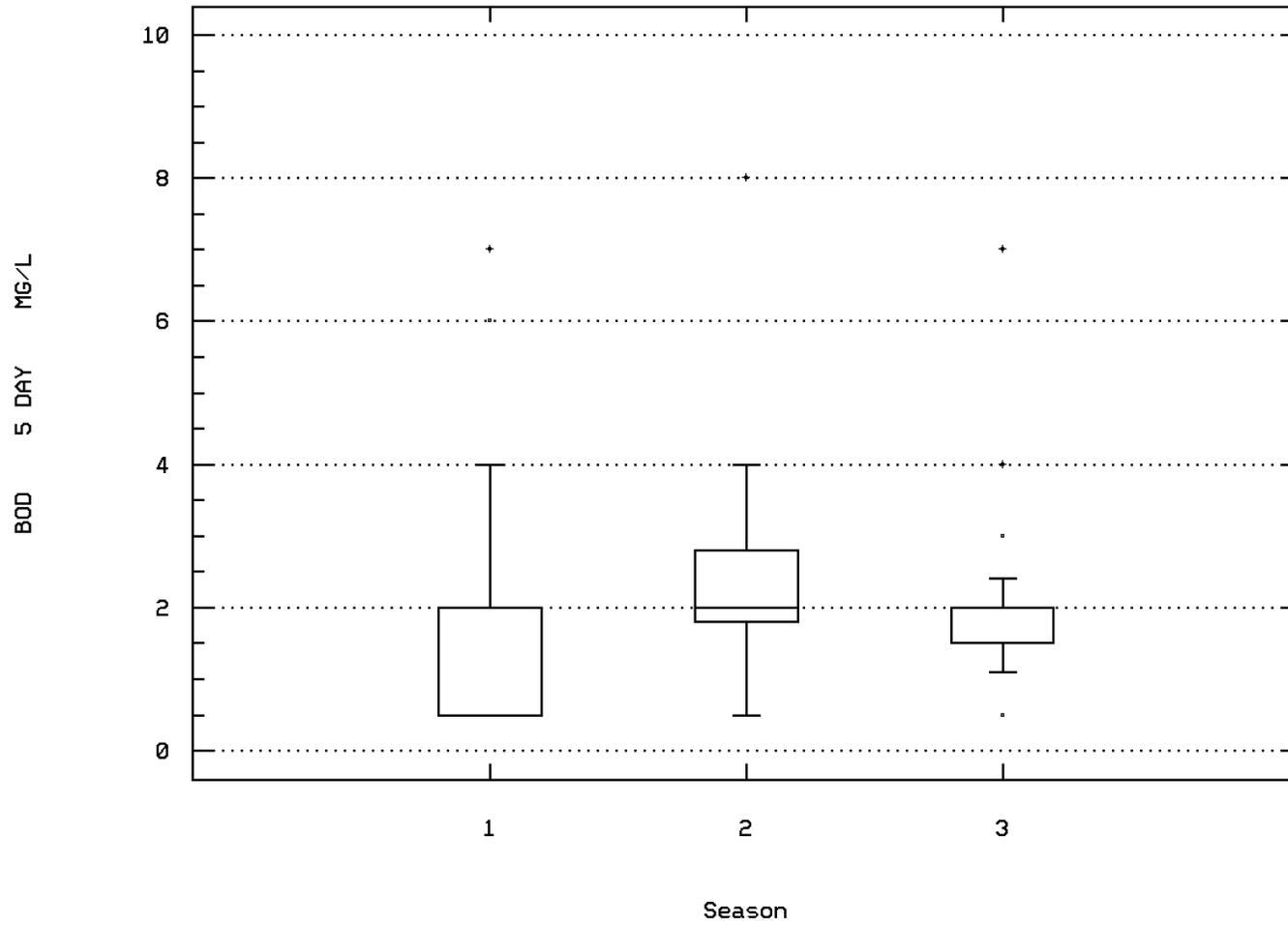
Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0777

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00540p	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-12/01/98	61	6.	12.959	160.	0.5	720.669	26.845	2.	2.5	10.	25.
00610p	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-12/01/98	76 ##	0.05	0.054	0.5	0.02	0.003	0.057	0.02	0.025	0.05	0.093
00615p	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	77	0.01	0.013	0.05	0.005	0.	0.009	0.005	0.005	0.02	0.02
00620p	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-12/01/98	76	0.93	1.003	2.51	0.025	0.234	0.484	0.382	0.71	1.35	1.614
00625p	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-12/01/98	74	0.3	0.374	1.7	0.1	0.057	0.239	0.2	0.2	0.4	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	03/01/79-12/01/98	54	0.1	0.092	0.3	0.05	0.003	0.055	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	03/01/79-04/02/92	38	0.04	0.048	0.2	0.005	0.001	0.036	0.01	0.028	0.07	0.081
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/09/77-09/04/96	52	3.85	4.315	11.	1.4	5.479	2.341	2.	2.625	5.	8.
00900p	HARDNESS, TOTAL (MG/L AS CaCO3)	11/12/73-12/01/98	55	140.	141.364	226.	62.	1422.31	37.714	88.	119.	160.	195.6
00940	CHLORIDE, TOTAL IN WATER MG/L	03/23/89-12/01/98	27	8.	8.667	18.	3.	9.231	3.038	6.	6.	10.	12.2
00945	SULFATE, TOTAL (MG/L AS SO4)	11/23/82-12/01/98	37	16.	15.784	23.	6.	8.063	2.84	13.	14.	17.	19.
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-05/29/85	11 ##	5.	5.045	10.	0.5	4.523	2.127	1.4	5.	5.	9.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-05/29/85	11 ##	5.	9.091	20.	5.	34.091	5.839	5.	5.	10.	20.
01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-05/29/85	9 ##	5.	4.611	10.	0.5	11.486	3.389	0.5	1.	7.	10.
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-05/29/85	20	5.	16.253	180.	0.01	1533.796	39.164	0.012	5.	10.	29.
31616p	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	77 ##	50.	555.455	8000.	50.	2228659.33	1492.869	50.	50.	200.	1200.
31616p	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-12/01/98	77 ##	1.699	2.102	3.903	1.699	0.349	0.591	1.699	1.699	2.301	3.074
31616p	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			126.552								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-01/04/79	19 ##	0.05	0.061	0.2	0.025	0.001	0.038	0.025	0.05	0.05	0.1
70507p	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-12/01/98	38	0.05	0.044	0.13	0.005	0.001	0.025	0.01	0.02	0.053	0.07
71900	MERCURY, TOTAL (UG/L AS HG)	09/09/70-05/29/85	9 ##	0.25	0.361	0.9	0.15	0.079	0.281	0.15	0.2	0.525	0.9

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station: SHEN0777 Parameter Code: 00310

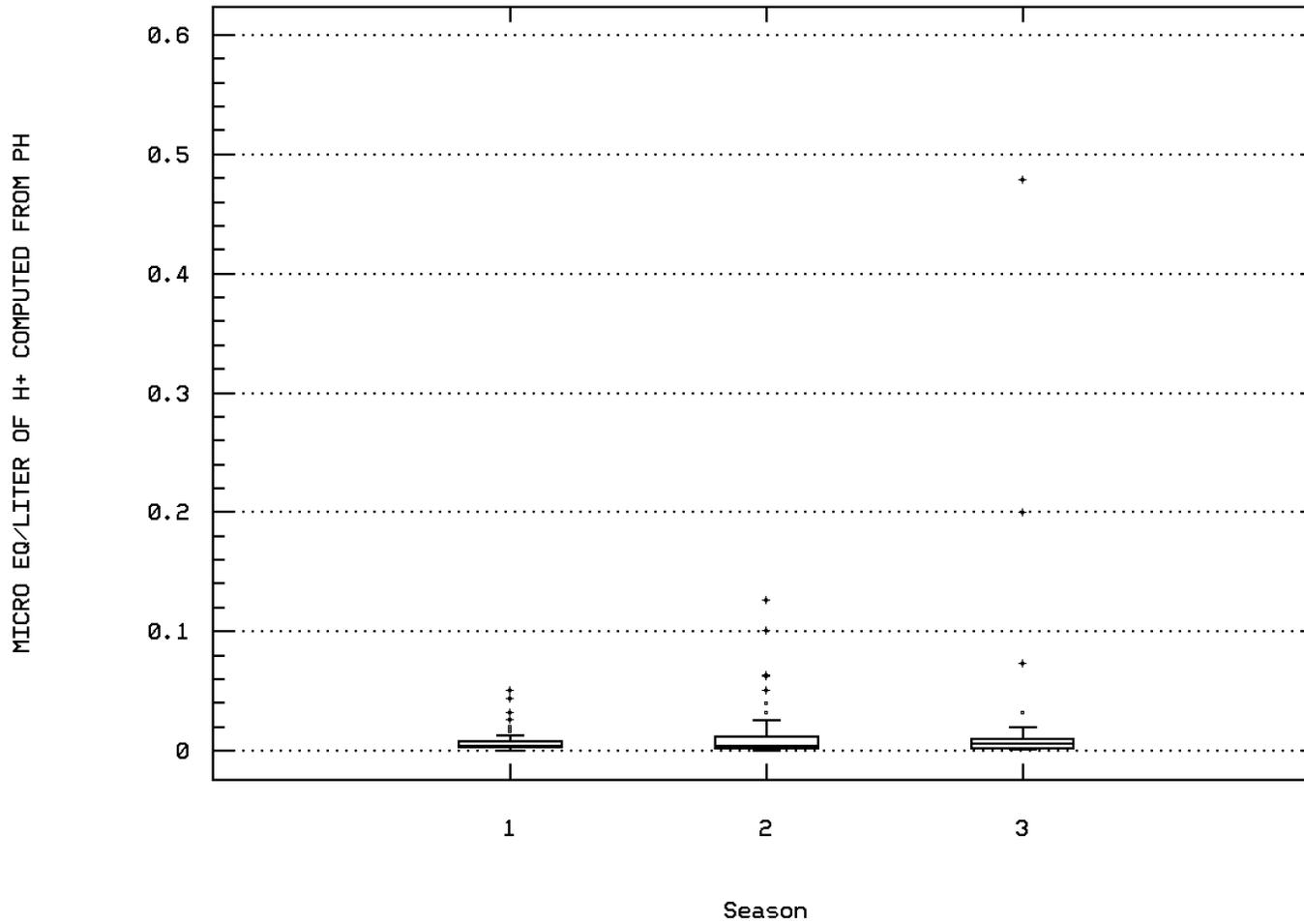
BOD, 5 DAY, 20 DEG C



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00400

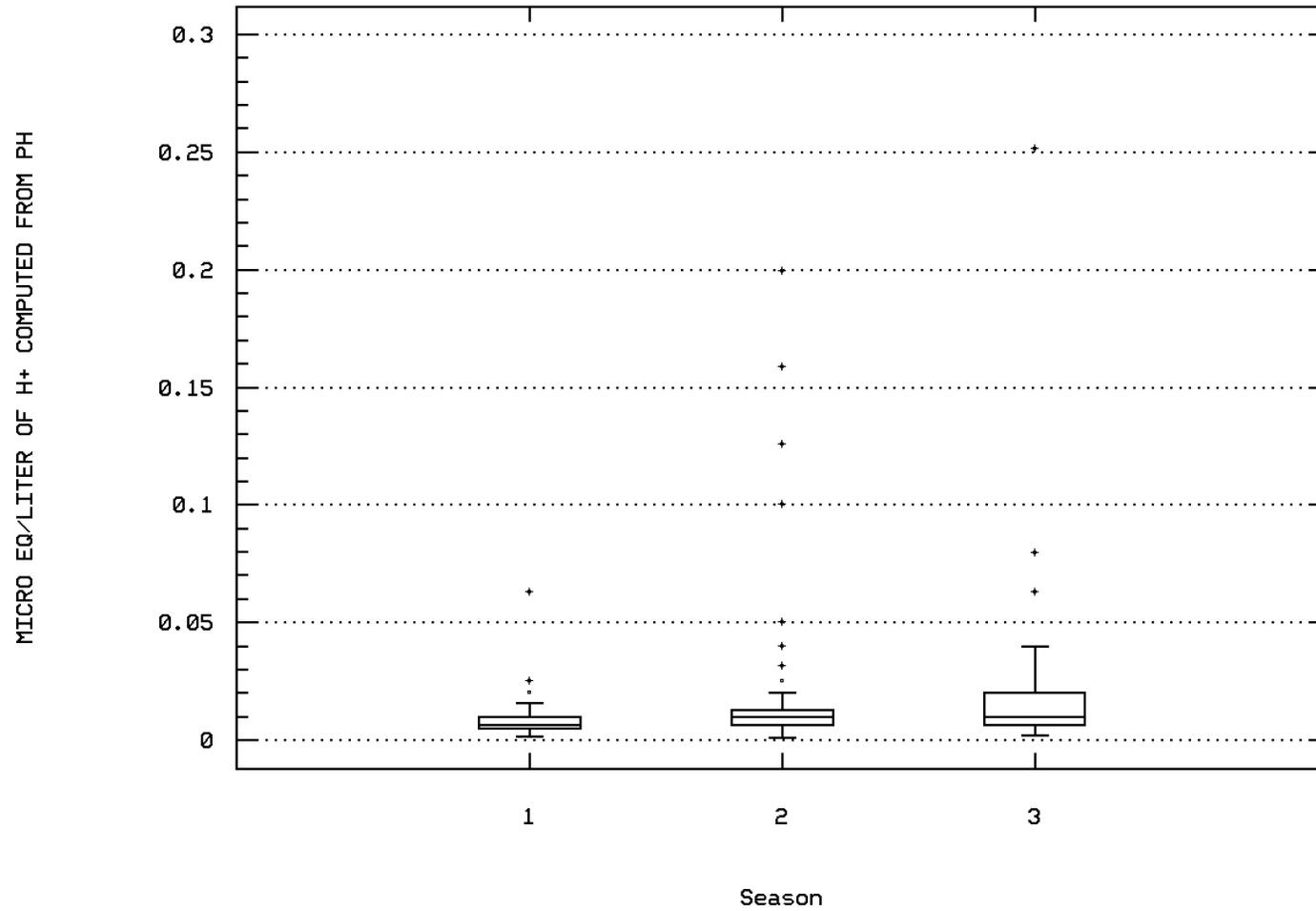
MICRO EQ/LITER OF H+ COMPUTED FROM PH



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00403

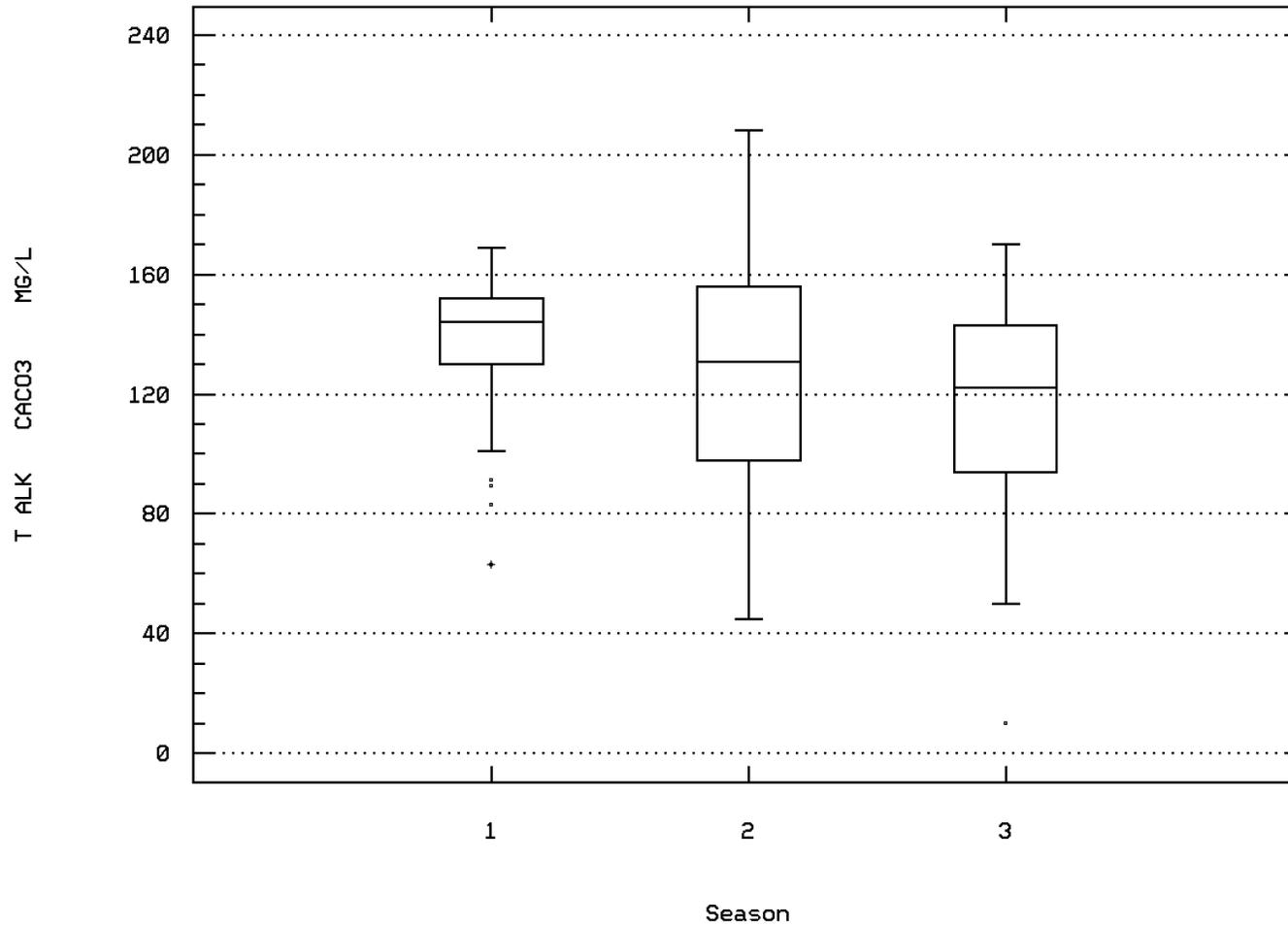
MICRO EQ/LITER OF H+ COMPUTED FROM PH



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00410

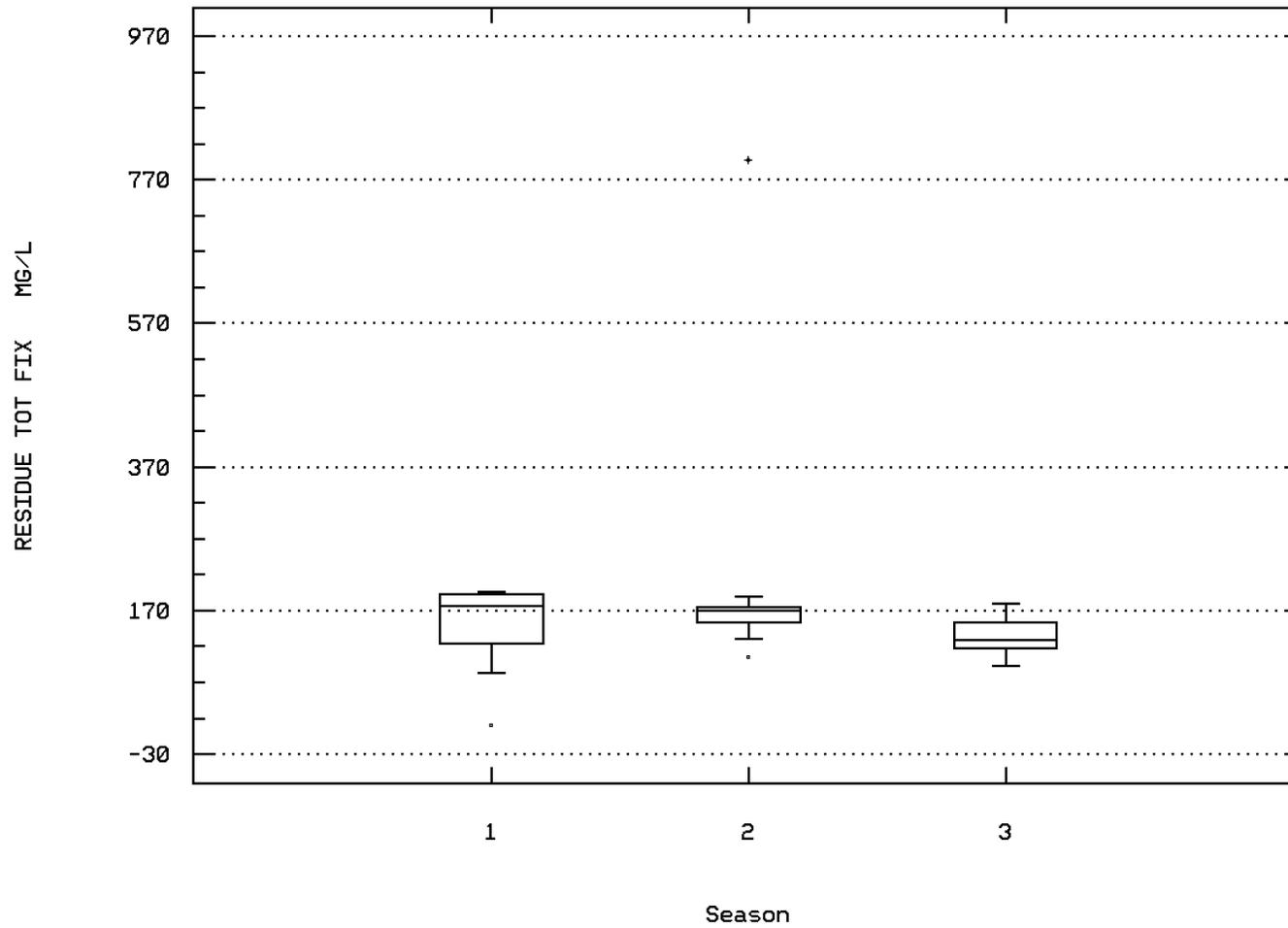
ALKALINITY, TOTAL (MG/L AS CaCO3)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00510

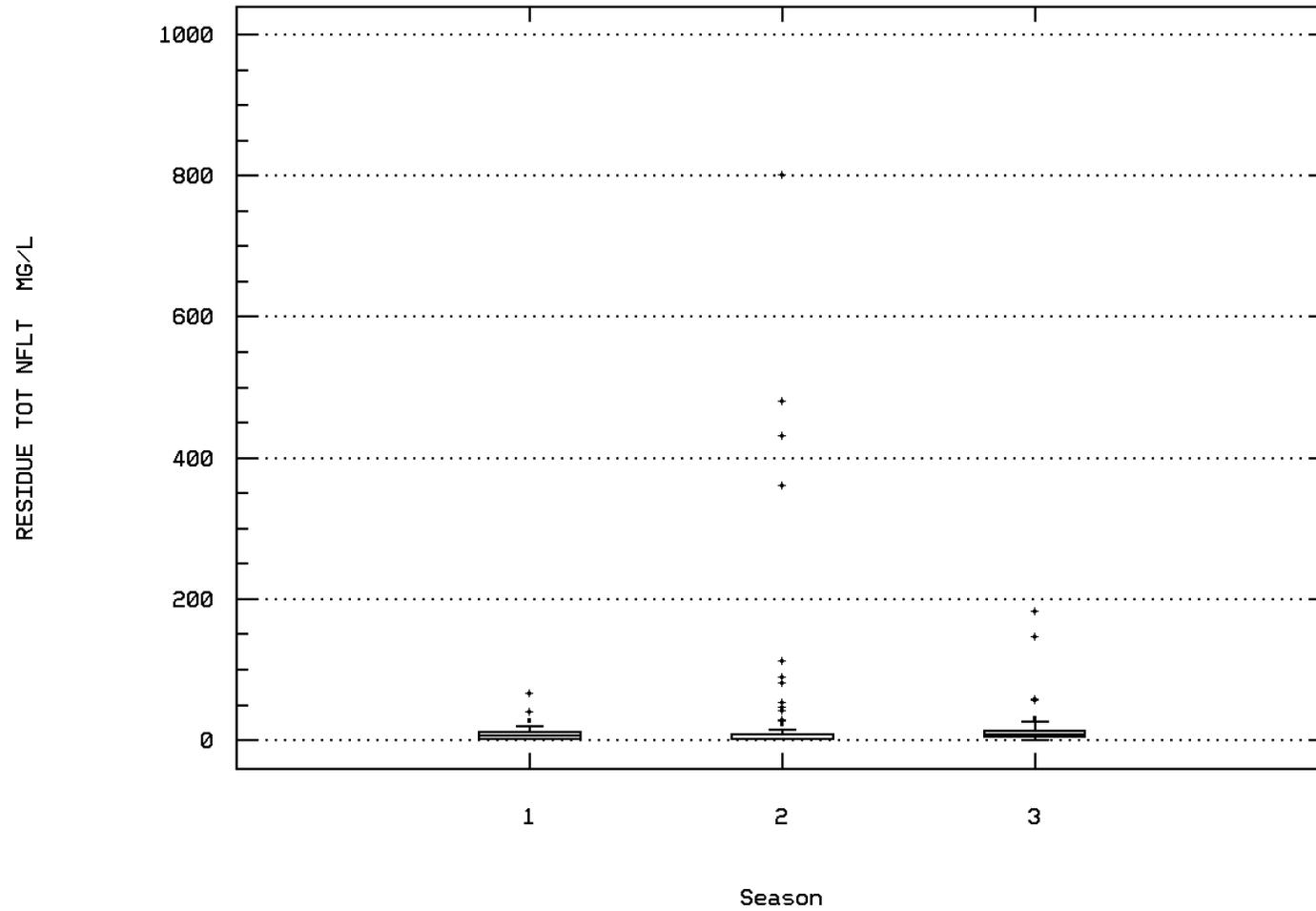
RESIDUE, TOTAL FIXED (MG/L)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00530

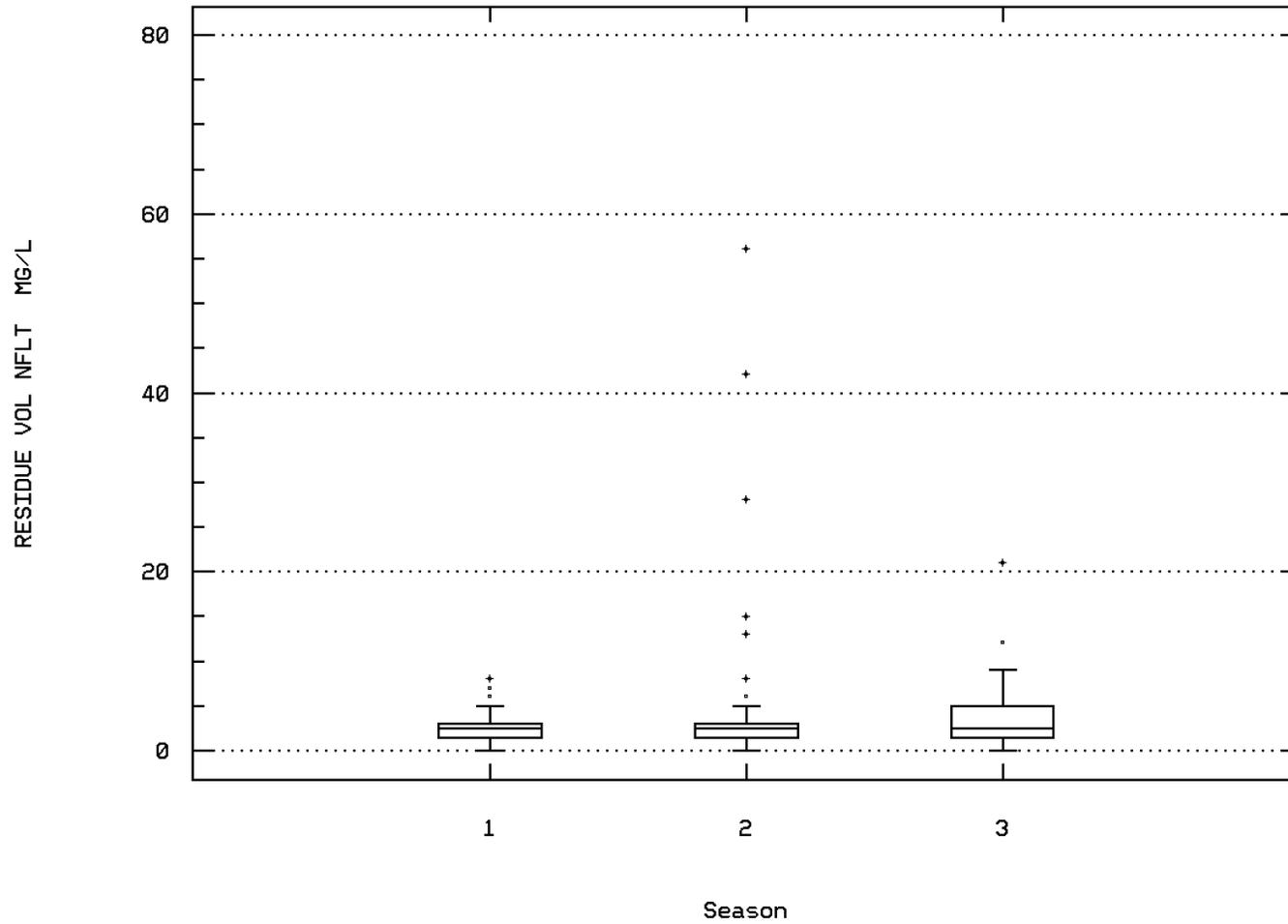
RESIDUE, TOTAL NONFILTRABLE (MG/L)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00535

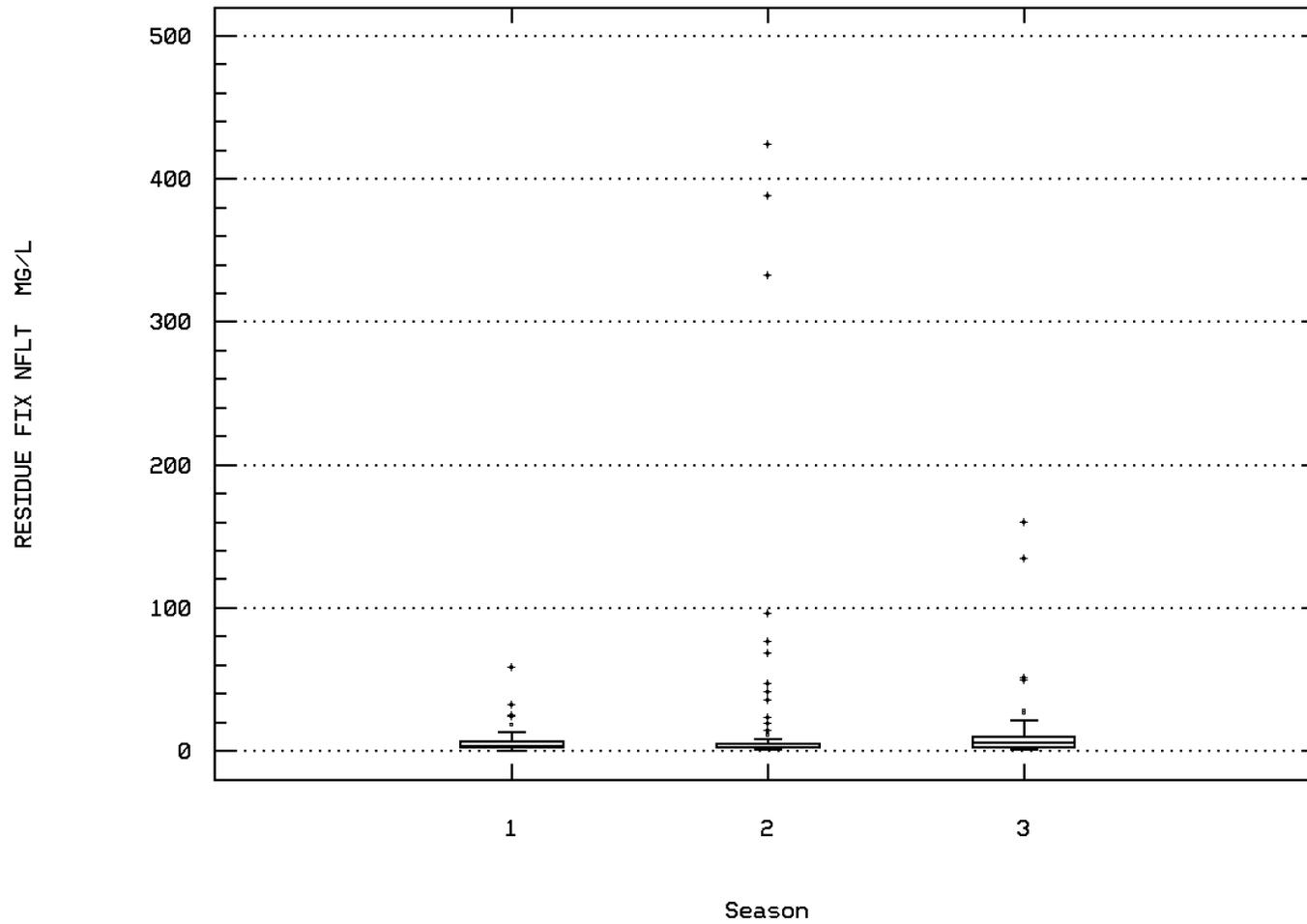
RESIDUE, VOLATILE NONFILTRABLE (MG/L)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00540

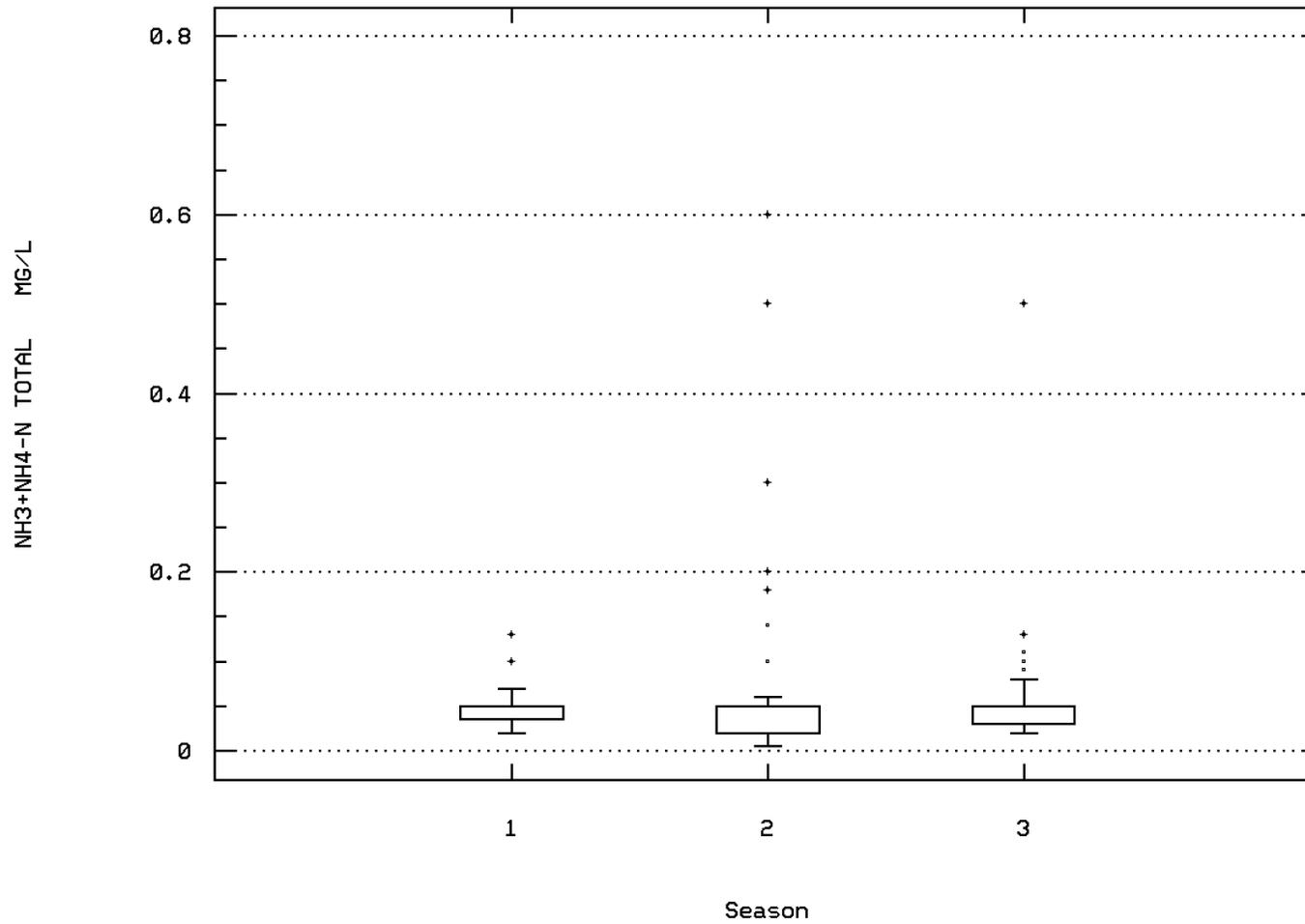
RESIDUE, FIXED NONFILTRABLE (MG/L)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00610

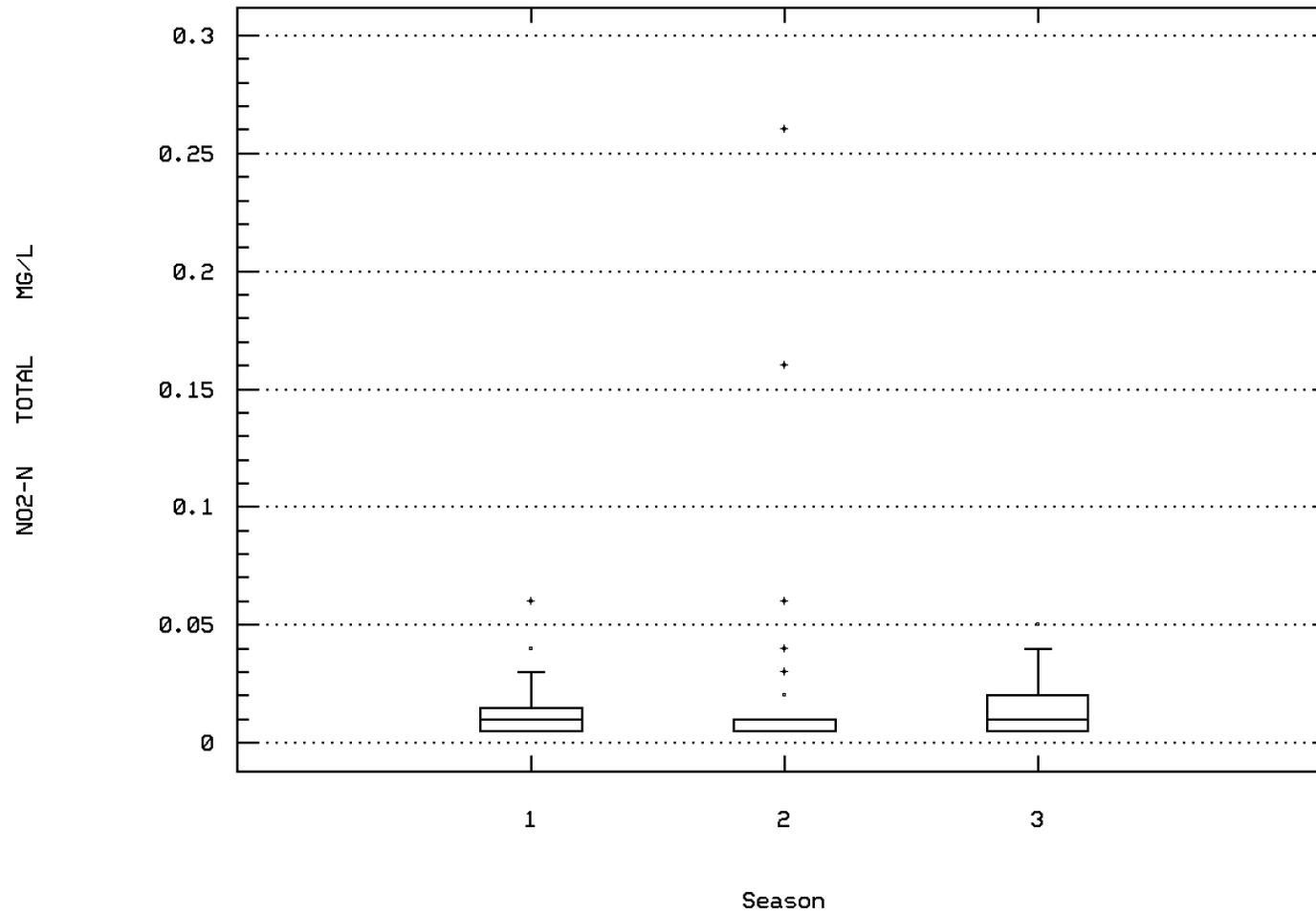
NITROGEN, AMMONIA, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00615

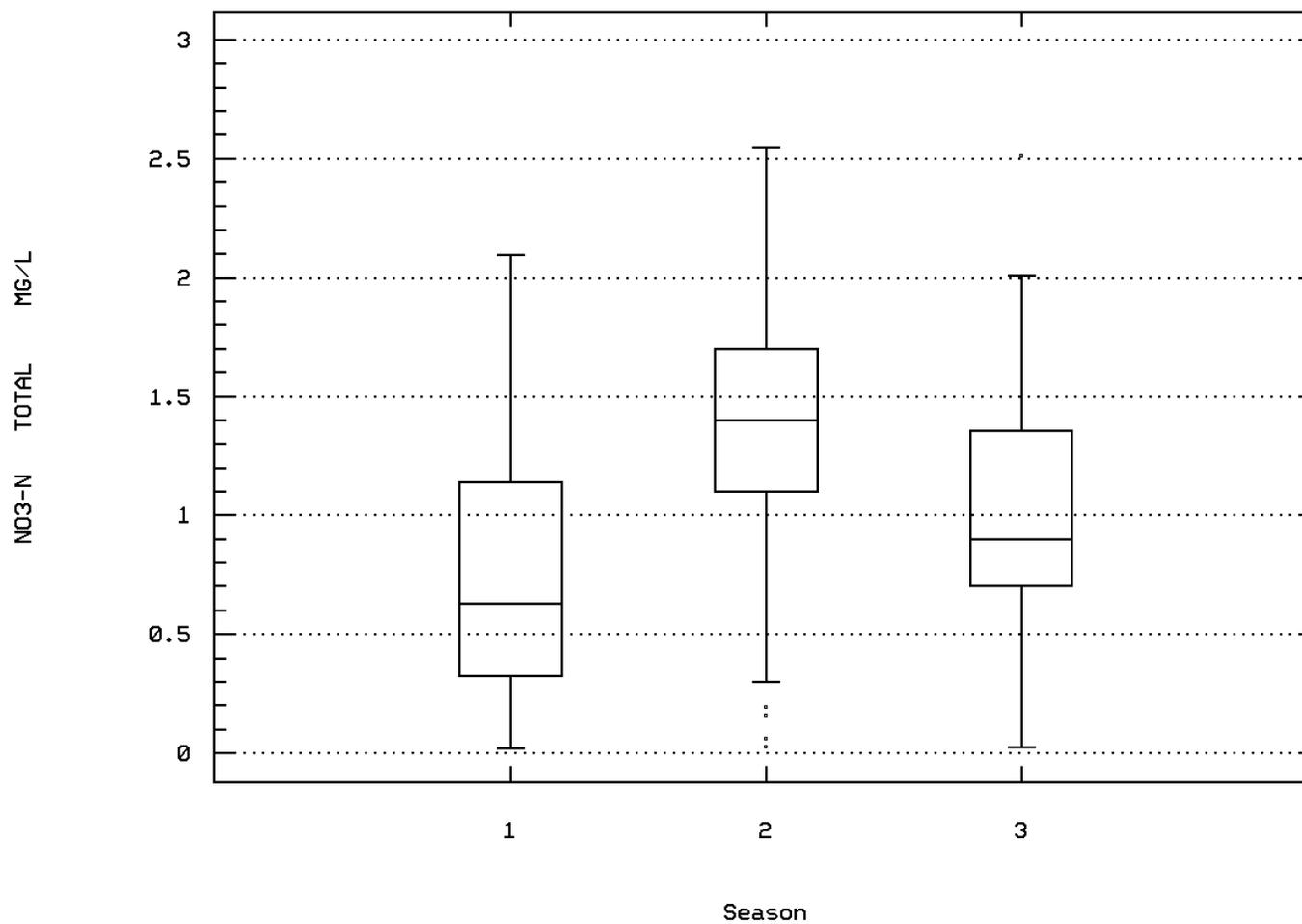
NITRITE NITROGEN, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00620

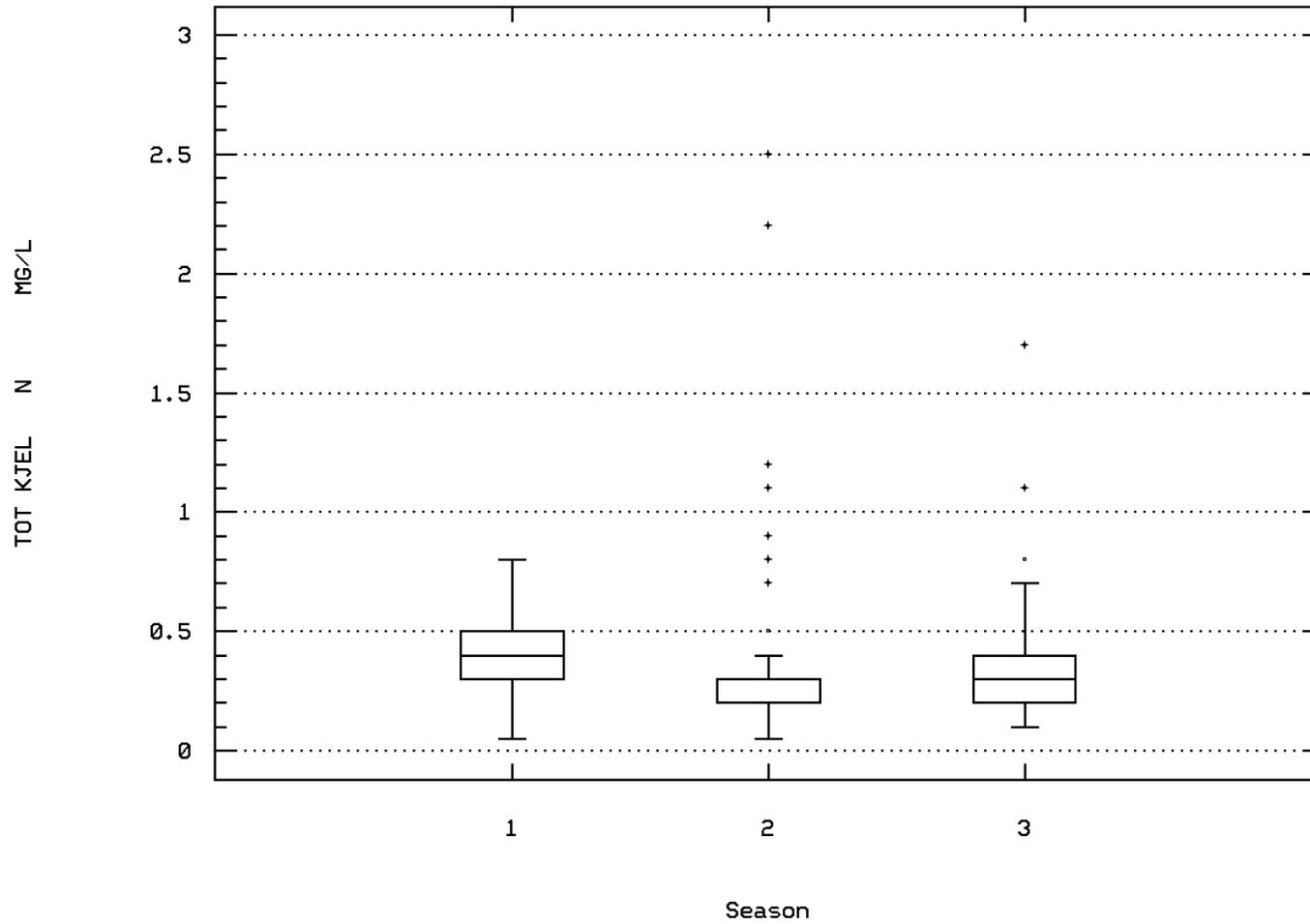
NITRATE NITROGEN, TOTAL (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00625

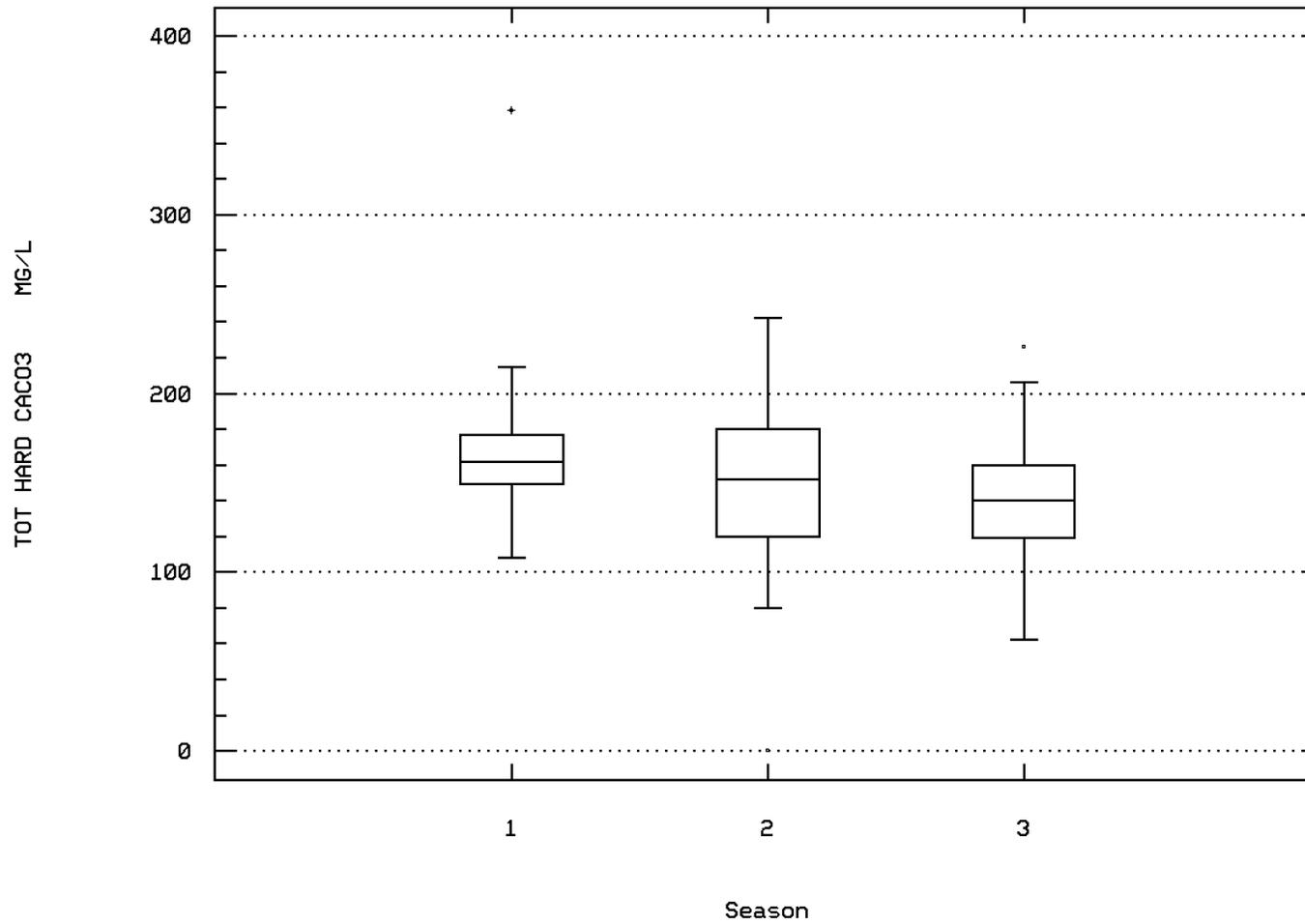
NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 00900

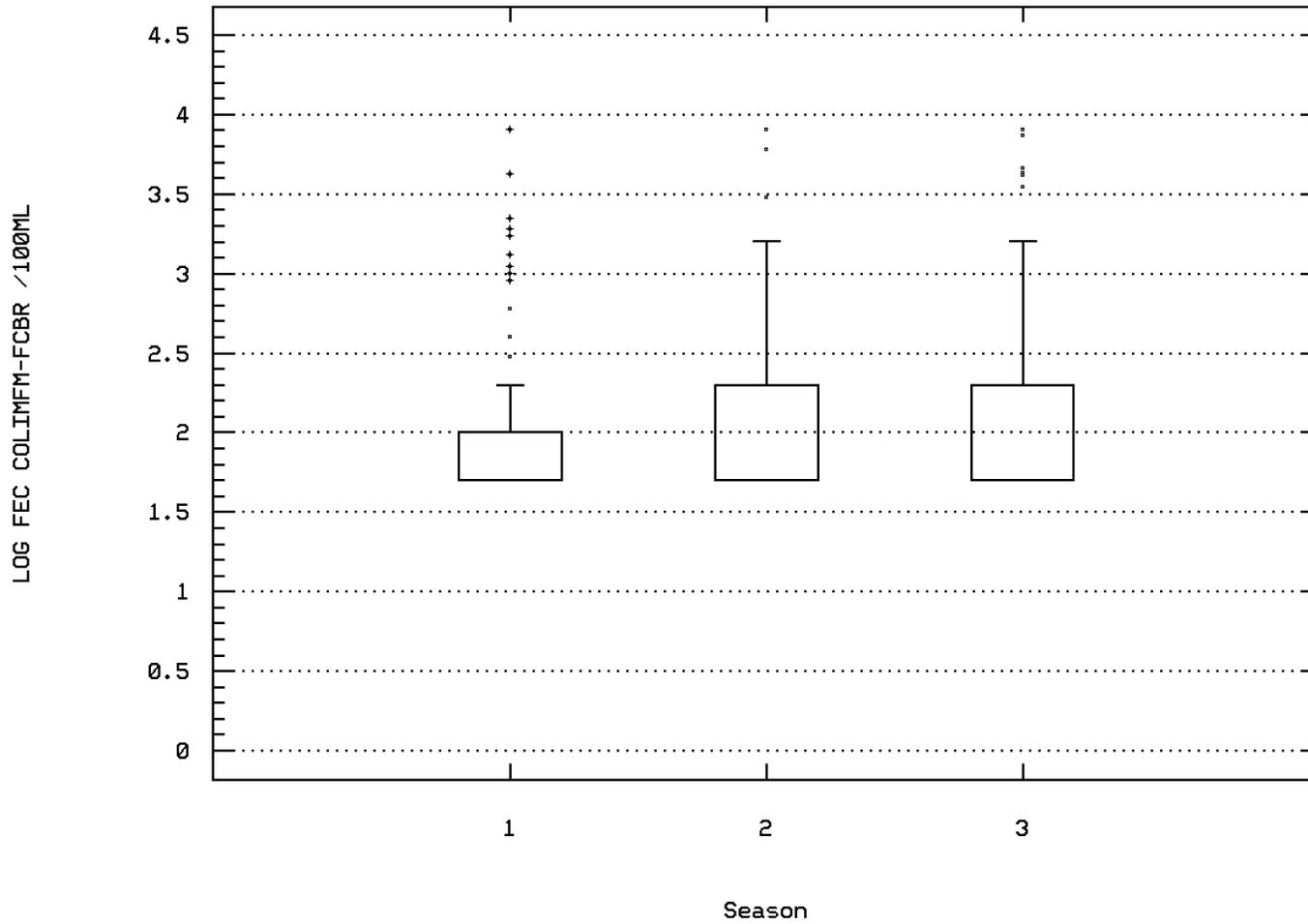
HARDNESS, TOTAL (MG/L AS CaCO3)



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 31616

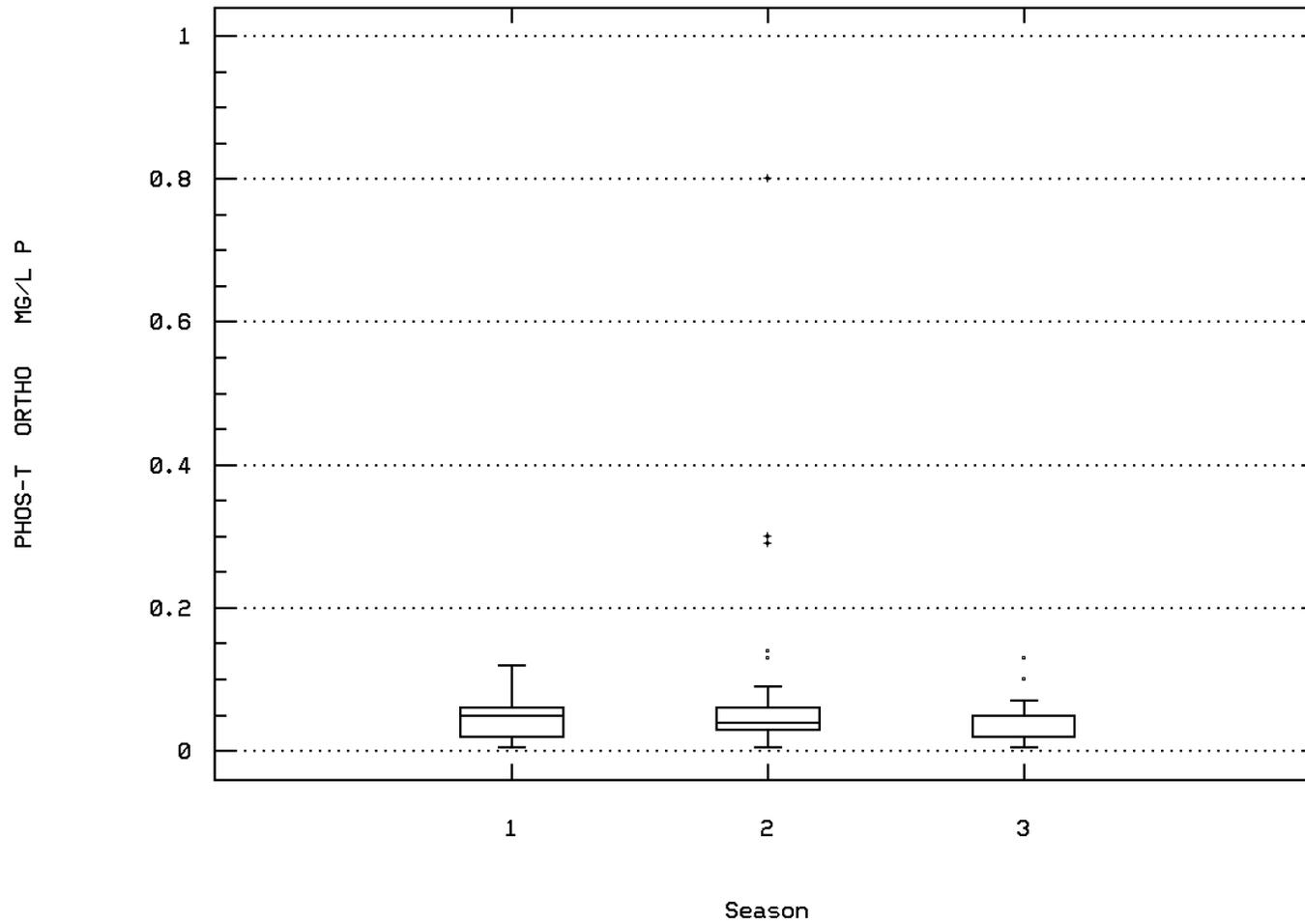
LOG FECAL COLIFORM, MEMBR FILTER, M-FC BR



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station: SHEN0777 Parameter Code: 70507

PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/



APPROX. 0.1 MILE BELOW RT. 340/522 BRID

Station Inventory for Station: SHEN0778

NPS Station ID: SHEN0778
 Location: N.F.SHEN.R. RTE 340 BR FRNT ROYL
 Station Type: /TYP/A/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070006001
 RF3 Index: 02070006000600.00
 Description:

LAT/LON: 38.950004/ -78.200005

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 0.500
 RF3 Mile Point: 1.25

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 033 /033 /NF SHEN N-6
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0778

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/67-06/16/67	10	26.25	26.3	28.5	24.	1.956	1.398	24.1	25.	27.25	28.45
00300	OXYGEN, DISSOLVED MG/L	06/14/67-06/16/67	10	9.5	10.12	14.4	7.1	5.464	2.338	7.15	8.125	11.85	14.22
00310	BOD, 5 DAY, 20 DEG C MG/L	06/14/67-06/16/67	10	7.4	7.69	11.3	4.4	5.85	2.419	4.47	5.25	9.975	11.19
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/14/67-06/15/67	5	230.	412.	790.	140.	94470.	307.36	**	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/14/67-06/15/67	5	2.362	2.51	2.898	2.146	0.115	0.339	**	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			323.834								
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	5 ##	10.	42.	100.	10.	1970.	44.385	**	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	5 ##	1.	1.381	2.	1.	0.273	0.522	**	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			24.022								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0778

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	10	0	0.00						10	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	5	0	0.00						5	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	5	0	0.00						5	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0779

NPS Station ID: SHEN0779
 Location: N.F.SHEN.R. US 340 BR FRONT ROYL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070006001
 RF3 Index: 02070006000600.00
 Description:

LAT/LON: 38.950004/ -78.200005

Depth of Water: 1
 Elevation: 0

RF1 Mile Point: 0.500
 RF3 Mile Point: 1.25

Agency: 1113PPWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 055 /055 /NFSHEN-N6
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.03

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0779

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	07/29/69-08/19/69	2	24.5	24.5	25.	24.	0.5	0.707	**	**	**	**
00070	TURBIDITY, (JACKSON CANDLE UNITS)	07/29/69-08/19/69	2	8.75	8.75	15.	2.5	78.125	8.839	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	07/29/69-08/19/69	2	6.85	6.85	7.5	6.2	0.845	0.919	**	**	**	**
00311	BOD, DISSOLVED, 5 DAY MG/L	07/29/69-08/19/69	2	1.75	1.75	1.8	1.7	0.005	0.071	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	07/29/69-07/29/69	1	0.081	0.081	0.081	0.081	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	07/29/69-07/29/69	1	0.84	0.84	0.84	0.84	0.	0.	**	**	**	**
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	07/29/69-08/19/69	2	1.455	1.455	1.52	1.39	0.008	0.092	**	**	**	**
31506	COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/19/69	2	6600.	6600.	10900.	2300.	36980000.	6081.118	**	**	**	**
31506	LOG COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	07/29/69-08/19/69	2	3.7	3.7	4.037	3.362	0.228	0.478	**	**	**	**
31506	GM COLIFORM,TOT,MPN, CONFIRMED TEST, TUBE CONFIG.	GEOMETRIC MEAN =			5006.995								
31614	FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/19/69	2	2700.	2700.	4900.	500.	9680000.	3111.27	**	**	**	**
31614	LOG FECAL COLIFORM,MPN,TUBE CONFIGURATION	07/29/69-08/19/69	2	3.195	3.195	3.69	2.699	0.491	0.701	**	**	**	**
31614	GM FECAL COLIFORM,MPN,TUBE CONFIGURATION	GEOMETRIC MEAN =			1565.248								
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	07/29/69-08/19/69	2	6.375	6.375	7.5	5.25	2.531	1.591	**	**	**	**
71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	07/29/69-08/19/69	2	0.225	0.225	0.31	0.14	0.014	0.12	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0779

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----		-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	2	0	0.00	2	0	0.00							
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	2	0	0.00	2	0	0.00							
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	2	0	0.00	2	0	0.00							
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	2	2	1.00	2	2	1.00							
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	2	2	1.00	2	2	1.00							

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0780

NPS Station ID: SHEN0780
 Location: UPSTREAM FROM DAM
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070006
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1B-SHENANDOAH
 RF1 Index: 02070006
 RF3 Index: 02070005000102.60

LAT/LON: 38.950004/ -78.200005

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BNFS000.69
 Within Park Boundary: No

Date Created: 05/13/89

Depth of Water: 0
 Elevation: 0

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 3.40
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

RF1 Mile Point: 0.000
 RF3 Mile Point: 2.59

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING (PCB) BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: N FORK SHENANDOAH SECTION: 06 TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Parameter Inventory for Station: SHEN0780

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00023	SAMPLE WEIGHT IN POUNDS	07/26/79-09/12/90	14	4.775	5.028	10.85	0.17	24.391	4.939	0.17	0.225	9.84	10.775
00024	SAMPLE LENGTH IN INCHES	07/26/79-09/12/90	13	26.	18.231	28.6	6.1	107.527	10.37	6.18	6.65	27.65	28.44
01004	ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	08/18/88-08/18/88	3	0.07	0.093	0.14	0.07	0.002	0.04	**	**	**	**
01069	NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	08/18/88-08/18/88	3	1.5	2.833	6.4	0.6	9.743	3.121	**	**	**	**
34258	B-BHC-BETA WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34263	DELTA BENZENE HEXACHLORIDE WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34360	ENDOSULFAN, BETA WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34365	ENDOSULFAN, ALPHA WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34664	PCB - 1221 WET WGT TISM/G/KG	09/12/90-09/12/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34667	PCB - 1232 WET WGT TISM/G/KG	09/12/90-09/12/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34669	PCB - 1248 WET WGT TISM/G/KG	09/12/90-09/12/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34670	PCB - 1260 WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.5	1.425	4.2	0.5	3.423	1.85	**	**	**	**
34674	PCB - 1016 WET WGT TISM/G/KG	09/12/90-09/12/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
34682	CHLORDANE(TECH MIX & METABS), TISSUE WET WGT, MG/KG	07/26/79-09/12/90	11 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
34685	ENDRIN WET WGT TISM/G/KG	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
34686	HEPTACHLOR EPOXIDE WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34687	HEPTACHLOR WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34688	HEXACHLORO BENZENE WET WGT TISM/G/KG	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
34689	PCB - 1242 WET WGT TISM/G/KG	09/12/90-09/12/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34690	PCB - 1254 WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34691	TOXAPHENE WET WGT TISM/G/KG	08/18/88-09/12/90	4 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
38744	CHLORPYRIFOS-METHYL TISWETWGTMG/KG	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39060	PCP (PENTACHLOROPHENOL) IN TISSUE WET WGT UG/G	07/26/79-08/14/85	9 ##	0.005	0.17	0.5	0.005	0.061	0.248	0.005	0.005	0.5	0.5
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	09/12/90-09/12/90	1 ##	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
39063	CHLORDANE-CIS ISOMER, TISSUE WET WGT (UG/G)	07/26/79-08/14/85	9 ##	0.005	0.17	0.5	0.005	0.061	0.248	0.005	0.005	0.5	0.5
39066	CHLORDANE-TRANS ISOMER, TISSUE WET WGT (UG/G)	07/26/79-08/14/85	9 ##	0.005	0.17	0.5	0.005	0.061	0.248	0.005	0.005	0.5	0.5
39069	CHLORDANE-NONACHLOR, CIS ISO, TISSUE WET WGT (UG/G)	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
39072	CHLORDANE-NONACHLOR, TRANS ISO, TISSUE, WET WT, UG/G	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
39074	BHC-ALPHA ISOMER, TISSUE UG/G WET WGT	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
39075	BHC- GAMMA ISOMER, TISSUE WET WGT (UG/G)	07/26/79-07/28/83	6 ##	0.253	0.253	0.5	0.005	0.074	0.271	**	**	**	**
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	08/14/85-09/12/90	7 ##	0.05	0.243	0.5	0.05	0.058	0.241	**	**	**	**
39302	P P DDT IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	9 ##	0.005	0.17	0.5	0.005	0.061	0.248	0.005	0.005	0.5	0.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0780

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
39309	O P DDT IN AQUATIC ORGANISMS WET WEIGHT BASIS(UG/G	07/26/79-08/14/85	9 ##	0.005	0.225	0.5	0.005	0.068	0.261	0.005	0.005	0.5	0.5
39312	P P DDD IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	9 ##	0.005	0.17	0.5	0.005	0.061	0.248	0.005	0.005	0.5	0.5
39322	P,P'-DDE IN TISSUE WET WGT MG/KG	07/26/79-08/14/85	9 ##	0.09	0.191	0.5	0.005	0.055	0.235	0.005	0.005	0.5	0.5
39325	O,P DDD IN TISSUE WET WGT (UG/G)	07/26/79-08/14/85	9 ##	0.005	0.17	0.5	0.005	0.061	0.248	0.005	0.005	0.5	0.5
39329	O,P DDE IN TISSUE, WET WGT(UG/G)	07/26/79-08/14/85	9 ##	0.005	0.17	0.5	0.005	0.061	0.248	0.005	0.005	0.5	0.5
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	09/12/90-09/12/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39358	DDT TOTAL IN AQUATIC ORGANISMS WT WGT (UG/G)	07/26/79-07/28/83	6 ##	0.253	0.253	0.5	0.005	0.074	0.271	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	09/12/90-09/12/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	08/14/85-09/12/90	7 ##	0.05	0.243	0.5	0.05	0.058	0.241	**	**	**	**
39406	DIELDRIN IN AQ ORGANISMS WT WGT BASIS (UG/G)	07/26/79-07/28/83	6 ##	0.253	0.253	0.5	0.005	0.074	0.271	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/26/79-09/12/90	12 ##	0.5	0.771	4.2	0.05	1.183	1.088	0.185	0.5	0.5	3.09
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	09/12/90-09/12/90	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
39781	LINDANE AQUATIC ORGANISMS WT WGT BASIS(UG/G)	07/26/79-08/14/85	8 ##	0.005	0.129	0.5	0.005	0.053	0.229	**	**	**	**
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	08/14/85-09/12/90	7 ##	0.05	0.243	0.5	0.05	0.058	0.241	**	**	**	**
45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	09/12/90-09/12/90	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
71918	ARSENIC,TOTAL IN FISH,DRY WEIGHT BASIS	07/26/79-08/14/85	8 ##	4.675	4.014	7.9	0.05	7.394	2.719	**	**	**	**
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/26/79-08/18/88	11	0.07	0.089	0.18	0.01	0.004	0.067	0.01	0.01	0.17	0.178
71934	LEAD TOTAL IN FISH DRY WEIGHT BASIS	07/26/79-08/14/85	8 ##	1.75	2.745	7.5	0.5	5.796	2.407	**	**	**	**
71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-08/18/88	9 ##	0.5	0.767	2.1	0.1	0.613	0.783	0.1	0.1	1.5	2.1
71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-08/18/88	9	1.7	2.081	3.9	0.83	1.215	1.102	0.83	1.2	3.05	3.9
71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	08/18/88-08/18/88	3	7.7	27.933	68.5	7.6	1234.243	35.132	**	**	**	**
71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	07/28/83-08/18/88	9	0.31	2.012	13.	0.2	17.372	4.168	0.2	0.2	1.7	13.
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/26/79-08/18/88	10 ##	0.05	0.075	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.19
71941	CADMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	8 ##	0.143	0.131	0.2	0.05	0.003	0.054	**	**	**	**
71942	COPPER,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	8	3.885	4.318	8.	3.	2.546	1.596	**	**	**	**
71943	CHROMIUM,TOTAL IN FISH-DRY WEIGHT BASIS	07/26/79-08/14/85	8	0.99	1.506	6.	0.45	3.4	1.844	**	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/26/79-09/12/90	12	5.	4.417	5.	2.	1.174	1.084	2.3	3.5	5.	5.
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	08/18/88-08/18/88	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	08/18/88-09/12/90	4 ##	0.05	0.044	0.05	0.025	0.	0.013	**	**	**	**
81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	08/18/88-09/12/90	4 ##	0.05	0.103	0.26	0.05	0.011	0.105	**	**	**	**
81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	08/18/88-09/12/90	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	09/12/90-09/12/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0780

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00023	SAMPLE WEIGHT IN POUNDS	07/26/79-09/12/90	14	4.775	5.028	10.85	0.17	24.391	4.939	0.17	0.225	9.84	10.775
00024	SAMPLE LENGTH IN INCHES	07/26/79-09/12/90	13	26.	18.231	28.6	6.1	107.527	10.37	6.18	6.65	27.65	28.44
34680	ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
34682	CHLORDANE(TECH MIX & METABS),TISSUEWET WGT,MG/KG	07/26/79-09/12/90	11 ##	0.5	0.5	0.5	0.5	0.	0.	0.5	0.5	0.5	0.5
34685	ENDRIN WET WGT,MG/KG	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
34688	HEXACHLOROBENZENE WET WGT,MG/KG	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
39069	CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5
39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/26/79-09/12/90	12 ##	0.5	0.771	4.2	0.05	1.183	1.088	0.185	0.5	0.5	3.09
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/26/79-08/18/88	11	0.07	0.089	0.18	0.01	0.004	0.067	0.01	0.01	0.17	0.178
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/26/79-08/18/88	10 ##	0.05	0.075	0.2	0.05	0.002	0.049	0.05	0.05	0.1	0.19
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/26/79-09/12/90	12	5.	4.417	5.	2.	1.174	1.084	2.3	3.5	5.	5.
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	07/26/79-09/12/90	12 ##	0.5	0.35	0.5	0.05	0.049	0.222	0.05	0.05	0.5	0.5

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0781

NPS Station ID: SHEN0781
 Location: POWER POOL (WARREN CO)
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070005
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070005
 RF3 Index: 02070007017606.86
 Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: SHENANDOAH RIVER

LAT/LON: 38.953337/ -78.153059

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 0.000
 RF3 Mile Point: 9.10

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSHN052.03
 Within Park Boundary: No

Date Created: 07/24/93

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.02

On/Off RF1:
 On/Off RF3:

AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 SECTION: 01C TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Parameter Inventory for Station: SHEN0781

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01003 ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	07/14/92-07/14/92	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01004 ARSENIC TOTAL IN FISH OR ANIMAL WET WT MG/KG	07/14/92-07/14/92	3 ##	0.125	0.125	0.125	0.125	0.	0.	**	**	**	**
01028 CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/14/92-07/14/92	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01029 CHROMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/14/92-07/14/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01043 COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	07/14/92-07/14/92	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01052 LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	07/14/92-07/14/92	1	9.	9.	9.	9.	0.	0.	**	**	**	**
01068 NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	07/14/92-07/14/92	1	8.	8.	8.	8.	0.	0.	**	**	**	**
01069 NICKEL, TOTAL IN FISH OR ANIMALS-WET WEIGHT MG/KG	07/14/92-07/14/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01073 THALLIUM,TISSUE,WET WEIGHT,MG/KG	07/14/92-07/14/92	3 ##	1.	1.	1.	1.	0.	0.	**	**	**	**
01093 ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	07/14/92-07/14/92	1	200.	200.	200.	200.	0.	0.	**	**	**	**
01149 SELENIUM, TOTAL IN FISH OR ANIMALS WET WT MG/KG	07/14/92-07/14/92	3	0.36	0.343	0.4	0.27	0.004	0.067	**	**	**	**
34252 BERYLLIUM WET WGT TISMG/KG	07/14/92-07/14/92	3 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34258 B-BHC-BETA WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34263 DELTA BENZENE HEXACHLORIDE WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34360 ENDOSULFAN, BETA WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34365 ENDOSULFAN, ALPHA WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34664 PCB - 1221 WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34667 PCB - 1232 WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34669 PCB - 1248 WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34670 PCB - 1260 WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34674 PCB - 1016 WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34680 ALDRIN IN FISH TISSUE WET WEIGHT MG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34682 CHLORDANE(TECH MIX & METABS),TISSUEWET WGT,MG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34685 ENDRIN WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34686 HEPTACHLOR EPOXIDE WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34687 HEPTACHLOR WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34688 HEXACHLORO BENZENE WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34689 PCB - 1242 WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34690 PCB - 1254 WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34691 TOXAPHENE WET WGT TISMG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
38744 CHLORPYRIFOS-METHYL TISWETWGTMG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39061 PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/14/92-07/14/92	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
39069 CHLORDANE-NONACHLOR,CIS ISO,TISSUE WET WGT(UG/G)	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0781

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
39072	CHLORDANE-NONACHLOR,TRANS ISO,TISSUE,WET WT,UG/G	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39074	BHC-ALPHA ISOMER,TISSUE UG/G WET WGT	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39290	DDT TOTAL IN TISSUE WET WGT BASIS (UG/G)	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/14/92-07/14/92	1 ##	0.5	0.5	0.5	0.5	0.5	0.	0.	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	1 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	1 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	1 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/14/92-07/14/92	1 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	1 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/14/92-07/14/92	1 ##	0.5	0.5	0.5	0.5	0.5	0.	0.	**	**	**
39404	DIELDRIN IN TISSUE WET WGT (UG/G)	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/14/92-07/14/92	1 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.5	0.	0.	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/14/92-07/14/92	1 ##	380.	380.	380.	380.	380.	0.	0.	**	**	**
39785	GAMMA-BHC(LINDANE),TISSUE,WET WEIGHT,MG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	07/14/92-07/14/92	2 ##	0.5	0.5	0.5	0.5	0.5	0.	0.	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	07/14/92-07/14/92	1	0.3	0.3	0.3	0.3	0.3	0.	0.	**	**	**
71930	MERCURY,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/14/92-07/14/92	3	0.03	0.115	0.3	0.015	0.026	0.16	**	**	**	**
71936	LEAD,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/14/92-07/14/92	3	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
71937	COPPER,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/14/92-07/14/92	3	1.	1.333	2.	1.	0.333	0.577	**	**	**	**
71938	ZINC,TOTAL IN FISH OR ANIMALS-WET WEIGHT BASIS	07/14/92-07/14/92	3	13.	22.	45.	8.	403.	20.075	**	**	**	**
71939	CHROMIUM,TOT IN FISH OR ANIMALS-WET WEIGHT BASIS	07/14/92-07/14/92	3 ##	0.5	0.5	0.5	0.5	0.5	0.	0.	**	**	**
71940	CADMIUM,TOTAL IN FISH OR ANIMAL-WET WEIGHT BASIS	07/14/92-07/14/92	3 ##	0.5	0.5	0.5	0.5	0.5	0.	0.	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/14/92-07/14/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/14/92-07/14/92	1 ##	50.	50.	50.	50.	50.	0.	0.	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	07/14/92-07/14/92	3	5.	5.	5.	5.	5.	0.	0.	**	**	**
81644	METHOXYCHLOR IN FISH TISSUE,UG/G WET WEIGHT	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
81645	MIREX IN FISH TISSUE WET WEIGHT UG/G	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
81742	SILVER IN FISH TISSUE WET WEIGHT (MG/KG)PPM	07/14/92-07/14/92	3 ##	0.5	0.5	0.5	0.5	0.5	0.	0.	**	**	**
81823	PENTACHLOROANISOLE(PCA)INFISH TISSUE WET WGT MG/KG	07/14/92-07/14/92	2 ##	0.025	0.025	0.025	0.025	0.025	0.	0.	**	**	**
81896	DDE TOTAL IN TISSUE WET WEIGHT MG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
81897	DDD TOTAL IN TISSUE WET WEIGHT MG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**
82029	OXYCHLORDANE IN TISSUE SAMPLE WET WEIGHT MG/KG	07/14/92-07/14/92	2 ##	0.05	0.05	0.05	0.05	0.05	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0782

NPS Station ID: SHEN0782
 Location: SHENANDOAH R. PEPSCO DAM FRNT RYL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070007
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070007003
 RF3 Index: 02070005003007.86
 Description:

LAT/LON: 38.953892/ -78.148616

Depth of Water: 1
 Elevation: 0
 RF1 Mile Point: 40.190
 RF3 Mile Point: 8.07

Agency: 1113SHWQ
 FIPS State/County: 51000 VIRGINIA/
 STORET Station ID(s): POTOMAC 001 /001 /SHEN M-0
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.01

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0782

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	06/14/67-06/16/67	8	27.25	27.063	29.	24.	2.103	1.45	**	**	**
00300	OXYGEN, DISSOLVED MG/L	06/14/67-06/16/67	8	9.75	10.038	12.9	8.4	2.371	1.54	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	06/14/67-06/16/67	8	8.2	8.775	11.4	7.4	2.482	1.575	**	**	**
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/14/67-06/15/67	4	250.	250.	330.	170.	8533.333	92.376	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	06/14/67-06/15/67	4	2.374	2.374	2.519	2.23	0.028	0.166	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	GEOMETRIC MEAN =			236.854							
31615	FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	4 ##	10.	10.	10.	10.	0.	0.	**	**	**
31615	LOG FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	06/14/67-06/15/67	4 ##	1.	1.	1.	1.	0.	0.	**	**	**
31615	GM FECAL COLIFORM,MPN,EC MED,44.5C (TUBE 31614)	GEOMETRIC MEAN =			10.							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0782

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	8	0	0.00						8	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	4	0	0.00						4	0	0.00			
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	4	0	0.00						4	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Station Inventory for Station: SHEN0783

NPS Station ID: SHEN0783
 Location: RIVERTON CORP. BRIDGE
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070007
 Major Basin: 02-NORTH-ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070007
 RF3 Index: 02070005019400.00

LAT/LON: 38.954726/ -78.190560

Depth of Water: 0
 Elevation: 0

RF1 Mile Point: 0.000
 RF3 Mile Point: 8.95

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: CROOKED RUN SECTION: 01D TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BCRO000.43 /VA1B01DX0101/VA1B6X0101
 Within Park Boundary: No

Date Created: 06/14/80

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 29.30
 Distance from RF3: 0.03

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	133	13.1	13.561	26.2	0.	57.762	7.6	3.54	6.6	20.5	23.
00070	TURBIDITY, (JACKSON CANDLE UNITS)	11/09/88-04/02/92	12	2.1	3.542	13.	0.5	16.924	4.114	0.5	0.775	3.375	12.4
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	08/01/94-07/14/97	12	4.95	6.425	25.	1.8	41.433	6.437	1.89	2.3	7.6	20.71
00080	COLOR (PLATINUM-COBALT UNITS)	09/23/91-03/03/93	17	13.	15.824	32.	8.	54.154	7.359	9.6	11.	21.5	28.8
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	96	476.5	453.927	647.	239.	9180.131	95.813	309.2	381.75	523.	566.
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	09/23/91-07/14/97	36	456.	443.333	559.	257.	5247.429	72.439	334.9	398.5	498.25	523.9
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE MG/L	05/04/92-01/06/97	30	9.65	10.027	15.2	6.	5.914	2.432	7.11	7.875	12.25	13.09
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	102	10.1	10.259	15.	6.3	4.712	2.171	7.9	8.5	11.925	13.27
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	132	1.	1.205	3.	0.5	0.382	0.618	0.5	1.	1.975	2.
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	134	8.	9.082	42.	0.5	33.929	5.825	3.	5.	12.	16.
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	131	8.	7.978	9.35	6.	0.251	0.501	7.46	7.7	8.22	8.624
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	131	8.	7.573	9.35	6.	0.416	0.645	7.46	7.7	8.22	8.624
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	131	0.01	0.027	1.	0.	0.008	0.092	0.002	0.006	0.02	0.035
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	86	8.	7.937	9.3	6.1	0.239	0.488	7.4	7.7	8.2	8.5
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	86	8.	7.489	9.3	6.1	0.442	0.665	7.4	7.7	8.2	8.5
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	86	0.01	0.032	0.794	0.001	0.011	0.103	0.003	0.006	0.02	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	86	167.5	158.791	242.	14.	2211.297	47.024	88.	127.75	200.25	208.3
00500	RESIDUE, TOTAL (MG/L)	05/09/79-08/04/92	22	298.	310.682	423.	258.	1624.703	40.308	265.8	279.5	334.	368.1
00505	RESIDUE, TOTAL VOLATILE (MG/L)	05/09/79-08/04/92	22	59.	58.955	103.	10.	339.665	18.43	35.8	50.	69.75	80.
00510	RESIDUE, TOTAL FIXED (MG/L)	05/09/79-08/04/92	22	238.5	251.818	359.	192.	1858.442	43.11	203.5	221.	270.25	334.5
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	133	5.	9.876	128.	0.5	265.483	16.294	2.5	2.5	10.	23.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	134	2.5	3.06	25.	0.	8.887	2.981	1.	1.5	3.	6.5
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	134	3.	7.69	113.	0.	188.947	13.746	1.5	2.5	7.	19.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	131 ##	0.05	0.062	1.	0.02	0.009	0.093	0.02	0.02	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	131	0.01	0.013	0.08	0.005	0.	0.013	0.005	0.005	0.02	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	131	1.02	1.11	5.	0.11	0.279	0.528	0.6	0.79	1.38	1.6
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	128	0.3	0.321	1.1	0.05	0.03	0.174	0.2	0.2	0.4	0.51
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	128	0.1	0.086	0.3	0.05	0.002	0.046	0.05	0.05	0.1	0.121
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	101	0.05	0.065	0.2	0.01	0.002	0.043	0.02	0.04	0.08	0.13
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	125	4.	4.889	24.	0.5	10.601	3.256	1.48	2.85	7.	9.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	82	219.	211.915	268.	102.	1630.227	40.376	151.5	184.	243.	254.7
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-07/14/97	41	17.	17.195	34.	8.	22.361	4.729	11.2	14.5	19.5	21.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-07/14/97	41	42.	43.488	63.	23.	107.006	10.344	30.	36.	51.5	58.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00951	FLUORIDE, TOTAL (MG/L AS F)	11/09/88-04/14/93	20 ##	0.1	0.117	0.25	0.05	0.004	0.063	0.05	0.05	0.15	0.244
00955	SILICA, DISSOLVED (MG/L AS SiO2)	06/15/89-02/03/93	17	4.8	5.247	8.6	3.5	1.935	1.391	3.58	4.15	6.25	7.4
01003	ARSENIC IN BOTTOM DEPOSITS (MG/KG AS AS DRY WGT)	06/23/83-07/25/96	2	15.05	15.05	17.1	13.	8.405	2.899	**	**	**	**
01013	BERYLLIUM IN BOTTOM DEPOSITS(MG/KG AS BE DRY WGT)	06/23/83-07/25/96	2 ##	2.2	2.2	2.5	1.9	0.18	0.424	**	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	07/07/82-07/07/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01028	CADMIUM,TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/23/83-07/25/96	2 ##	1.298	1.298	2.5	0.095	2.892	1.701	**	**	**	**
01029	CHROMIUM, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/23/83-07/25/96	2	31.65	31.65	32.3	31.	0.845	0.919	**	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	07/07/82-07/07/82	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	07/07/82-07/07/82	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
01043	COPPER IN BOTTOM DEPOSITS (MG/KG AS CU DRY WGT)	06/23/83-07/25/96	2	39.35	39.35	54.	24.7	429.245	20.718	**	**	**	**
01045	IRON, TOTAL (UG/L AS FE)	07/07/82-07/07/82	1	160.	160.	160.	160.	0.	0.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	07/07/82-07/07/82	1	2.	2.	2.	2.	0.	0.	**	**	**	**
01052	LEAD IN BOTTOM DEPOSITS (MG/KG AS PB DRY WGT)	06/23/83-07/25/96	2	50.1	50.1	72.2	28.	976.82	31.254	**	**	**	**
01053	MANGANESE IN BOTTOM DEPOSITS (MG/KG AS MN DRY WGT)	07/25/96-07/25/96	1	926.	926.	926.	926.	0.	0.	**	**	**	**
01055	MANGANESE, TOTAL (UG/L AS MN)	07/07/82-07/07/82	1	80.	80.	80.	80.	0.	0.	**	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	07/07/82-07/07/82	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01068	NICKEL, TOTAL IN BOTTOM DEPOSITS (MG/KG,DRY WGT)	06/23/83-07/25/96	2	38.95	38.95	39.9	38.	1.805	1.344	**	**	**	**
01078	SILVER IN BOTTOM DEPOSITS (MG/KG AS AG DRY WGT)	07/25/96-07/25/96	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	07/07/82-07/07/82	1	10.	10.	10.	10.	0.	0.	**	**	**	**
01093	ZINC IN BOTTOM DEPOSITS (MG/KG AS ZN DRY WGT)	06/23/83-07/25/96	2	95.15	95.15	101.	89.3	68.445	8.273	**	**	**	**
01098	ANTIMONY IN BOTTOM DEPOSITS (MG/KG AS SB DRY WGT)	07/25/96-07/25/96	1	18.	18.	18.	18.	0.	0.	**	**	**	**
01108	ALUMINUM IN BOTTOM DEPOSITS (MG/KG AS AL DRY WGT)	07/25/96-07/25/96	1	17000.	17000.	17000.	17000.	0.	0.	**	**	**	**
01148	SELENIUM IN BOTTOM DEPOSITS (MG/KG AS SE DRY WGT)	06/23/83-07/25/96	2 ##	3.1	3.1	5.7	0.5	13.52	3.677	**	**	**	**
01170	IRON IN BOTTOM DEPOSITS (MG/KG AS FE DRY WGT)	07/25/96-07/25/96	1	62100.	62100.	62100.	62100.	0.	0.	**	**	**	**
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/09/79-07/14/97	133	100.	486.842	8000.	50.	1287799.043	1134.812	50.	50.	400.	1160.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/09/79-07/14/97	133	2.	2.242	3.903	1.699	0.295	0.543	1.699	1.699	2.602	3.064
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			174.662								
32240	TANNIN AND LIGNIN (MG/L)	08/04/92-08/04/92	1	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	12/07/82-12/07/82	1 ##	0.001	0.001	0.001	0.001	0.	0.	**	**	**	**
34480	THALLIUM DRY WGTBOTMG/KG	06/23/83-06/23/83	1	17.1	17.1	17.1	17.1	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	07/23/91-07/25/96	2 ##	42.5	42.5	50.	35.	112.5	10.607	**	**	**	**
39062	CHLORDANE-CIS ISOMER,WHOLE WATER SAMPL (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39065	CHLORDANE-TRNS ISOMER,WHOLE WATER SAMPL (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39068	CHLORDANE-NONACHLOR,CIS ISO,WHOLE WTR (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39071	CHLORDANE-NONACHLOR,TPANS ISO,WHOLE WTR (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39305	O,P' DDT IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39315	O,P' DDD IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39327	ORTHO PARA DDE IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/07/82	2	0.	0.	0.	0.	0.	0.	**	**	**	**
39333	ALDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/23/83-07/25/96	3	15.	38.333	100.	0.	2908.333	53.929	**	**	**	**
39350	CHLORDANE(TECH MIX & METABS),WHOLE WATER,UG/L	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39351	CHLORDANE(TECH MIX&METABS),SEDIMENTS,DRY WGT,UG/KG	07/23/91-07/25/96	2 ##	260.	260.	500.	20.	115200.	339.411	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	2 ##	57.5	57.5	100.	15.	3612.5	60.104	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/25/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	2 ##	57.5	57.5	100.	15.	3612.5	60.104	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	07/23/91-07/25/96	2 ##	35.25	35.25	70.	0.5	2415.125	49.144	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	07/23/91-07/25/96	2 ##	2.525	2.525	5.	0.05	12.251	3.5	**	**	**	**
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39526	PCBS TOTAL,IN SEDIMENT,DRY (ISOMER ANALYSES) UG/KG	07/23/91-07/25/96	2 ##	257.5	257.5	500.	15.	117612.5	342.947	**	**	**	**
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE (UG/L)	07/07/82-07/07/82	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39631	ATRAZINE IN BOTTOM DEPOS (UG/KG DRY SOLIDS)	06/23/83-06/23/83	1	0.	0.	0.	0.	0.	0.	**	**	**	**
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	07/21/80-07/21/80	1	0.	0.	0.	0.	0.	0.	**	**	**	**
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	06/17/82-08/16/83	7	0.	0.	0.	0.	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	05/04/92-07/14/97	30	0.02	0.02	0.04	0.005	0.	0.011	0.005	0.01	0.03	0.04

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
71900	MERCURY, TOTAL (UG/L AS HG)	07/07/82-07/07/82	1 ##	0.15	0.15	0.15	0.15	0.	0.	**	**	**
71921	MERCURY,TOT. IN BOT. DEPOS. (MG/KG AS HG DRY WGT)	06/23/83-07/25/96	2 ##	0.175	0.175	0.2	0.15	0.001	0.035	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT,DRY,WT,UG/KG	07/23/91-07/25/96	2 ##	52.5	52.5	100.	5.	4512.5	67.175	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT,DRY,WT,UG/KG	07/23/91-07/25/96	2 ##	67.5	67.5	100.	35.	2112.5	45.962	**	**	**
82078	TURBIDITY,FIELD NEPHELOMETRIC TURBIDITY UNITS,NTU	05/04/92-06/13/94	18	3.15	4.522	13.7	0.9	13.561	3.682	1.17	2.225	5.8

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0783

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00070	TURBIDITY, JACKSON CANDLE UNITS	50.	12	0	0.00	2	0	0.00	6	0	0.00	4	0	0.00			
00076	TURBIDITY, HACH TURBIDIMETER	50.	12	0	0.00	4	0	0.00	6	0	0.00	2	0	0.00			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	4.	30	0	0.00	8	0	0.00	14	0	0.00	8	0	0.00			
00300	OXYGEN, DISSOLVED	4.	102	0	0.00	30	0	0.00	39	0	0.00	33	0	0.00			
00400	PH	9.	131	4	0.03	38	1	0.03	52	3	0.06	41	0	0.00			
	Other-Lo Lim.	6.5	131	1	0.01	38	0	0.00	52	1	0.02	41	0	0.00			
00403	PH, LAB	9.	86	2	0.02	22	0	0.00	38	2	0.05	26	0	0.00			
	Other-Lo Lim.	6.5	86	2	0.02	22	1	0.05	38	1	0.03	26	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	1.	131	0	0.00	36	0	0.00	54	0	0.00	41	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	10.	131	0	0.00	36	0	0.00	54	0	0.00	41	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	860.	41	0	0.00	10	0	0.00	20	0	0.00	11	0	0.00			
	Drinking Water	250.	41	0	0.00	10	0	0.00	20	0	0.00	11	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	250.	41	0	0.00	10	0	0.00	20	0	0.00	11	0	0.00			
00951	FLUORIDE, TOTAL AS F	4.	20	0	0.00	5	0	0.00	10	0	0.00	5	0	0.00			
01027	CADMIUM, TOTAL	3.9	1	0	0.00	1	0	0.00									
	Drinking Water	5.	1	0	0.00	1	0	0.00									
01034	CHROMIUM, TOTAL	100.	1	0	0.00	1	0	0.00									
01042	COPPER, TOTAL	18.	1	0	0.00	1	0	0.00									
	Drinking Water	1300.	1	0	0.00	1	0	0.00									
01051	LEAD, TOTAL	82.	1	0	0.00	1	0	0.00									
	Drinking Water	15.	1	0	0.00	1	0	0.00									
01067	NICKEL, TOTAL	1400.	1	0	0.00	1	0	0.00									
	Drinking Water	100.	1	0	0.00	1	0	0.00									
01092	ZINC, TOTAL	120.	1	0	0.00	1	0	0.00									
	Drinking Water	5000.	1	0	0.00	1	0	0.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	200.	133	62	0.47	38	22	0.58	53	11	0.21	42	29	0.69			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	20.	1	0	0.00	1	0	0.00									
	Drinking Water	1.	1	0	0.00	1	0	0.00									
39300	P,P' DDT IN WHOLE WATER SAMPLE	1.1	1	0	0.00	1	0	0.00									
39310	P,P' DDD IN WHOLE WATER SAMPLE	0.6	1	0	0.00	1	0	0.00									
39320	P,P' DDE IN WHOLE WATER SAMPLE	1050.	1	0	0.00	1	0	0.00									
39330	ALDRIN IN WHOLE WATER SAMPLE	3.	2	0	0.00	2	0	0.00									
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	2.4	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									
39380	DIELDRIN IN WHOLE WATER SAMPLE	2.5	1	0	0.00	1	0	0.00									
39390	ENDRIN IN WHOLE WATER SAMPLE	0.18	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	40.	1	0	0.00	1	0	0.00									
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	3.	1	0	0.00	1	0	0.00									
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	6.	1	0	0.00	1	0	0.00									
	Drinking Water	1.	1	0	0.00	1	0	0.00									
50060	CHLORINE, TOTAL RESIDUAL	0.019	7	0	0.00	4	0	0.00	1	0	0.00	2	0	0.00			
71900	MERCURY, TOTAL	2.4	1	0	0.00	1	0	0.00									
	Drinking Water	2.	1	0	0.00	1	0	0.00									
82078	TURBIDITY, FIELD	50.	18	0	0.00	4	0	0.00	8	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1979 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	5	20.	18.7	21.	12.	14.45	3.801	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	5	486.	469.2	513.	424.	1441.7	37.97	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	5	8.6	9.04	10.6	7.	2.208	1.486	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	4	1.	1.25	2.	1.	0.25	0.5	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	5	10.	9.8	16.	5.	16.2	4.025	**	**	**	**
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	5	8.5	8.26	8.7	7.6	0.203	0.451	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	5	8.5	8.061	8.7	7.6	0.252	0.502	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	5	0.003	0.009	0.025	0.002	0.	0.01	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	4	15.	40.125	128.	2.5	3509.396	59.24	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	5	6.	7.3	15.	2.5	22.45	4.738	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	5	6.	28.1	113.	1.	2297.05	47.928	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	5###	0.05	0.06	0.1	0.05	0.001	0.022	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	5###	0.005	0.015	0.04	0.005	0.	0.015	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	5	1.2	1.28	1.6	1.	0.067	0.259	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	5	0.3	0.3	0.4	0.2	0.01	0.1	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	5###	0.05	0.07	0.1	0.05	0.001	0.027	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	5	0.04	0.05	0.1	0.03	0.001	0.029	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	5	3.	3.7	9.	0.5	11.95	3.457	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	4	450.	2250.	8000.	100.	14803333.333	3847.51	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	4	2.452	2.702	3.903	2.	0.823	0.907	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			502.973								

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1980 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	5	13.1	14.98	26.2	7.4	65.712	8.106	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	5	557.	521.4	604.	304.	15460.3	124.339	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	5	11.3	10.88	13.7	8.	6.767	2.601	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	5	1.	1.	2.	0.5	0.375	0.612	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	5	9.	10.	16.	6.	16.5	4.062	**	**	**	**
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	5	8.7	8.52	9.	7.7	0.242	0.492	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	5	8.7	8.25	9.	7.7	0.333	0.577	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	5	0.002	0.006	0.02	0.001	0.	0.008	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	5	12.	12.7	24.	2.5	86.2	9.284	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	5	2.5	2.9	8.	0.	9.55	3.09	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	5	12.	10.3	21.	2.5	55.2	7.43	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	5###	0.05	0.24	1.	0.05	0.181	0.425	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	5	0.01	0.014	0.02	0.01	0.	0.005	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	5	1.5	1.42	2.	0.6	0.262	0.512	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	5	0.2	0.22	0.3	0.2	0.002	0.045	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	5	0.1	0.12	0.3	0.05	0.011	0.104	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	5	0.04	0.074	0.14	0.03	0.003	0.052	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	5	8.	7.8	12.	1.	17.2	4.147	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	5	100.	160.	400.	50.	21750.	147.479	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	5	2.	2.06	2.602	1.699	0.154	0.392	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			114.87								

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1981 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	10	14.9	13.69	26.	0.8	78.621	8.867	1.02	5.1	20.45	25.73
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	11	556.	537.091	647.	354.	7160.291	84.619	374.	475.	600.	639.8
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	10	11.7	11.06	15.	6.3	7.269	2.696	6.52	8.8	12.775	14.95
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	11	1.	1.545	3.	1.	0.473	0.688	1.	1.	2.	2.8
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	11	7.	8.318	17.	0.5	18.014	4.244	1.6	6.	10.	16.2
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	10	8.5	8.388	9.	7.5	0.256	0.506	7.53	7.935	8.775	9.
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	10	8.5	8.116	9.	7.5	0.338	0.582	7.53	7.935	8.775	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	10	0.003	0.008	0.032	0.001	0.	0.01	0.001	0.002	0.012	0.03
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	11	8.	13.909	40.	2.5	176.791	13.296	2.5	2.5	24.	38.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	11	2.5	3.091	6.	2.	1.391	1.179	2.	2.5	4.	5.6
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	11	6.	11.727	36.	1.	154.318	12.422	1.3	2.5	21.	35.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	11 ##	0.05	0.086	0.3	0.05	0.007	0.084	0.05	0.05	0.05	0.28
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	11	0.01	0.014	0.03	0.005	0.	0.008	0.005	0.01	0.02	0.028
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	11	1.2	1.515	5.	0.11	1.664	1.29	0.208	0.86	1.6	4.46
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	11	0.3	0.273	0.5	0.1	0.016	0.127	0.1	0.2	0.4	0.48
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	11	0.1	0.091	0.2	0.05	0.002	0.044	0.05	0.05	0.1	0.18
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	11	0.09	0.092	0.2	0.05	0.002	0.043	0.052	0.06	0.1	0.186
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	11	10.	9.864	24.	0.5	31.605	5.622	1.6	8.	11.	21.6
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	11 ##	50.	286.364	1600.	50.	241545.455	491.473	50.	50.	300.	1440.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	11 ##	1.699	2.043	3.204	1.699	0.311	0.557	1.699	1.699	2.477	3.144
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			110.503								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1982 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	9	19.	15.8	23.5	0.5	52.948	7.277	0.5	11.35	21.5	23.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	9	523.	477.111	589.	244.	14222.861	119.26	244.	379.5	567.	589.
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	9	9.5	9.689	13.2	8.2	2.219	1.49	8.2	8.55	10.1	13.2
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	9	1.	1.333	3.	1.	0.5	0.707	1.	1.	1.5	3.
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	9	6.	9.889	21.	5.	36.611	6.051	5.	15.	21.	
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	8	7.77	7.71	8.22	7.2	0.114	0.338	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	8	7.764	7.595	8.22	7.2	0.13	0.36	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	8	0.017	0.025	0.063	0.006	0.	0.02	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	1	7.2	7.2	7.2	7.2	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	1	0.063	0.063	0.063	0.063	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	1	60.	60.	60.	60.	0.	0.	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	9	6.	10.889	31.	2.5	118.299	10.877	2.5	3.75	19.5	31.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	9	2.5	2.778	5.	1.	1.382	1.176	1.	2.	3.5	5.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	9	4.	8.667	26.	1.	100.438	10.022	1.	2.5	17.	26.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	9 ##	0.05	0.072	0.2	0.05	0.003	0.051	0.05	0.05	0.075	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	9	0.01	0.013	0.02	0.005	0.	0.007	0.005	0.008	0.02	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	9	1.1	1.034	1.4	0.58	0.07	0.264	0.58	0.815	1.25	1.4
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	9	0.2	0.333	0.7	0.2	0.037	0.194	0.2	0.2	0.5	0.7
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	9	0.1	0.117	0.2	0.05	0.004	0.066	0.05	0.05	0.2	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	9	0.11	0.109	0.2	0.02	0.003	0.057	0.02	0.06	0.155	0.2
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	9	7.	6.333	10.	2.	10.75	3.279	2.	2.5	9.5	10.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	9	300.	672.222	4000.	50.	1576944.444	1255.764	50.	150.	450.	4000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	9	2.477	2.462	3.602	1.699	0.278	0.527	1.699	2.151	2.651	3.602
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			289.761								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1983 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	13	17.2	14.062	24.1	0.	60.079	7.751	1.8	7.25	20.5	23.06
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	11	434.	395.273	506.	273.	7352.618	85.747	279.2	317.	456.	504.8
00300	OXYGEN, DISSOLVED MG/L	13	9.2	10.338	14.5	7.9	4.163	2.04	8.14	8.8	11.9	13.86
00310	BOD, 5 DAY, 20 DEG C MG/L	11	1.	1.227	2.	0.5	0.268	0.518	0.6	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	11	6.	8.5	20.	0.5	41.05	6.407	0.8	3.	13.	19.6
00400	PH (STANDARD UNITS)	13	7.68	7.656	8.	7.	0.107	0.328	7.04	7.475	7.9	8.
00400	CONVERTED PH (STANDARD UNITS)	13	7.68	7.525	8.	7.	0.126	0.355	7.04	7.475	7.9	8.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	13	0.021	0.03	0.1	0.01	0.001	0.028	0.01	0.013	0.034	0.092
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	11	6.	18.636	96.	2.5	792.155	28.145	2.5	2.5	26.	84.4
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	11	3.	6.455	25.	2.	47.573	6.897	2.1	2.5	10.	22.2
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	11	2.5	13.091	71.	1.	442.791	21.043	1.2	2.5	21.	62.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	11 ##	0.05	0.064	0.1	0.05	0.001	0.023	0.05	0.05	0.1	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	11	0.01	0.009	0.01	0.005	0.	0.002	0.005	0.01	0.01	0.01
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	11	0.8	0.923	1.5	0.59	0.111	0.333	0.592	0.6	1.3	1.478
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	11	0.3	0.373	0.7	0.1	0.04	0.2	0.12	0.2	0.6	0.68
00665	PHOSPHORUS, TOTAL (MG/L AS P)	11 ##	0.05	0.079	0.2	0.05	0.002	0.048	0.05	0.05	0.1	0.184
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	11	0.05	0.054	0.12	0.03	0.001	0.026	0.03	0.04	0.06	0.112
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	11	6.	5.5	7.	0.5	4.35	2.086	1.	5.	7.	7.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	300.	436.364	1600.	50.	272045.455	521.58	50.	100.	400.	1540.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11	2.477	2.38	3.204	1.699	0.256	0.506	1.699	2.	2.602	3.186
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1984 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	9	12.5	12.711	25.5	4.	70.066	8.371	4.	4.	20.6	25.5
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	9	374.	369.667	482.	257.	5014.	70.81	257.	314.5	424.	482.
00300	OXYGEN, DISSOLVED MG/L	9	9.	10.456	14.6	7.9	6.24	2.498	7.9	8.35	12.5	14.6
00310	BOD, 5 DAY, 20 DEG C MG/L	10	1.	1.2	2.	0.5	0.344	0.587	0.5	0.875	2.	2.
00340	COD, .25N K2CR2O7 MG/L	10	5.	4.75	8.	0.5	4.625	2.151	0.65	3.5	6.	7.8
00400	PH (STANDARD UNITS)	9	8.	7.937	8.5	7.4	0.093	0.305	7.4	7.75	8.09	8.5
00400	CONVERTED PH (STANDARD UNITS)	9	8.	7.843	8.5	7.4	0.103	0.32	7.4	7.75	8.09	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	9	0.01	0.014	0.04	0.003	0.	0.011	0.003	0.008	0.018	0.04
00403	PH, LAB, STANDARD UNITS SU	4	7.9	7.775	7.9	7.4	0.063	0.25	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	4	7.9	7.712	7.9	7.4	0.068	0.26	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.013	0.019	0.04	0.013	0.	0.014	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	4	180.	164.75	191.	108.	1500.917	38.742	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10 ##	4.75	6.75	17.	2.5	28.069	5.298	2.5	2.5	11.5	16.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10 ##	2.5	3.65	8.	1.	5.114	2.261	1.15	2.5	5.5	7.9
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10 ##	3.25	4.35	9.	2.5	5.225	2.286	2.5	2.5	6.	8.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	10 ##	0.05	0.055	0.1	0.05	0.	0.016	0.05	0.05	0.05	0.095
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	10 ##	0.008	0.012	0.05	0.005	0.	0.014	0.005	0.005	0.01	0.046
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	10	0.84	0.961	1.9	0.3	0.235	0.484	0.325	0.618	1.35	1.86
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	10	0.25	0.29	0.7	0.1	0.034	0.185	0.1	0.175	0.35	0.68
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10 ##	0.05	0.08	0.2	0.05	0.002	0.048	0.05	0.05	0.1	0.19
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	10	0.05	0.062	0.19	0.02	0.002	0.049	0.021	0.03	0.07	0.178
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	10	3.	3.2	8.	1.	4.844	2.201	1.	4.25	7.7	7.7
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	150.	585.	3800.	50.	1323916.667	1150.616	50.	50.	550.	3490.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	10	2.151	2.3	3.58	1.699	0.377	0.614	1.699	1.699	2.736	3.506
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1985 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	10	9.1	12.14	23.	1.5	76.374	8.739	1.71	4.65	21.575	23.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	10	410.	401.1	527.	239.	7619.878	87.292	243.4	352.	466.75	522.1
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	10	11.3	10.44	15.	6.3	9.094	3.016	6.32	7.325	12.8	14.84
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	11	1.	1.182	2.	0.5	0.314	0.56	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	11	13.	11.364	22.	4.	28.855	5.372	4.	8.	15.	20.6
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	10	7.9	7.55	8.2	6.	0.501	0.707	6.06	7.275	8.	8.18
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	10	7.9	6.861	8.2	6.	1.029	1.014	6.06	7.275	8.	8.18
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	10	0.013	0.138	1.	0.006	0.097	0.312	0.007	0.01	0.087	0.925
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	11	7.7	7.5	8.1	6.1	0.392	0.626	6.2	7.4	7.9	8.08
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	11	7.7	6.951	8.1	6.1	0.724	0.851	6.2	7.4	7.9	8.08
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	11	0.02	0.112	0.794	0.008	0.056	0.237	0.008	0.013	0.04	0.686
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	11	132.	125.455	201.	23.	3232.473	56.855	32.4	72.	167.	198.4
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	11	9.	12.727	50.	2.5	213.318	14.605	2.5	2.5	16.	45.6
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	11	2.5	3.545	8.	1.	4.973	2.23	1.2	2.	5.	7.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	11	6.	10.091	43.	2.5	154.791	12.441	2.5	2.5	10.	39.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	8 ##	0.05	0.069	0.2	0.05	0.003	0.053	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	8	0.01	0.008	0.01	0.005	0.	0.003	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	8	0.85	1.001	1.9	0.69	0.165	0.407	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	5	0.4	0.39	0.5	0.3	0.008	0.039	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	5	0.13	0.126	0.2	0.05	0.006	0.075	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	8	0.07	0.087	0.2	0.04	0.003	0.054	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	11	5.	6.091	9.	4.	5.091	2.256	4.	4.	8.	9.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	10	186.	184.4	256.	102.	2436.267	49.359	103.2	151.5	224.	254.6
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	11	100.	409.091	2600.	50.	567909.091	753.597	50.	50.	400.	2220.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	11	2.	2.205	3.415	1.699	0.316	0.562	1.699	1.699	2.602	3.301
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			160.495								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	12	16.6	14.758	25.	0.5	67.081	8.19	2.	7.35	22.15	24.7
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	13	498.	465.	528.	340.	4201.5	64.819	350.4	407.	514.	523.2
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	12	8.6	9.5	12.2	6.6	4.135	2.033	6.96	7.925	12.025	12.2
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	13	1.	1.154	2.	0.5	0.266	0.516	0.5	1.	1.5	2.
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	13	6.	6.615	10.	2.	4.756	2.181	2.8	6.	8.	10.
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	12	7.85	7.825	8.7	7.1	0.148	0.384	7.22	7.6	7.975	8.52
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	12	7.847	7.68	8.7	7.1	0.17	0.413	7.22	7.6	7.975	8.52
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	12	0.014	0.021	0.079	0.002	0.	0.02	0.004	0.011	0.025	0.065
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	12	7.8	7.733	8.2	6.3	0.23	0.479	6.72	7.7	8.	8.14
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	12	7.8	7.259	8.2	6.3	0.476	0.69	6.72	7.7	8.	8.14
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	12	0.016	0.055	0.501	0.006	0.02	0.141	0.007	0.01	0.02	0.357
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	12	163.	151.667	208.	14.	3397.697	58.29	38.6	111.5	201.75	207.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	13	7.	6.231	13.	2.5	10.942	3.308	2.5	2.5	7.5	12.2
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	13	2.5	3.462	7.	1.	3.519	1.876	1.4	2.25	4.5	7.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	13	2.5	3.538	7.	0.	4.353	2.086	0.8	2.25	6.	6.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	13 ##	0.05	0.058	0.1	0.05	0.	0.019	0.05	0.05	0.05	0.1
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	13	0.01	0.011	0.03	0.005	0.	0.008	0.005	0.005	0.015	0.026
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	13	0.9	0.973	1.5	0.3	0.096	0.31	0.456	0.835	1.175	1.456
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	13	0.3	0.288	0.5	0.05	0.013	0.112	0.11	0.2	0.35	0.46
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	13	0.1	0.088	0.1	0.05	0.	0.022	0.05	0.075	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	13	0.05	0.048	0.12	0.02	0.001	0.026	0.02	0.03	0.055	0.096
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	13	4.	4.308	7.	3.	1.231	1.109	3.	3.5	5.	6.2
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	13	238.	219.231	254.	150.	1144.359	33.828	155.6	196.	242.	250.8
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	13	100.	130.769	200.	50.	3557.692	59.646	50.	100.	200.	200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	13	2.	2.069	2.301	1.699	0.048	0.218	1.699	2.	2.301	2.301

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1986 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			117.346								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1987 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	11	12.5	13.718	22.5	3.5	49.332	7.024	3.96	6.7	22.	22.5
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	11	500.	448.727	535.	281.	9691.218	98.444	285.8	322.	523.	534.6
00300 OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	11	10.5	10.036	12.7	6.8	3.089	1.757	6.98	8.6	11.4	12.44
00310 BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	11	1.	1.045	2.	0.5	0.273	0.522	0.5	0.5	1.	2.
00340 COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	11	13.	13.773	42.	0.5	141.468	11.894	0.8	3.	21.	38.2
00400 PH (STANDARD UNITS)	05/09/79-07/14/97	10	8.055	8.002	8.51	7.5	0.104	0.322	7.5	7.725	8.2	8.479
00400 CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	10	8.052	7.89	8.51	7.5	0.118	0.343	7.5	7.725	8.2	8.479
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	10	0.009	0.013	0.032	0.003	0.	0.01	0.003	0.006	0.02	0.032
00403 PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	11	7.8	7.764	8.1	6.8	0.135	0.367	6.96	7.6	8.	8.1
00403 CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	11	7.8	7.552	8.1	6.8	0.184	0.429	6.96	7.6	8.	8.1
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	11	0.016	0.028	0.158	0.008	0.002	0.044	0.008	0.01	0.025	0.132
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	11	160.	163.818	222.	104.	1828.964	42.766	104.8	125.	207.	219.
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	11 ##	2.5	8.955	70.	2.5	411.023	20.274	2.5	2.5	2.5	57.2
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	11 ##	2.5	3.318	9.	2.5	4.114	2.028	2.5	2.5	2.5	8.2
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	11 ##	2.5	7.818	61.	2.5	311.114	17.638	2.5	2.5	2.5	49.3
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	11 ##	0.05	0.059	0.1	0.05	0.	0.02	0.05	0.05	0.05	0.1
00615 NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	11	0.02	0.02	0.08	0.005	0.	0.021	0.005	0.005	0.02	0.07
00620 NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	11	1.32	1.228	1.59	0.74	0.074	0.272	0.772	1.	1.47	1.568
00625 NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	11	0.3	0.4	1.1	0.2	0.108	0.329	0.2	0.2	0.4	1.08
00665 PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	11	0.1	0.1	0.2	0.05	0.002	0.039	0.05	0.1	0.1	0.18
00671 PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	11	0.06	0.062	0.13	0.03	0.001	0.028	0.03	0.04	0.07	0.12
00680 CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	7	4.	4.429	8.	2.	3.619	1.902	**	**	**	**
00900 HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	11	216.	213.455	268.	136.	1928.873	43.919	138.8	186.	252.	265.6
31616 FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	10	200.	1015.	8000.	50.	6069472.222	2463.63	50.	50.	475.	7270.
31616 LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	10	2.239	2.353	3.903	1.699	0.48	0.693	1.699	1.699	2.663	3.797
31616 GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			225.234								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010 TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	7	10.2	11.643	24.4	0.4	63.76	7.985	**	**	**	**
00094 SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	7	484.	490.714	563.	354.	4739.238	68.842	**	**	**	**
00300 OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	7	9.9	10.214	13.3	8.1	4.211	2.052	**	**	**	**
00310 BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	7	1.	0.929	2.	0.5	0.286	0.535	**	**	**	**
00340 COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	7	5.	6.286	12.	3.	9.905	3.147	**	**	**	**
00400 PH (STANDARD UNITS)	05/09/79-07/14/97	7	8.12	8.174	8.63	7.93	0.051	0.227	**	**	**	**
00400 CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	7	8.12	8.133	8.63	7.93	0.053	0.231	**	**	**	**
00400 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	7	0.008	0.007	0.012	0.002	0.	0.003	**	**	**	**
00403 PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	7	7.9	7.957	8.2	7.7	0.033	0.181	**	**	**	**
00403 CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	7	7.9	7.925	8.2	7.7	0.034	0.185	**	**	**	**
00403 MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	7	0.013	0.012	0.02	0.006	0.	0.005	**	**	**	**
00410 ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	6	207.5	196.667	221.	162.	649.867	25.492	**	**	**	**
00530 RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	7 ##	2.5	2.714	9.	0.5	8.405	2.899	**	**	**	**
00535 RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	7 ##	1.	1.571	2.5	0.5	0.786	0.886	**	**	**	**
00540 RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	7 ##	2.5	2.5	8.	0.5	6.75	2.598	**	**	**	**
00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	7	0.05	0.074	0.26	0.02	0.007	0.084	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1988 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	7	0.03	0.039	0.07	0.01	0.001	0.027	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	7	1.31	1.299	1.53	0.85	0.047	0.217	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	7	0.3	0.357	0.6	0.2	0.016	0.127	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	7	0.1	0.093	0.2	0.05	0.003	0.053	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	7	0.04	0.054	0.13	0.03	0.001	0.035	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	5	2.8	2.46	3.1	1.7	0.433	0.658	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	7	234.	234.	266.	174.	886.667	29.777	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	8	200.	543.75	2200.	50.	577455.357	759.905	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	8	2.239	2.332	3.342	1.699	0.427	0.654	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			214.834								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1989 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	5	16.4	14.28	21.1	3.8	58.807	7.669	**	**	**	**
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	4	467.	468.5	543.	397.	4788.333	69.198	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	5	10.5	10.44	13.9	8.	6.433	2.536	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	4	1.5	1.75	3.	1.	0.917	0.957	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	4	9.	9.25	12.	7.	4.25	2.062	**	**	**	**
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	5	8.07	8.194	8.41	8.07	0.029	0.171	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	5	8.07	8.169	8.41	8.07	0.03	0.173	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	5	0.009	0.007	0.009	0.004	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	4	8.05	8.025	8.1	7.9	0.009	0.096	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	4	8.047	8.017	8.1	7.9	0.009	0.096	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	4	0.009	0.01	0.013	0.008	0.	0.002	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	4	160.	159.75	192.	127.	800.25	28.289	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	4	4.5	4.	5.	2.	1.414	1.414	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	4	2.5	2.75	5.	1.	2.917	1.708	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	4	1.5	1.375	2.	0.5	0.563	0.75	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	4 ##	0.03	0.035	0.06	0.02	0.	0.019	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	4	0.015	0.014	0.02	0.005	0.	0.008	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	4	1.305	1.3	1.78	0.81	0.241	0.491	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	4	0.3	0.425	1.	0.1	0.163	0.403	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	4	0.1	0.087	0.1	0.05	0.001	0.025	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	4	0.05	0.058	0.1	0.03	0.001	0.03	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	4	2.35	2.475	3.1	2.1	0.203	0.45	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	4	230.	224.5	254.	184.	1123.667	33.521	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	4 ##	50.	62.5	100.	50.	625.	25.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	4 ##	1.699	1.774	2.	1.699	0.023	0.151	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			59.46								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	3	17.	14.433	17.1	9.2	20.543	4.532	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	3	10.2	10.233	10.4	10.1	0.023	0.153	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	3	1.	1.	1.	1.	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	3	7.	5.667	7.	3.	5.333	2.309	**	**	**	**
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	3	8.2	8.163	8.4	7.89	0.066	0.257	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	3	8.2	8.112	8.4	7.89	0.07	0.265	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	3	0.006	0.008	0.013	0.004	0.	0.005	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1991 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	3	8.3	8.267	8.3	8.2	0.003	0.058	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	3	8.3	8.264	8.3	8.2	0.003	0.058	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	3	0.005	0.005	0.006	0.005	0.	0.001	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	3	200.	197.333	201.	191.	30.333	5.508	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	3	3.	6.	12.	3.	27.	5.196	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	3	1.	1.333	2.	1.	0.333	0.577	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	3	2.	4.667	10.	2.	21.333	4.619	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	3###	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	3###	0.005	0.005	0.005	0.005	0.	0.	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	3	0.63	0.717	0.91	0.61	0.028	0.168	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	3	0.3	0.267	0.3	0.2	0.003	0.058	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	3###	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	3	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	3	2.	2.167	2.9	1.6	0.443	0.666	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	3	240.	243.333	250.	240.	33.333	5.774	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	3	100.	83.333	100.	50.	833.333	28.868	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	3	2.	1.9	2.	1.699	0.03	0.174	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			79.37								

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1992 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	11	8.9	11.4	23.7	1.7	55.582	7.455	2.16	4.2	17.	23.16
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	1	446.	446.	446.	446.	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	3	12.	12.433	14.4	10.9	3.203	1.79	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	12	1.	1.167	3.	0.5	0.47	0.685	0.5	1.	1.	2.7
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	12	9.5	11.25	21.	3.	37.659	6.137	3.6	6.	16.75	20.7
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	11	8.1	8.186	9.35	6.8	0.501	0.708	6.98	7.7	8.8	9.26
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	11	8.1	7.656	9.35	6.8	0.811	0.9	6.98	7.7	8.8	9.26
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	11	0.008	0.022	0.158	0.	0.002	0.046	0.001	0.002	0.02	0.131
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	11	8.3	8.273	8.6	8.	0.048	0.22	8.	8.1	8.5	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	11	8.3	8.226	8.6	8.	0.051	0.225	8.	8.1	8.5	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	11	0.005	0.006	0.01	0.003	0.	0.003	0.003	0.003	0.008	0.01
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	12	172.5	168.917	216.	91.	1156.629	34.009	103.9	148.25	194.25	213.
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	12	4.5	5.375	15.	1.5	15.506	3.938	1.65	2.	6.75	13.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	12	1.	1.167	3.	0.	0.652	0.807	0.	1.	1.5	2.7
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	12	3.5	4.458	13.	1.5	10.339	3.215	1.65	2.	5.75	11.2
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	12###	0.02	0.027	0.1	0.02	0.001	0.023	0.02	0.02	0.02	0.076
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	12	0.01	0.009	0.02	0.005	0.	0.004	0.005	0.005	0.01	0.017
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	12	1.33	1.433	2.38	0.98	0.161	0.401	0.992	1.103	1.64	2.23
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	12	0.3	0.317	0.6	0.2	0.016	0.127	0.2	0.2	0.375	0.57
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	12###	0.075	0.075	0.1	0.05	0.001	0.026	0.05	0.05	0.1	0.1
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	4	0.015	0.02	0.04	0.01	0.	0.014	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	12	4.6	4.033	8.2	1.	5.333	2.309	1.09	1.8	5.75	7.66
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	12	225.	220.333	264.	146.	970.061	31.146	159.8	202.	240.	260.4
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	12	100.	600.	2800.	50.	782727.273	884.719	50.	50.	1225.	2440.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	12	2.	2.312	3.447	1.699	0.442	0.665	1.699	1.699	3.071	3.374
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			204.936								

** - Less than 9 observations ### - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1993 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	8	9.8	11.475	21.9	2.5	49.265	7.019	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	8	2.	1.75	3.	1.	0.5	0.707	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	8	6.	8.688	23.	2.5	43.638	6.606	**	**	**	**
00400	PH (STANDARD UNITS)	8	7.95	7.8	8.5	6.7	0.509	0.713	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	8	7.822	7.339	8.5	6.7	0.751	0.867	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	8	0.015	0.046	0.2	0.003	0.005	0.067	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	8	8.55	8.513	9.	7.9	0.11	0.331	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	8	8.547	8.393	9.	7.9	0.126	0.355	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	8	0.003	0.004	0.013	0.001	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	8	155.5	151.25	201.	81.	1527.357	39.081	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	8	3.5	5.125	14.	1.5	18.625	4.316	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	8	1.25	1.313	2.	1.	0.138	0.372	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	8	3.	4.375	12.	1.5	14.196	3.768	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	8 ##	0.02	0.039	0.1	0.02	0.001	0.035	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	8 ##	0.005	0.008	0.02	0.005	0.	0.005	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	8	0.815	0.881	1.36	0.48	0.111	0.333	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	8	0.3	0.288	0.4	0.2	0.007	0.083	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	8 ##	0.075	0.075	0.1	0.05	0.001	0.027	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	8	3.6	3.45	5.1	1.3	1.854	1.362	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	8	206.	200.75	252.	126.	1767.929	42.047	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	100.	168.75	600.	50.	34241.071	185.043	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	8	2.	2.06	2.778	1.699	0.147	0.384	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	114.72							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1994 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	4	17.4	15.925	26.1	2.8	114.289	10.691	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	3	1.	0.833	1.	0.5	0.083	0.289	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	4	6.5	7.	9.	6.	2.	1.414	**	**	**	**
00400	PH (STANDARD UNITS)	4	8.15	8.15	8.3	8.	0.017	0.129	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	4	8.147	8.136	8.3	8.	0.017	0.13	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.007	0.007	0.01	0.005	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	4	8.25	8.475	9.3	8.1	0.323	0.568	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	4	8.225	8.293	9.3	8.1	0.367	0.605	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.006	0.005	0.008	0.001	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	4	209.	190.5	218.	126.	1891.	43.486	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	4	6.5	6.125	10.	1.5	12.396	3.521	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	4	1.75	1.625	2.	1.	0.229	0.479	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	4	5.	4.875	8.	1.5	7.063	2.658	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	4 ##	0.035	0.035	0.05	0.02	0.	0.017	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	4	0.01	0.011	0.02	0.005	0.	0.006	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	4	0.965	0.97	1.06	0.89	0.005	0.071	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	4	0.3	0.3	0.4	0.2	0.007	0.082	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	4 ##	0.05	0.063	0.1	0.05	0.001	0.025	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	4	1.75	1.725	2.3	1.1	0.256	0.506	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	4	253.5	232.	257.	164.	2059.333	45.38	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	4	350.	387.5	800.	50.	110625.	332.603	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	4	2.5	2.401	2.903	1.699	0.281	0.53	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	251.487							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1995 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	4	8.05	10.875	24.2	3.2	92.076	9.596	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	4 ##	1.1	1.15	1.9	0.5	0.57	0.755	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	4	12.	12.5	16.	10.	9.	3.	**	**	**	**
00400	PH (STANDARD UNITS)	4	8.	8.	8.2	7.8	0.033	0.183	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	4	7.989	7.972	8.2	7.8	0.034	0.185	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.01	0.011	0.016	0.006	0.	0.004	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	4	7.6	7.575	7.8	7.3	0.049	0.222	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	4	7.589	7.532	7.8	7.3	0.052	0.227	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.026	0.029	0.05	0.016	0.	0.015	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	4	139.	144.25	183.	116.	787.583	28.064	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	4	3.5	5.125	12.	1.5	22.063	4.697	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	4 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	4 ##	2.75	4.5	11.	1.5	20.167	4.491	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	4 ##	0.02	0.025	0.04	0.02	0.	0.01	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	4	0.02	0.019	0.03	0.005	0.	0.013	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	4	0.685	0.685	0.8	0.57	0.016	0.127	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	4	0.25	0.325	0.6	0.2	0.036	0.189	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	4 ##	0.075	0.075	0.1	0.05	0.001	0.029	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	4	4.7	4.775	6.3	3.4	1.576	1.255	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	4	185.	187.	220.	158.	678.667	26.051	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	4	450.	500.	1000.	100.	153333.333	391.578	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	4	2.628	2.564	3.	2.	0.187	0.433	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	366.284							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1996 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	5	12.2	11.84	20.9	1.7	76.743	8.76	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	4 ##	0.5	0.625	1.	0.5	0.063	0.25	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	4	11.	10.75	12.	9.	1.583	1.258	**	**	**	**
00400	PH (STANDARD UNITS)	5	8.	7.98	8.3	7.7	0.057	0.239	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	5	8.	7.93	8.3	7.7	0.06	0.245	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	5	0.01	0.012	0.02	0.005	0.	0.006	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	4	7.95	7.875	8.	7.6	0.036	0.189	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	4	7.947	7.841	8.	7.6	0.037	0.193	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	4	0.011	0.014	0.025	0.01	0.	0.007	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	4	144.5	134.5	173.	76.	2101.667	45.844	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	4	5.5	8.	17.	4.	38.	6.164	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	4 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	4	4.5	6.75	15.	3.	32.25	5.679	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	4 ##	0.02	0.035	0.08	0.02	0.001	0.03	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	4 ##	0.005	0.009	0.02	0.005	0.	0.008	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	4	0.68	0.675	0.76	0.58	0.005	0.074	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	4	0.25	0.275	0.5	0.1	0.029	0.171	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	4 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	3	3.4	3.633	4.4	3.1	0.463	0.681	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	4	177.5	168.5	210.	109.	2145.667	46.321	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	4	150.	387.5	1200.	50.	297291.667	545.245	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	4	2.151	2.27	3.079	1.699	0.352	0.593	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	186.121							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1997 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	2	14.85	14.85	20.6	9.1	66.125	8.132	**	**	**	**
00310	BOD, 5 DAY, 20 DEG C MG/L	2 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
00340	COD, .25N K2CR2O7 MG/L	2 ##	5.25	5.25	8.	2.5	15.125	3.889	**	**	**	**
00400	PH (STANDARD UNITS)	2	7.85	7.85	7.9	7.8	0.005	0.071	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	2	7.847	7.847	7.9	7.8	0.005	0.071	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	2	0.014	0.014	0.016	0.013	0.	0.002	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	2	8.1	8.1	8.2	8.	0.02	0.141	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	2	8.089	8.089	8.2	8.	0.02	0.142	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	2	0.008	0.008	0.01	0.006	0.	0.003	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	2	205.	205.	242.	168.	2738.	52.326	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	2	5.5	5.5	8.	3.	12.5	3.536	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	2 ##	1.5	1.5	1.5	1.5	0.	0.	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	2	5.5	5.5	8.	3.	12.5	3.536	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	2 ##	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	2 ##	0.008	0.008	0.01	0.005	0.	0.004	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	2	1.015	1.015	1.28	0.75	0.14	0.375	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	2	0.35	0.35	0.4	0.3	0.005	0.071	**	**	**	**
00665	PHOSPHORUS, TOTAL (MG/L AS P)	2 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	2	234.5	234.5	255.	214.	840.5	28.991	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2 ##	125.	125.	200.	50.	11250.	106.066	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	2 ##	2.	2.	2.301	1.699	0.181	0.426	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			GEOMETRIC MEAN =	100.							

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	39	21.	21.126	26.2	12.5	8.993	2.999	17.	19.5	23.5	25.
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	28	511.5	494.357	600.	305.	4409.646	66.405	418.1	450.25	530.25	580.8
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	30	8.4	8.36	10.6	6.3	1.251	1.118	6.51	7.875	8.925	10.08
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	38	1.	0.974	2.	0.5	0.216	0.464	0.5	0.5	1.	2.
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	39	6.	10.09	42.	0.5	62.854	7.928	3.	5.	15.	21.
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	38	7.845	7.892	9.	7.2	0.14	0.375	7.495	7.7	8.015	8.52
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	38	7.845	7.762	9.	7.2	0.158	0.397	7.495	7.7	8.015	8.52
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	38	0.014	0.017	0.063	0.001	0.	0.014	0.003	0.01	0.02	0.032
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	22	8.	7.932	8.8	6.3	0.296	0.544	6.9	7.875	8.2	8.44
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	22	8.	7.366	8.8	6.3	0.63	0.794	6.9	7.875	8.2	8.44
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	22	0.01	0.043	0.501	0.002	0.013	0.115	0.004	0.006	0.013	0.183
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	22	189.5	175.773	242.	14.	2493.041	49.93	87.9	171.5	203.	207.7
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	39	6.	13.987	128.	0.5	681.546	26.106	2.5	2.5	9.	28.
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	39	2.5	3.538	25.	0.5	19.347	4.399	1.	1.5	3.	6.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	39	4.	11.192	113.	0.5	489.429	22.123	1.	2.5	8.	23.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	36 ##	0.05	0.048	0.1	0.02	0.	0.02	0.02	0.043	0.05	0.072
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	36	0.01	0.013	0.08	0.005	0.	0.013	0.005	0.005	0.01	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	36	1.115	1.097	1.9	0.3	0.109	0.33	0.637	0.823	1.31	1.5
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/09/79-07/14/97	36	0.3	0.311	1.	0.1	0.027	0.163	0.2	0.2	0.375	0.43
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	36 ##	0.05	0.083	0.2	0.05	0.002	0.048	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	28	0.05	0.059	0.2	0.01	0.002	0.049	0.019	0.03	0.07	0.136
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	37	4.	4.6	11.	0.5	8.177	2.86	1.	2.35	6.5	8.56
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	22	242.	232.864	256.	136.	800.028	28.285	193.	219.5	252.	255.7
00940	CHLORIDE, TOTAL IN WATER MG/L	11/09/88-07/14/97	10	17.5	17.7	22.	14.	7.344	2.71	14.	15.5	20.25	21.9
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-07/14/97	10	37.5	38.9	58.	23.	101.211	10.06	23.7	33.	46.25	57.2
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	38	200.	830.263	8000.	50.	3342235.064	1828.178	50.	100.	500.	2620.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	05/09/79-07/14/97	38	2.301	2.403	3.903	1.699	0.366	0.605	1.699	2.	2.699	3.418
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			252.826								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	53	5.4	5.964	13.1	0.	12.635	3.555	1.08	3.55	8.95	11.68
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	36	490.	457.167	647.	239.	12886.029	113.517	278.6	346.5	541.	600.5
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	39	12.2	12.118	15.	8.8	2.632	1.622	9.9	10.9	13.3	14.5
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	54	1.	1.3	3.	0.5	0.488	0.699	0.5	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	54	8.	8.667	23.	0.5	22.104	4.701	4.	6.	10.	14.5
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	52	8.17	8.055	9.35	6.	0.45	0.671	7.03	7.71	8.5	8.77
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	52	8.169	7.361	9.35	6.	0.942	0.97	7.03	7.71	8.5	8.77
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	52	0.007	0.044	1.	0.	0.021	0.144	0.002	0.003	0.02	0.094
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	38	7.9	7.947	9.3	6.1	0.28	0.529	7.39	7.7	8.225	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	38	7.9	7.45	9.3	6.1	0.534	0.73	7.39	7.7	8.225	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	38	0.013	0.035	0.794	0.001	0.016	0.127	0.003	0.006	0.02	0.041
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	38	157.	148.342	221.	23.	2430.177	49.297	75.4	119.	187.25	209.6
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	54	2.5	6.241	50.	1.	84.365	9.185	1.5	2.5	5.5	15.5
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	54 ##	2.5	2.574	11.	0.	3.768	1.941	1.	1.5	2.5	5.
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	54 ##	2.5	4.852	43.	0.	55.034	7.419	1.25	2.	3.	11.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	54 ##	0.05	0.065	0.3	0.02	0.004	0.06	0.02	0.02	0.058	0.15
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	54	0.01	0.013	0.07	0.005	0.	0.012	0.005	0.005	0.02	0.03
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	54	1.3	1.2	2.38	0.11	0.231	0.48	0.6	0.82	1.5	1.83
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	05/09/79-07/14/97	54	0.3	0.317	1.1	0.05	0.032	0.179	0.2	0.2	0.4	0.55
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	54	0.1	0.083	0.2	0.05	0.001	0.039	0.05	0.05	0.1	0.11
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	40	0.065	0.075	0.2	0.01	0.002	0.043	0.03	0.043	0.118	0.13
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	47	4.	4.987	24.	0.5	15.131	3.89	1.08	2.3	7.	9.
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	35	212.	203.286	266.	102.	2098.857	45.813	138.	164.	240.	254.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00940	CHLORIDE,TOTAL IN WATER MG/L	11/09/88-07/14/97	20	18.	18.	34.	8.	36.632	6.052	11.1	13.5	20.	29.1
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-07/14/97	20	49.	47.05	63.	26.	107.839	10.385	30.5	39.	56.75	59.9
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/09/79-07/14/97	53 ##	50.	125.472	1200.	50.	29675.254	172.265	50.	50.	100.	300.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/09/79-07/14/97	53 ##	1.699	1.943	3.079	1.699	0.099	0.315	1.699	1.699	2.	2.477
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			87.655								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0783

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	05/09/79-07/14/97	41	16.5	16.185	26.1	5.5	26.324	5.131	9.1	11.3	20.5	21.74
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	05/09/79-04/02/92	32	424.	414.906	589.	257.	6682.926	81.749	304.	341.25	481.75	519.1
00300	OXYGEN, DISSOLVED MG/L	05/09/79-03/02/92	33	9.3	9.788	13.	7.	2.792	1.671	7.94	8.4	11.5	12.04
00310	BOD, 5 DAY, 20 DEG C MG/L	05/09/79-07/14/97	40	1.	1.298	3.	0.5	0.34	0.583	0.55	1.	2.	2.
00340	COD, .25N K2CR2O7 MG/L	05/09/79-07/14/97	41	9.	8.671	20.	0.5	22.42	4.735	2.2	5.	12.5	15.8
00400	PH (STANDARD UNITS)	05/09/79-07/14/97	41	8.	7.961	8.5	7.2	0.095	0.309	7.52	7.75	8.11	8.482
00400	CONVERTED PH (STANDARD UNITS)	05/09/79-07/14/97	41	8.	7.847	8.5	7.2	0.109	0.33	7.52	7.75	8.11	8.482
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	05/09/79-07/14/97	41	0.01	0.014	0.063	0.003	0.	0.012	0.003	0.008	0.018	0.03
00403	PH, LAB, STANDARD UNITS SU	02/04/82-07/14/97	26	8.	7.927	8.6	6.8	0.148	0.385	7.4	7.775	8.1	8.46
00403	CONVERTED PH, LAB, STANDARD UNITS	02/04/82-07/14/97	26	8.	7.718	8.6	6.8	0.194	0.44	7.4	7.775	8.1	8.46
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	02/04/82-07/14/97	26	0.01	0.019	0.158	0.003	0.001	0.03	0.004	0.008	0.017	0.04
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	02/04/82-07/14/97	26	161.5	159.692	222.	72.	1407.022	37.51	108.	133.5	189.	215.9
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	06/07/79-07/14/97	40	7.5	10.775	40.	1.5	83.807	9.155	2.5	4.25	13.	25.8
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	05/09/79-07/14/97	41	2.5	3.244	10.	0.	5.602	2.367	1.	1.5	4.5	7.8
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	05/09/79-07/14/97	41	6.	8.098	36.	0.5	67.365	8.208	2.	2.5	9.	21.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	05/09/79-07/14/97	41 ##	0.05	0.069	1.	0.02	0.023	0.15	0.02	0.02	0.05	0.094
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	41	0.01	0.014	0.07	0.005	0.	0.014	0.005	0.005	0.02	0.028
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	05/09/79-07/14/97	41	0.9	1.003	5.	0.48	0.484	0.695	0.58	0.695	1.045	1.442
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	05/09/79-07/14/97	38	0.3	0.337	1.	0.1	0.032	0.179	0.2	0.2	0.4	0.6
00665	PHOSPHORUS, TOTAL (MG/L AS P)	05/09/79-07/14/97	38	0.1	0.093	0.3	0.05	0.003	0.053	0.05	0.05	0.1	0.2
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	05/09/79-04/02/92	33	0.05	0.057	0.2	0.01	0.001	0.038	0.03	0.04	0.065	0.096
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	05/09/79-07/22/96	41	4.	5.037	12.	1.3	7.991	2.827	1.92	3.	7.	9.8
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	02/13/85-07/14/97	25	208.	205.56	268.	114.	1275.673	35.717	159.6	182.	231.	255.2
00940	CHLORIDE,TOTAL IN WATER MG/L	11/09/88-07/14/97	11	16.	15.273	18.	10.	7.618	2.76	10.2	13.	17.	18.
00945	SULFATE, TOTAL (MG/L AS SO4)	11/09/88-07/14/97	11	39.	41.182	54.	26.	79.764	8.931	27.4	35.	52.	53.8
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/09/79-07/14/97	42	250.	632.143	4000.	50.	792539.199	890.247	50.	100.	725.	1600.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	05/09/79-07/14/97	42	2.389	2.475	3.602	1.699	0.299	0.546	1.699	2.	2.86	3.204
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			298.341								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0784

NPS Station ID: SHEN0784
 Location: OPPOSITE FRONT ROYAL COUNTRY CLUB
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070007
 Major Basin: 02-NORTH ATLANTIC
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070007003
 RF3 Index: 02070007000333.73
 Description:
 VIRGINIA STATE WATER CONTROL BOARD
 RIVER: SHENANDOAH RIVER

LAT/LON: 38.956531/ -78.182837

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 42.440
 RF3 Mile Point: 33.72

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSHN054.22 /VA1B01DX0062/VA1B6X0062
 Within Park Boundary: No

Date Created: / /

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.00
 Distance from RF3: 0.04

On/Off RF1: OFF
 On/Off RF3:

AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 SECTION: 01D TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Parameter Inventory for Station: SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	88	15.1	15.113	30.	1.1	70.033	8.369	3.5	6.9	22.95	25.76
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	88	10.05	9.959	16.	4.2	5.082	2.254	7.18	8.175	11.5	12.84
00310	BOD, 5 DAY, 20 DEG C MG/L	03/04/70-01/27/72	9	2.4	2.822	4.8	1.2	1.244	1.116	1.2	2.	3.7	4.8
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	86	8.5	8.413	9.7	7.	0.384	0.62	7.5	8.	8.925	9.2
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	86	8.5	7.951	9.7	7.	0.6	0.774	7.5	8.	8.925	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	86	0.003	0.011	0.1	0.	0.	0.02	0.001	0.001	0.01	0.032
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	84	8.	7.937	9.1	3.	0.498	0.705	7.45	7.7	8.2	8.6
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	84	8.	4.924	9.1	3.	9.687	3.112	7.45	7.7	8.2	8.6
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	84	0.01	11.922	1000.	0.001	11904.346	109.107	0.003	0.006	0.02	0.036
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	86	125.5	123.244	218.	28.	1148.54	33.89	77.9	99.	147.5	161.6
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	07/09/70-07/09/70	1	11.	11.	11.	11.	0.	**	**	**	**	**
00500	RESIDUE, TOTAL (MG/L)	03/04/70-06/22/77	4	241.5	292.	490.	195.	17964.667	134.032	**	**	**	**
00505	RESIDUE, TOTAL VOLATILE (MG/L)	03/04/70-06/22/77	4	68.5	65.75	88.	38.	428.25	20.694	**	**	**	**
00510	RESIDUE, TOTAL FIXED (MG/L)	03/04/70-06/22/77	4	189.	226.25	420.	107.	18194.917	134.889	**	**	**	**
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	03/04/70-06/22/77	4	12.	13.75	19.	12.	12.25	3.5	**	**	**	**
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	03/04/70-06/22/77	4	4.5	4.5	7.	2.	5.667	2.38	**	**	**	**
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	03/04/70-06/22/77	4	9.5	9.25	13.	5.	10.917	3.304	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	60	0.075	0.11	0.6	0.005	0.01	0.098	0.05	0.05	0.178	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	63	0.01	0.013	0.23	0.005	0.001	0.029	0.005	0.005	0.01	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	57	1.	0.933	2.	0.025	0.233	0.483	0.138	0.695	1.279	1.599
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	63	0.4	0.505	1.5	0.1	0.103	0.321	0.2	0.3	0.6	0.9
00630	NITRITE PLUS NITRATE, TOTAL I DET. (MG/L AS N)	07/06/78-03/02/79	6	1.1	1.117	1.5	0.8	0.054	0.232	**	**	**	**
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	09/25/74-11/10/77	3	8.	8.667	15.	3.	36.333	6.028	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	80	158.	161.725	242.	4.	1949.088	44.148	116.	129.25	190.	217.8
00901	HARDNESS, CARBONATE (MG/L AS CaCO3)	09/10/70-09/10/70	1	198.	198.	198.	198.	0.	**	**	**	**	**
00940	CHLORIDE, TOTAL IN WATER MG/L	05/09/74-10/14/75	3	12.	68.	180.	12.	9408.	96.995	**	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	04/13/71-08/31/78	11 ##	1.	1.773	5.	0.5	1.668	1.292	0.6	1.	2.5	4.5
01027	CADMIUM, TOTAL (UG/L AS CD)	04/13/71-08/31/78	16 ##	5.	4.781	10.	0.5	4.032	2.008	0.85	5.	5.	6.5
01034	CHROMIUM, TOTAL (UG/L AS CR)	04/07/70-08/31/78	23 ##	5.	7.174	20.	5.	20.059	4.479	5.	5.	10.	16.
01042	COPPER, TOTAL (UG/L AS CU)	04/07/70-08/31/78	23 ##	5.	7.174	20.	5.	13.241	3.639	5.	5.	10.	10.
01045	IRON, TOTAL (UG/L AS FE)	11/16/70-08/31/78	3	400.	400.	500.	300.	10000.	100.	**	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	11/16/70-08/31/78	20 ##	5.	12.075	70.	1.5	306.823	17.516	1.5	5.	9.5	47.5
01055	MANGANESE, TOTAL (UG/L AS MN)	04/07/70-04/13/71	2	60.	60.	70.	50.	200.	14.142	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
01065	NICKEL, DISSOLVED (UG/L AS NI)	05/17/73-08/31/78	11 ##	50.	50.	50.	0.	0.	50.	50.	50.	50.
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	76	30.	49.737	400.	5.	5730.596	75.701	5.	10.	93.
31505	COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506)	04/07/70-11/10/77	8	7800.	8593.75	24000.	150.	56611741.071	7524.077	**	**	**
31505	LOG COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 3150	04/07/70-11/10/77	8	3.852	3.673	4.38	2.176	0.462	0.68	**	**	**
31505	GM COLIFORM,TOT,MPN,CONFIRMED TEST,35C (TUBE 31506	GEOMETRIC MEAN =			4712.767							
31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-03/02/79	77 ##	50.	631.169	6000.	50.	1947107.826	1395.388	50.	50.	350.
31616	LOG FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	11/16/70-03/02/79	77 ##	1.699	2.173	3.778	1.699	0.423	0.65	1.699	1.699	2.54
31616	GM FECAL COLIFORM,MEMBR FILTER,M-FC BROTH,44.5 C	GEOMETRIC MEAN =			148.897							
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	05/09/74-05/09/74	1	2.	2.	2.	2.	0.	0.	**	**	**
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	63	0.1	0.117	0.6	0.05	0.011	0.105	0.05	0.05	0.15
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	62	0.05	0.091	0.3	0.005	0.006	0.075	0.02	0.05	0.135
71900	MERCURY, TOTAL (UG/L AS HG)	09/10/70-08/31/78	22 ##	0.25	0.305	1.3	0.15	0.053	0.23	0.25	0.25	0.425

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0784

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	88	0	0.00	25	0	0.00	36	0	0.00	27	0	0.00			
00400	PH	Fresh Chronic	9.	86	21	0.24	24	7	0.29	36	8	0.22	26	6	0.23			
		Other-Lo Lim.	6.5	86	0	0.00	24	0	0.00	36	0	0.00	26	0	0.00			
00403	PH, LAB	Fresh Chronic	9.	84	1	0.01	24	0	0.00	34	0	0.00	26	1	0.04			
		Other-Lo Lim.	6.5	84	1	0.01	24	0	0.00	34	1	0.03	26	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	63	0	0.00	17	0	0.00	27	0	0.00	19	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	57	0	0.00	14	0	0.00	24	0	0.00	19	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	6	0	0.00	3	0	0.00	3	0	0.00						
00940	CHLORIDE,TOTAL IN WATER	Fresh Acute	860.	3	0	0.00	1	0	0.00				2	0	0.00			
		Drinking Water	250.	3	0	0.00	1	0	0.00				2	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	50.	11	0	0.00	5	0	0.00	3	0	0.00	3	0	0.00			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	3 &	1	0.33	1	0	0.00				2	1	0.50			
		Drinking Water	5.	3 &	1	0.33	1	0	0.00				2	1	0.50			
01034	CHROMIUM, TOTAL	Drinking Water	100.	23	0	0.00	6	0	0.00	9	0	0.00	8	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	23	1	0.04	6	0	0.00	9	1	0.11	8	0	0.00			
		Drinking Water	1300.	23	0	0.00	6	0	0.00	9	0	0.00	8	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	20	0	0.00	6	0	0.00	9	0	0.00	5	0	0.00			
		Drinking Water	15.	20	4	0.20	6	1	0.17	9	2	0.22	5	1	0.20			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	11	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00			
		Drinking Water	100.	11	0	0.00	3	0	0.00	4	0	0.00	4	0	0.00			
01092	ZINC, TOTAL	Fresh Acute	120.	76	6	0.08	22	1	0.05	31	4	0.13	23	1	0.04			
		Drinking Water	5000.	76	0	0.00	22	0	0.00	31	0	0.00	23	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	8	7	0.88	4	4	1.00	1	1	1.00	3	2	0.67			
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	77	29	0.38	20	9	0.45	34	10	0.29	23	10	0.43			
71900	MERCURY, TOTAL	Fresh Acute	2.4	22	0	0.00	7	0	0.00	9	0	0.00	6	0	0.00			
		Drinking Water	2.	22	0	0.00	7	0	0.00	9	0	0.00	6	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

Annual Analysis for 1970 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	9	21.7	16.178	25.6	5.6	78.724	8.873	5.6	6.65	24.15	25.6
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	10	7.1	8.26	12.4	4.2	6.916	2.63	4.44	6.6	10.7	12.32
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	10	8.5	8.46	9.4	7.5	0.278	0.527	7.53	8.25	8.75	9.35
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	10	8.5	8.164	9.4	7.5	0.376	0.613	7.53	8.25	8.75	9.35
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	10	0.003	0.007	0.032	0.	0.	0.01	0.	0.002	0.007	0.03
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	8	7.75	7.937	8.9	7.6	0.211	0.46	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	8	7.725	7.794	8.9	7.6	0.235	0.485	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	8	0.019	0.016	0.025	0.001	0.	0.01	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	10	121.5	118.7	149.	94.	280.011	16.734	94.6	103.75	129.25	147.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	3	0.1	0.247	0.6	0.04	0.095	0.307	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	4 ##	0.005	0.006	0.01	0.005	0.	0.003	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	4	0.31	0.44	1.	0.14	0.146	0.383	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	4	0.475	0.688	1.5	0.3	0.311	0.557	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	6	158.	158.667	188.	124.	495.467	22.259	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	9	20.	22.778	50.	5.	194.444	13.944	5.	10.	30.	50.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	2	450.	450.	500.	400.	5000.	70.711	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	2	2.651	2.651	2.699	2.602	0.005	0.069	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			447.214								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	4	0.1	0.1	0.15	0.05	0.002	0.041	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	3	0.04	0.033	0.05	0.01	0.	0.021	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1971 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	9	16.7	17.467	28.9	3.3	89.04	9.436	3.3	9.15	27.8	28.9
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	9	8.	10.222	16.	5.6	13.314	3.649	5.6	7.7	13.8	16.
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	9	8.7	8.678	9.2	7.5	0.264	0.514	7.5	8.5	9.1	9.2
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	9	8.7	8.294	9.2	7.5	0.431	0.656	7.5	8.5	9.1	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	9	0.002	0.005	0.032	0.001	0.	0.01	0.001	0.001	0.003	0.032
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	8	7.8	7.887	8.2	7.7	0.027	0.164	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	8	7.8	7.863	8.2	7.7	0.028	0.166	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	8	0.016	0.014	0.02	0.006	0.	0.004	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	8	142.5	141.875	178.	95.	766.411	27.684	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	8	178.	183.	240.	132.	1613.714	40.171	**	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	7 ##	5.	25.714	90.	5.	1078.571	32.842	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	8	300.	900.	4800.	50.	2547857.143	1596.201	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	8	2.477	2.524	3.681	1.699	0.416	0.645	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			334.174								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	10	15.3	13.85	23.9	5.	46.621	6.828	5.06	5.6	19.6	23.68
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	9	9.	9.689	14.	7.2	5.211	2.283	7.2	8.	11.7	14.
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	9	7.8	7.811	8.5	7.	0.206	0.454	7.	7.5	8.15	8.5
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	9	7.8	7.598	8.5	7.	0.257	0.507	7.	7.5	8.15	8.5
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	9	0.016	0.025	0.1	0.003	0.001	0.03	0.003	0.008	0.032	0.1
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	10	7.7	7.7	8.	7.4	0.033	0.183	7.41	7.575	7.825	7.99
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	10	7.7	7.666	8.	7.4	0.035	0.186	7.41	7.575	7.825	7.99
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	10	0.02	0.022	0.04	0.01	0.	0.009	0.01	0.015	0.027	0.039
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	10	121.5	113.7	156.	71.	1232.011	35.1	71.1	72.75	144.75	155.4

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1972 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	2	0.155	0.155	0.2	0.11	0.004	0.064	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	2	0.015	0.015	0.02	0.01	0.	0.007	**	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	2	0.91	0.91	1.029	0.79	0.029	0.169	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	2	0.3	0.3	0.3	0.3	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	10	137.	158.	242.	92.	2991.111	54.691	94.	113.5	212.5	241.
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	8	15.	31.875	90.	5.	1363.839	36.93	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	10	150.	1720.	6000.	50.	6191777.778	2488.328	50.	50.	4050.	6000.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	10	2.151	2.53	3.778	1.699	0.839	0.916	1.699	1.699	3.593	3.778
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	10	150.	1720.	6000.	50.	6191777.778	2488.328	50.	50.	4050.	6000.
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	2 ##	0.075	0.075	0.1	0.05	0.001	0.035	**	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	2	0.09	0.09	0.13	0.05	0.003	0.057	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1973 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	12	15.	14.075	30.	1.1	86.647	9.308	1.43	5.275	22.1	28.5
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	12	9.7	9.692	13.6	7.3	3.174	1.781	7.39	8.45	10.3	13.12
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	11	8.5	8.473	9.	7.8	0.146	0.382	7.84	8.2	8.7	9.
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	11	8.5	8.319	9.	7.8	0.172	0.415	7.84	8.2	8.7	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	11	0.003	0.005	0.016	0.001	0.	0.005	0.001	0.002	0.006	0.015
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	12	8.1	7.625	8.8	3.	2.409	1.552	4.17	7.45	8.5	8.74
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	12	8.1	4.079	8.8	3.	16.126	4.016	4.17	7.45	8.5	8.74
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	12	0.008	83.353	1000.	0.002	83329.76	288.669	0.002	0.003	0.036	700.038
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	12	122.	109.75	152.	28.	1679.477	40.981	36.1	81.5	147.75	151.7
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	12 ##	0.05	0.08	0.3	0.005	0.007	0.085	0.007	0.05	0.088	0.27
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	12	0.01	0.01	0.02	0.005	0.	0.006	0.005	0.005	0.018	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	12	1.04	0.998	1.939	0.33	0.168	0.41	0.435	0.7	1.232	1.747
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	12	0.6	0.633	1.299	0.2	0.14	0.375	0.2	0.3	0.875	1.269
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	12	145.	142.583	205.	28.	2410.629	49.098	53.2	118.5	185.	204.7
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	10	30.	59.5	300.	5.	7813.611	88.395	5.5	10.	67.5	279.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	11 ##	50.	518.182	4300.	50.	1613636.364	1270.29	50.	50.	300.	3580.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	11 ##	1.699	2.05	3.633	1.699	0.431	0.656	1.699	1.699	2.477	3.476
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	11 ##	50.	518.182	4300.	50.	1613636.364	1270.29	50.	50.	300.	3580.
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	12 ##	0.05	0.088	0.3	0.05	0.006	0.08	0.05	0.05	0.088	0.27
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	12	0.05	0.073	0.15	0.03	0.001	0.036	0.033	0.05	0.1	0.135

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	11	14.4	13.9	25.	2.8	53.218	7.295	3.24	6.7	20.6	24.44
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	11	10.8	10.464	14.	7.6	3.903	1.975	7.68	8.8	12.	13.66
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	11	8.3	8.318	9.	7.4	0.21	0.458	7.52	8.	8.5	9.
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	11	8.3	8.087	9.	7.4	0.269	0.518	7.52	8.	8.5	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	11	0.005	0.008	0.04	0.001	0.	0.011	0.001	0.003	0.01	0.034
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	11	8.2	8.2	8.5	7.9	0.038	0.195	7.92	8.	8.4	8.48
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	11	8.2	8.161	8.5	7.9	0.04	0.199	7.92	8.	8.4	8.48
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	11	0.006	0.007	0.013	0.003	0.	0.003	0.003	0.004	0.01	0.012
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	11	137.	143.273	218.	107.	1258.418	35.474	107.2	109.	161.	212.
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	11 ##	0.05	0.118	0.3	0.05	0.008	0.09	0.05	0.05	0.2	0.28
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	11 ##	0.005	0.005	0.01	0.005	0.	0.002	0.005	0.005	0.005	0.009
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	11	1.299	1.29	2.	0.7	0.143	0.378	0.76	1.	1.5	1.96

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1974 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	11	0.4	0.373	0.6	0.1	0.046	0.215	0.1	0.2	0.6	0.6
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	11	186.	183.455	218.	144.	613.673	24.772	145.6	158.	202.	217.6
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	8	65.	133.125	400.	5.	21606.696	146.992	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	11 ##	50.	118.182	400.	50.	14136.364	118.896	50.	50.	100.	380.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	11 ##	1.699	1.934	2.602	1.699	0.109	0.33	1.699	1.699	2.	2.577
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			85.883								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	11	0.1	0.155	0.4	0.05	0.016	0.125	0.05	0.05	0.3	0.38
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	11 ##	0.05	0.109	0.3	0.05	0.007	0.086	0.05	0.05	0.2	0.28

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1975 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	11	13.9	16.364	30.	3.9	79.763	8.931	4.56	9.4	25.	29.56
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	11	10.4	10.173	12.8	6.	3.816	1.954	6.48	9.	11.4	12.8
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	11	8.5	8.364	9.2	7.	0.527	0.726	7.1	7.7	9.	9.2
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	11	8.5	7.8	9.2	7.	0.876	0.936	7.1	7.7	9.	9.2
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	11	0.003	0.016	0.1	0.001	0.001	0.03	0.001	0.001	0.02	0.086
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	11	7.9	8.009	8.8	7.5	0.179	0.423	7.5	7.6	8.3	8.76
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	11	7.9	7.856	8.8	7.5	0.205	0.452	7.5	7.6	8.3	8.76
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	11	0.013	0.014	0.032	0.002	0.	0.011	0.002	0.005	0.025	0.032
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	11	117.	117.273	157.	52.	994.418	31.534	60.8	96.	147.	155.8
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	10 ##	0.05	0.08	0.2	0.05	0.002	0.048	0.05	0.05	0.1	0.19
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	10 ##	0.005	0.008	0.02	0.005	0.	0.005	0.005	0.005	0.01	0.019
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	10	1.05	0.989	1.599	0.13	0.161	0.401	0.187	1.599	1.284	1.569
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	10	0.3	0.36	0.9	0.2	0.045	0.212	0.2	0.2	0.425	0.86
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	9	158.	156.222	186.	118.	647.444	25.445	118.	133.	182.	186.
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	11	30.	54.545	330.	5.	8682.273	93.179	5.	10.	50.	274.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	11 ##	50.	77.273	200.	50.	3681.818	60.678	50.	50.	50.	200.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	11 ##	1.699	1.808	2.301	1.699	0.059	0.244	1.699	1.699	1.699	2.301
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			64.333								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	10 ##	0.075	0.105	0.2	0.05	0.005	0.069	0.05	0.05	0.2	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	10 ##	0.05	0.059	0.16	0.01	0.002	0.043	0.011	0.043	0.063	0.154

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	10	17.8	16.86	27.2	3.3	60.44	7.774	3.86	9.725	23.225	26.87
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	10	10.15	10.03	12.5	7.8	1.691	1.3	7.9	9.025	10.8	12.33
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	10	8.9	8.66	9.3	7.5	0.389	0.624	7.52	8.3	9.075	9.3
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	10	8.889	8.197	9.3	7.5	0.627	0.792	7.52	8.3	9.075	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	10	0.001	0.006	0.032	0.001	0.	0.011	0.001	0.001	0.007	0.03
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	10	7.95	7.96	8.9	7.1	0.385	0.62	7.12	7.3	8.375	8.9
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	10	7.947	7.635	8.9	7.1	0.502	0.709	7.12	7.3	8.375	8.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	10	0.011	0.023	0.079	0.001	0.001	0.027	0.001	0.005	0.05	0.077
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	10	135.	127.2	160.	83.	581.289	24.11	83.8	112.75	143.	158.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	10 ##	0.05	0.09	0.3	0.05	0.006	0.077	0.05	0.05	0.1	0.28
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	10	0.01	0.011	0.02	0.005	0.	0.005	0.005	0.009	0.013	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	10	0.715	0.704	1.599	0.06	0.246	0.496	0.062	0.283	1.07	1.567
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	10	0.5	0.44	0.7	0.1	0.043	0.207	0.11	0.2	0.6	0.69
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	10	159.5	158.8	204.	112.	847.956	29.12	112.4	136.25	182.	201.8
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	10	30.	28.	60.	5.	323.333	17.981	5.	8.75	40.	58.

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1976 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	10 ##	75.	205.	800.	50.	72472.222	269.207	50.	300.	780.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	10 ##	1.849	2.048	2.903	1.699	0.216	0.465	1.699	2.42	2.891
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =										
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	10 ##	0.05	0.07	0.1	0.05	0.001	0.026	0.05	0.1	0.1
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	10	0.06	0.063	0.16	0.01	0.002	0.041	0.012	0.038	0.075

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1977 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	5	11.5	14.7	30.	1.5	157.325	12.543	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	5	10.2	10.72	14.8	8.1	6.837	2.615	**	**	**
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	4	9.15	8.875	9.7	7.5	0.949	0.974	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	4	9.082	8.077	9.7	7.5	1.798	1.341	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	4	0.001	0.008	0.032	0.	0.016	0.016	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	5	8.2	8.4	9.1	7.8	0.325	0.57	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	5	8.2	8.165	9.1	7.8	0.394	0.628	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	5	0.006	0.007	0.016	0.001	0.	0.006	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	5	146.	128.2	160.	85.	1315.7	36.273	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	5	0.2	0.16	0.2	0.1	0.003	0.055	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	5	0.01	0.012	0.03	0.005	0.	0.01	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	5	0.79	0.662	1.5	0.025	0.406	0.637	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	5	0.7	0.86	1.399	0.4	0.178	0.421	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	5	190.	155.4	232.	4.	8779.8	93.701	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	5	60.	76.	180.	20.	3730.	61.074	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	5 ##	50.	500.	2300.	50.	1012500.	1006.231	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	5 ##	1.699	2.032	3.362	1.699	0.553	0.744	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =										
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	5	0.2	0.19	0.3	0.05	0.013	0.114	**	**	**
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	5	0.19	0.189	0.29	0.005	0.014	0.117	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	10	14.85	13.79	25.	3.5	70.521	8.398	3.5	3.5	23.125
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	10	10.45	10.56	14.	7.	3.64	1.908	7.16	9.725	13.8
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	10	8.7	8.42	9.	7.1	0.535	0.732	7.1	8.	9.
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	10	8.7	7.755	9.	7.1	1.026	1.013	7.1	8.	9.
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	10	0.002	0.018	0.079	0.001	0.001	0.033	0.001	0.024	0.079
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	8	8.1	7.988	8.6	6.7	0.316	0.562	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	8	8.1	7.502	8.6	6.7	0.585	0.765	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	8	0.008	0.031	0.2	0.003	0.005	0.068	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	8	113.	121.625	173.	50.	1891.696	43.494	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	6	0.1	0.125	0.2	0.05	0.004	0.061	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	8	0.01	0.044	0.23	0.01	0.006	0.077	**	**	**
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	3	0.79	1.06	1.699	0.69	0.309	0.556	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	8	0.45	0.513	0.9	0.1	0.064	0.253	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	8	144.	165.	240.	116.	2438.857	49.385	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	7	20.	28.571	70.	5.	639.286	25.284	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	8	450.	1356.25	5400.	50.	4006026.786	2001.506	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	8	2.573	2.559	3.732	1.699	0.696	0.834	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =										
				362.425								

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1978 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	8	0.1	0.169	0.6	0.05	0.034	0.185	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	8	0.17	0.139	0.23	0.005	0.009	0.093	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Annual Analysis for 1979 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	03/04/70-03/02/79	1	6.8	6.8	6.8	6.8	0.	0.	**	**	**	**
00300	OXYGEN, DISSOLVED MG/L	03/04/70-03/02/79	1	11.8	11.8	11.8	11.8	0.	0.	**	**	**	**
00400	PH (STANDARD UNITS)	03/04/70-03/02/79	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	1	7.5	7.5	7.5	7.5	0.	0.	**	**	**	**
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	1	0.032	0.032	0.032	0.032	0.	0.	**	**	**	**
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	1	7.8	7.8	7.8	7.8	0.	0.	**	**	**	**
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	1	0.016	0.016	0.016	0.016	0.	0.	**	**	**	**
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	1	71.	71.	71.	71.	0.	0.	**	**	**	**
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	1	0.01	0.01	0.01	0.01	0.	0.	**	**	**	**
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	1	0.4	0.4	0.4	0.4	0.	0.	**	**	**	**
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	1	122.	122.	122.	122.	0.	0.	**	**	**	**
01092	ZINC, TOTAL (UG/L AS Zn)	04/07/70-03/02/79	1	20.	20.	20.	20.	0.	0.	**	**	**	**
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	1##	1.699	1.699	1.699	1.699	0.	0.	**	**	**	**
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			50.								
70505	PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
70507	PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	1	0.02	0.02	0.02	0.02	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #1: 7/01 to 10/14 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	25	23.9	23.888	30.	16.7	12.744	3.57	18.46	21.7	26.4	29.34
00300	OXYGEN, DISSOLVED MG/L	25	8.6	8.26	14.	4.2	3.731	1.932	5.84	7.1	9.05	10.48
00400	PH (STANDARD UNITS)	24	8.5	8.592	9.4	7.7	0.21	0.459	8.	8.3	9.	9.3
00400	CONVERTED PH (STANDARD UNITS)	24	8.5	8.381	9.4	7.7	0.257	0.506	8.	8.3	9.	9.3
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	24	0.003	0.004	0.02	0.	0.	0.004	0.001	0.001	0.005	0.01
00403	PH, LAB, STANDARD UNITS SU	24	8.1	8.133	8.9	6.9	0.27	0.52	7.5	7.8	8.575	8.9
00403	CONVERTED PH, LAB, STANDARD UNITS	24	8.1	7.819	8.9	6.9	0.373	0.611	7.5	7.8	8.575	8.9
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	24	0.008	0.015	0.126	0.001	0.001	0.025	0.001	0.003	0.016	0.032
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	25	137.	132.2	218.	28.	1133.	33.66	103.6	107.5	150.	162.4
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	16	0.1	0.144	0.6	0.05	0.022	0.147	0.05	0.05	0.175	0.39
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	17	0.01	0.022	0.23	0.005	0.003	0.054	0.005	0.005	0.015	0.062
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	14	0.7	0.739	2.	0.025	0.364	0.604	0.043	0.125	1.219	1.65
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	17	0.6	0.7	1.5	0.1	0.159	0.398	0.18	0.4	0.9	1.419
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	22	187.	174.773	232.	28.	1994.66	44.662	125.8	156.5	204.	225.4
01092	ZINC, TOTAL (UG/L AS ZN)	22	45.	55.455	220.	10.	2016.45	44.905	20.	30.	67.5	97.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	20	100.	877.5	6000.	50.	3306967.105	1818.507	50.	50.	375.	5210.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	20	2.	2.264	3.778	1.699	0.504	0.71	1.699	1.699	2.571	3.714
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			183.693								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	17	0.1	0.15	0.4	0.05	0.01	0.1	0.05	0.05	0.2	0.32
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	17	0.1	0.128	0.29	0.04	0.007	0.081	0.048	0.05	0.2	0.242

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #2: 10/15 to 3/19 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	37	6.1	7.719	16.7	1.1	19.998	4.472	2.68	3.7	11.05	15.2
00300	OXYGEN, DISSOLVED MG/L	36	11.45	11.383	16.	8.	2.853	1.689	9.	10.4	12.4	13.72
00400	PH (STANDARD UNITS)	36	8.5	8.292	9.4	7.	0.476	0.69	7.31	7.55	8.9	9.06
00400	CONVERTED PH (STANDARD UNITS)	36	8.5	7.795	9.4	7.	0.73	0.854	7.31	7.55	8.9	9.06
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	36	0.003	0.016	0.1	0.	0.001	0.025	0.001	0.001	0.029	0.052
00403	PH, LAB, STANDARD UNITS SU	34	7.9	7.794	8.6	3.	0.847	0.92	7.45	7.75	8.2	8.35
00403	CONVERTED PH, LAB, STANDARD UNITS	34	7.9	4.531	8.6	3.	11.816	3.438	7.45	7.75	8.2	8.35
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	34	0.013	29.43	1000.	0.003	29410.668	171.495	0.004	0.006	0.018	0.036
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	35	120.	120.057	178.	50.	1129.173	33.603	72.6	93.	147.	162.6
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	27	0.1	0.119	0.3	0.005	0.006	0.078	0.042	0.05	0.2	0.2
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	27	0.01	0.01	0.03	0.005	0.	0.006	0.005	0.005	0.01	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	24	1.059	1.144	1.939	0.28	0.152	0.39	0.765	0.818	1.45	1.749
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	27	0.4	0.402	0.8	0.1	0.04	0.199	0.2	0.2	0.6	0.72
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	34	156.	158.735	242.	4.	2414.867	49.141	112.	121.5	190.	229.
01092	ZINC, TOTAL (UG/L AS ZN)	31	20.	59.516	400.	5.	9827.258	99.133	5.	5.	50.	252.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	34 ##	50.	245.588	2300.	50.	206419.34	454.334	50.	50.	225.	750.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	34 ##	1.699	2.022	3.362	1.699	0.242	0.492	1.699	1.699	2.345	2.874
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C			105.279								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	27 ##	0.05	0.119	0.6	0.05	0.017	0.13	0.05	0.05	0.1	0.3
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	27	0.05	0.09	0.3	0.005	0.007	0.081	0.009	0.04	0.13	0.226

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	26	15.6	17.196	30.	6.1	40.256	6.345	7.05	13.9	22.8	26.19
00300	OXYGEN, DISSOLVED MG/L	27	9.5	9.633	14.8	6.6	4.026	2.007	7.44	8.	10.8	12.16
00400	PH (STANDARD UNITS)	26	8.5	8.415	9.7	7.	0.393	0.627	7.5	7.95	8.85	9.06

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Seasonal Analysis for Season #3: 3/20 to 6/30 - Station SHEN0784

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00400	CONVERTED PH (STANDARD UNITS)	03/04/70-03/02/79	26	8.5	7.958	9.7	7.	0.611	0.781	7.5	7.95	8.85	9.06
00400	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	26	0.003	0.011	0.1	0.	0.	0.021	0.001	0.001	0.011	0.032
00403	PH, LAB, STANDARD UNITS SU	03/04/70-03/02/79	26	7.95	7.942	9.1	7.1	0.22	0.469	7.3	7.6	8.1	8.8
00403	CONVERTED PH, LAB, STANDARD UNITS	03/04/70-03/02/79	26	7.947	7.74	9.1	7.1	0.263	0.512	7.3	7.6	8.1	8.8
00403	MICRO EQUIVALENTS/LITER OF H+ COMPUTED FROM PH	03/04/70-03/02/79	26	0.011	0.018	0.079	0.001	0.	0.018	0.002	0.008	0.025	0.05
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	03/04/70-03/02/79	26	122.	118.923	188.	52.	1167.834	34.174	66.2	93.25	136.	164.5
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	03/04/70-03/02/79	17 ##	0.05	0.064	0.2	0.04	0.002	0.039	0.048	0.05	0.05	0.12
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	03/04/70-03/02/79	19 ##	0.005	0.011	0.05	0.005	0.	0.011	0.005	0.005	0.01	0.02
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	03/04/70-05/18/78	19	0.78	0.809	1.599	0.025	0.162	0.403	0.13	0.68	1.	1.399
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	03/04/70-03/02/79	19	0.4	0.479	1.199	0.1	0.104	0.322	0.1	0.3	0.6	1.199
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	06/16/70-03/02/79	24	143.5	154.	226.	112.	1170.348	34.21	116.	120.5	177.5	216.
01092	ZINC, TOTAL (UG/L AS ZN)	04/07/70-03/02/79	23	10.	31.087	300.	5.	3679.447	60.658	5.	5.	30.	50.
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	23 ##	50.	986.957	6000.	50.	3143458.498	1772.98	50.	50.	800.	4600.
31616	LOG FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	11/16/70-03/02/79	23 ##	1.699	2.316	3.778	1.699	0.598	0.773	1.699	1.699	2.903	3.662
31616	GM FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5 C	GEOMETRIC MEAN =			207.07								
70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	03/04/70-03/02/79	19	0.05	0.087	0.2	0.05	0.002	0.05	0.05	0.05	0.1	0.2
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	03/04/70-03/02/79	18 ##	0.05	0.059	0.19	0.01	0.002	0.042	0.01	0.045	0.068	0.109

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding box-and-whisker plot

Station Inventory for Station: SHEN0785

NPS Station ID: SHEN0785 LAT/LON: 38.958892/ -78.168893
 Location: DOWNSTREAM OF FRONT ROYAL COUNTRY CLUB
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070007 Depth of Water: 0
 Major Basin: 02-NORTH ATLANTIC Elevation: 0
 Minor Basin: 1-POTOMAC-SHENANDOAH
 RF1 Index: 02070007 RF1 Mile Point: 0.000
 RF3 Index: 02070005000107.50 RF3 Mile Point: 7.50

Agency: 21VASWCB
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): 1BSHN053.02
 Within Park Boundary: No

Date Created: 07/01/89

Description:
 VIRGINIA STATE WATER CONTROL BOARD AMBIENT MONITORING BASIN: 1B SHENANDOAH REGION: 6 VALLEY
 RIVER: SHENANDOAH RIVER SECTION: 01C TOPO MAP #: 0018 TOPO MAP NAME: FRONT ROYAL, VA

Aquifer:
 Water Body Id:
 ECO Region:
 Distance from RF1: 3.30
 Distance from RF3: 0.00

On/Off RF1:
 On/Off RF3:

Parameter Inventory for Station: SHEN0785

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
00023	SAMPLE WEIGHT IN POUNDS	06/06/90-06/06/90	3	0.33	2.47	6.83	0.25	14.259	3.776	**	**	**	**
00024	SAMPLE LENGTH IN INCHES	06/06/90-06/06/90	3	8.6	12.717	23.	6.55	80.361	8.964	**	**	**	**
34664	PCB - 1221 WET WGT TISMG/KG	06/06/90-06/06/90	3 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
34667	PCB - 1232 WET WGT TISMG/KG	06/06/90-06/06/90	3 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
34669	PCB - 1248 WET WGT TISMG/KG	06/06/90-06/06/90	3 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
34670	PCB - 1260 WET WGT TISMG/KG	06/06/90-06/06/90	3 ##	1.45	3.817	9.	1.	20.201	4.495	**	**	**	**
34674	PCB - 1016 WET WGT TISMG/KG	06/06/90-06/06/90	3 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
34689	PCB - 1242 WET WGT TISMG/KG	06/06/90-06/06/90	3 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
34690	PCB - 1254 WET WGT TISMG/KG	06/06/90-06/06/90	3 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
39061	PCP (PENTACHLOROPHENOL) IN BOT DEPOS DRY SOL UG/KG	06/06/90-06/06/90	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
39351	CHLORDANE (TECH MIX & METABS), SEDIMENTS, DRY WGT, UG/KG	06/06/90-06/06/90	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
39363	DDD IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39368	DDE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39373	DDT IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39383	DIELDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/06/90-06/06/90	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39393	ENDRIN IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
39403	TOXAPHENE IN BOTTOM DEPOS. (UG/KILOGRAM DRY SOL.)	06/06/90-06/06/90	1 ##	500.	500.	500.	500.	0.	0.	**	**	**	**
39413	HEPTACHLOR IN BOT. DEP. (UG/KILOGRAM DRY SOLIDS)	06/06/90-06/06/90	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39515	PCBS (MG/KG) FISH TISSUE MG/KG	06/06/90-06/06/90	3 ##	1.45	3.817	9.	1.	20.201	4.495	**	**	**	**
39526	PCBS TOTAL IN SEDIMENT, DRY (ISOMER ANALYSES) UG/KG	06/06/90-06/06/90	1 ##	100.	100.	100.	100.	0.	0.	**	**	**	**
45651	PCB - 1262, TISSUE, WET WEIGHT MG/KG	06/06/90-06/06/90	3 ##	0.25	0.25	0.25	0.25	0.	0.	**	**	**	**
75045	HEPTACHLOR EPOXIDE SEDIMENT, DRY, WT, UG/KG	06/06/90-06/06/90	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
79799	DICOFOL (KELTHANE) SEDIMENT, DRY, WT, UG/KG	06/06/90-06/06/90	1 ##	50.	50.	50.	50.	0.	0.	**	**	**	**
81614	NUMBER OF INDIVIDUALS IN THE SAMPLE	06/06/90-06/06/90	3	5.	5.	5.	5.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

***** No EPA Water Quality Criteria exist to compare against the data at this station. *****

Station Inventory for Station: SHEN0786

NPS Station ID: SHEN0786
 Location: SHENANDOAH RIVER AT FRONT ROYAL
 Station Type: /TYPA/AMBNT/STREAM
 RMI-Indexes:
 RMI-Miles:
 HUC: 02070007
 Major Basin: NORTH ATLANTIC
 Minor Basin: POTOMAC RIVER
 RF1 Index: 02070007003
 RF3 Index: 02070007010500.00
 Description:

LAT/LON: 38.963503/ -78.158003

Depth of Water: 0
 Elevation: 0
 RF1 Mile Point: 39.650
 RF3 Mile Point: 0.39

Agency: 1112A9WQ
 FIPS State/County: 51187 VIRGINIA/WARREN
 STORET Station ID(s): UP-POT-097A
 Within Park Boundary: No

Date Created: 04/18/81

Aquifer:
 Water Body ID:
 ECO Region:
 Distance from RF1: 0.70
 Distance from RF3: 0.02

On/Off RF1: OFF
 On/Off RF3:

Parameter Inventory for Station: SHEN0786

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th
00720	CYANIDE, TOTAL (MG/L AS CN) MG/L	01/10/79-01/10/79	1 ##	0.01	0.01	0.01	0.01	0.	0.	**	**	**
01002	ARSENIC, TOTAL (UG/L AS AS)	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01012	BERYLLIUM, TOTAL (UG/L AS BE)	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01027	CADMIUM, TOTAL (UG/L AS CD)	01/10/79-01/10/79	1 ##	10.	10.	10.	10.	0.	0.	**	**	**
01034	CHROMIUM, TOTAL (UG/L AS CR)	01/10/79-01/10/79	1	2.	2.	2.	2.	0.	0.	**	**	**
01042	COPPER, TOTAL (UG/L AS CU)	01/10/79-01/10/79	1	38.	38.	38.	38.	0.	0.	**	**	**
01051	LEAD, TOTAL (UG/L AS PB)	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01059	THALLIUM, TOTAL (UG/L AS TL)	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01067	NICKEL, TOTAL (UG/L AS NI)	01/10/79-01/10/79	1 ##	25.	25.	25.	25.	0.	0.	**	**	**
01077	SILVER, TOTAL (UG/L AS AG)	01/10/79-01/10/79	1	10.	10.	10.	10.	0.	0.	**	**	**
01092	ZINC, TOTAL (UG/L AS ZN)	01/10/79-01/10/79	1	13.	13.	13.	13.	0.	0.	**	**	**
01097	ANTIMONY, TOTAL (UG/L AS SB)	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
01147	SELENIUM, TOTAL (UG/L AS SE)	01/10/79-01/10/79	1	3.	3.	3.	3.	0.	0.	**	**	**
32101	BROMODICHLOROMETHANE,WHOLE WATER,UG/L	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
32102	CARBON TETRACHLORIDE,WHOLE WATER,UG/L	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
32103	1,2-DICHLOROETHANE,WHOLE WATER,UG/L	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
32104	BROMOFORM,WHOLE WATER,UG/L	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
32105	DIBROMOCHLOROMETHANE,WHOLE WATER,UG/L	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
32106	CHLOROFORM,WHOLE WATER,UG/L	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	01/10/79-01/10/79	1 ##	20.	20.	20.	20.	0.	0.	**	**	**
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.(UG/L)	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
34200	ACENAPHTHYLENE TOTWUG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34205	ACENAPHTHENE TOTWUG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34210	ACROLEIN TOTWUG/L	01/10/79-01/10/79	1 ##	50.	50.	50.	50.	0.	0.	**	**	**
34215	ACRYLONITRILE TOTWUG/L	01/10/79-01/10/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**
34220	ANTHRACENE TOTWUG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34230	BENZO(B)FLUORANTHENE,WHOLE WATER,UG/L	01/10/79-01/10/79	1 ##	10.	10.	10.	10.	0.	0.	**	**	**
34242	BENZO(K)FLUORANTHENE, TOTAL, WATER UG/L	01/10/79-01/10/79	1 ##	10.	10.	10.	10.	0.	0.	**	**	**
34247	BENZO-A-PYRENE TOTWUG/L	01/10/79-01/10/79	1 ##	10.	10.	10.	10.	0.	0.	**	**	**
34259	DELTA BENZENE HEXACHLORIDE TOTWUG/L	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**
34268	BIS (CHLOROMETHYL) ETHER TOTWUG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34273	BIS (2-CHLOROETHYL) ETHER TOTWUG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34278	BIS (2-CHLOROETHOXY) METHANE TOTWUG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34283	BIS (2-CHLOROISOPROPYL) ETHER TOTWUG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34292	N-BUTYL BENZYL PHTHALATE,WHOLE WATER,UG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**
34301	CHLOROBENZENE TOTWUG/L	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**
34311	CHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0786

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
34320	CHRYSENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34336	DIETHYL PHTHALATE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34341	DIMETHYL PHTHALATE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34346	1,2-DIPHENYLHYDRAZINE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34351	ENDOSULFAN SULFATE TOTWUG/L	01/10/79-01/10/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34356	ENDOSULFAN, BETA TOTWUG/L	01/10/79-01/10/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34361	ENDOSULFAN, ALPHA TOTWUG/L	01/10/79-01/10/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34366	ENDRIN ALDEHYDE TOTWUG/L	01/10/79-01/10/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34371	ETHYLBENZENE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34376	FLUORANTHENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34381	FLUORENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34386	HEXACHLOROCYCLOPENTADIENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34396	HEXACHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34403	INDENO (1,2,3-CD) PYRENE TOTWUG/L	01/10/79-01/10/79	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34408	ISOPHORONE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34413	METHYL BROMIDE TOTWUG/L	01/10/79-01/10/79	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34418	METHYL CHLORIDE TOTWUG/L	01/10/79-01/10/79	1##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
34423	METHYLENE CHLORIDE TOTWUG/L	01/10/79-01/10/79	1	200.	200.	200.	200.	0.	0.	**	**	**	**
34428	N-NITROSODI-N-PROPYLAMINE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34433	N-NITROSODIPHENYLAMINE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34438	N-NITROSODIMETHYLAMINE TOTWUG/L	01/10/79-01/10/79	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34447	NITROBENZENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34452	PARACHLOROMETA CRESOL TOTWUG/L	01/10/79-01/10/79	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34461	PHENANTHRENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34469	PYRENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34475	TETRACHLOROETHYLENE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34488	TRICHLOROFLUOROMETHANE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34496	1,1-DICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34501	1,1-DICHLOROETHYLENE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34506	1,1,1-TRICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34511	1,1,2-TRICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34516	1,1,2,2-TETRACHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE TOTWUG/L	01/10/79-01/10/79	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34536	1,2-DICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34541	1,2-DICHLOROPROPANE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER UG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34551	1,2,4-TRICHLOROBENZENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34556	1,2,5,6-DIBENZANTHRACENE TOTWUG/L	01/10/79-01/10/79	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34561	1,3-DICHLOROPROPENE TOTWUG/L	01/10/79-01/10/79	1##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
34566	1,3-DICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34571	1,4-DICHLOROETHANE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34576	2-CHLOROETHYL VINYL ETHER TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34581	2-CHLORONAPHTHALENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34586	2-CHLOROPHENOL TOTWUG/L	01/10/79-01/10/79	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34591	2-NITROPHENOL TOTWUG/L	01/10/79-01/10/79	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34596	DI-N-OCTYL PHTHALATE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34601	2,4-DICHLOROPHENOL TOTWUG/L	01/10/79-01/10/79	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34606	2,4-DIMETHYLPHENOL TOTWUG/L	01/10/79-01/10/79	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34611	2,4-DINITROTOLUENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34616	2,4-DINITROPHENOL TOTWUG/L	01/10/79-01/10/79	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
34621	2,4,6-TRICHLOROPHENOL TOTWUG/L	01/10/79-01/10/79	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34626	2,6-DINITROTOLUENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34631	3,3'-DICHLOROETHANEDITHIOL TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34636	4-BROMOPHENYL PHENYL ETHER TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34641	4-CHLOROPHENYL PHENYL ETHER TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
34646	4-NITROPHENOL TOTWUG/L	01/10/79-01/10/79	1##	20.	20.	20.	20.	0.	0.	**	**	**	**
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL) TOTWUG/L	01/10/79-01/10/79	1##	50.	50.	50.	50.	0.	0.	**	**	**	**
34671	PCB - 1016 TOTWUG/L	01/10/79-01/10/79	1##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
34675	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD) TOTWUG/L	01/10/79-01/10/79	1##	25.	25.	25.	25.	0.	0.	**	**	**	**
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTWUG/L	01/10/79-01/10/79	1##	1.	1.	1.	1.	0.	0.	**	**	**	**
34696	NAPHTHALENE TOTWUG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	1##	5.	5.	5.	5.	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

Parameter Inventory for Station: SHEN0786

Parameter	Period of Record	Obs	Median	Mean	Maximum	Minimum	Variance	Std. Dev.	10th	25th	75th	90th	
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER, UG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39110	DI-N-BUTYL PHTHALATE, WHOLE WATER, UG/L	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	25.	25.	25.	25.	0.	0.	**	**	**	**
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE-UG/L	01/10/79-01/10/79	1 ##	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE-UG/L	01/10/79-01/10/79	1 ##	0.5	0.5	0.5	0.5	0.	0.	**	**	**	**
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER SAMP	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39340	GAMMA-BHC(LINDANE), WHOLE WATER, UG/L	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39350	CHLORDANE (TECH MIX & METABS), WHOLE WATER, UG/L	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	1 ##	0.05	0.05	0.05	0.05	0.	0.	**	**	**	**
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE UG/L	01/10/79-01/10/79	1	0.1	0.1	0.1	0.1	0.	0.	**	**	**	**
39700	HEXACHLORO BENZENE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
39702	HEXACHLORO BUTADIENE IN WHOLE WATER SAMPLE (UG/L)	01/10/79-01/10/79	1 ##	5.	5.	5.	5.	0.	0.	**	**	**	**
71900	MERCURY, TOTAL (UG/L AS HG)	01/10/79-01/10/79	1	2.5	2.5	2.5	2.5	0.	0.	**	**	**	**

** - Less than 9 observations ## - Computed with 50% or more of the total observations as values that were half the detection limit p - Has a corresponding time series plot

EPA Water Quality Criteria Analysis for Station: SHEN0786

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----		
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.
00720	CYANIDE, TOTAL	0.022	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																
01002	ARSENIC, TOTAL	360.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	50.	1	0	0.00	1	0	0.00
01012	BERYLLIUM, TOTAL	130.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	4.	1	0	0.00	1	0	0.00
01027	CADMIIUM, TOTAL	3.9	0 &	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	5.	0 &	0	0.00	1	0	0.00
01034	CHROMIUM, TOTAL	100.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
01042	COPPER, TOTAL	18.	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00
	Drinking Water																	1300.	1	0	0.00	1	0	0.00
01051	LEAD, TOTAL	82.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	15.	1	0	0.00	1	0	0.00
01059	THALLIUM, TOTAL	1400.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	2.	1	0	0.00	1	0	0.00
01067	NICKEL, TOTAL	1400.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	100.	1	0	0.00	1	0	0.00
01077	SILVER, TOTAL	4.1	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00	1	1	1.00
	Drinking Water																	100.	1	0	0.00	1	0	0.00
01092	ZINC, TOTAL	120.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	5000.	1	0	0.00	1	0	0.00
01097	ANTIMONY, TOTAL	88.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	6.	1	0	0.00	1	0	0.00
01147	SELENIUM, TOTAL	20.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00
	Drinking Water																	50.	1	0	0.00	1	0	0.00
32101	BROMODICHLOROMETHANE, WHOLE WATER	100.	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Station: SHEN0786

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a		
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.			
39330 ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	1	0	0.00				1	0	0.00						
39340 GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	1	0	0.00				1	0	0.00						
	Drinking Water	0.2	1	0	0.00				1	0	0.00						
39350 CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	1	0	0.00				1	0	0.00						
	Drinking Water	2.	1	0	0.00				1	0	0.00						
39380 DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	1	0	0.00				1	0	0.00						
39390 ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	1	0	0.00				1	0	0.00						
	Drinking Water	2.	1	0	0.00				1	0	0.00						
39400 TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	1	0	0.00				1	0	0.00						
	Drinking Water	3.	1	0	0.00				1	0	0.00						
39410 HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00				1	0	0.00						
	Drinking Water	0.4	1	0	0.00				1	0	0.00						
39420 HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	1	0	0.00				1	0	0.00						
	Drinking Water	0.2	1	0	0.00				1	0	0.00						
39700 HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	1	0	0.00				1	0	0.00						
	Drinking Water	1.	0 &	0	0.00												
39702 HEXACHLOROBUTADIENE IN WHOLE WATER SAMPL	Fresh Acute	90.	1	0	0.00				1	0	0.00						
71900 MERCURY, TOTAL	Fresh Acute	2.4	1	1	1.00				1	1	1.00						
	Drinking Water	2.	1	1	1.00				1	1	1.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Entire SHEN Study Area

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14			10/15-3/19			3/20-6/30			n/a			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
00070	TURBIDITY, JACKSON CANDLE UNITS	Other-Hi Lim.	50.	366	17	0.05	103	11	0.11	146	4	0.03	117	2	0.02			
00076	TURBIDITY, HACH TURBIDIMETER	Other-Hi Lim.	50.	779	23	0.03	269	4	0.01	316	15	0.05	194	4	0.02			
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	Other-Lo Lim.	4.	1214	0	0.00	376	0	0.00	491	0	0.00	347	0	0.00			
00300	OXYGEN, DISSOLVED	Other-Lo Lim.	4.	4659	70	0.02	1564	49	0.03	1482	3	0.00	1613	18	0.01			
00400	PH	Fresh Chronic	9.	13446	531	0.04	3840	197	0.05	5652	201	0.04	3954	133	0.03			
		Other-Lo Lim.	6.5	13446	5492	0.41	3840	1475	0.38	5652	2417	0.43	3954	1600	0.40			
00403	PH, LAB	Fresh Chronic	9.	2754	25	0.01	832	8	0.01	1075	10	0.01	847	7	0.01			
		Other-Lo Lim.	6.5	2754	212	0.08	832	49	0.06	1075	80	0.07	847	83	0.10			
00406	PH, FIELD	Fresh Chronic	9.	611	12	0.02	305	9	0.03	33	0	0.00	273	3	0.01			
		Other-Lo Lim.	6.5	611	224	0.37	305	89	0.29	33	11	0.33	273	124	0.45			
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYS	Other-Lo Lim.	200.	7837	7411	0.95	2160	2078	0.96	3384	3273	0.97	2293	2060	0.90			
00613	NITRITE NITROGEN, DISSOLVED AS N	Drinking Water	1.	132	0	0.00	40	0	0.00	56	0	0.00	36	0	0.00			
00615	NITRITE NITROGEN, TOTAL AS N	Drinking Water	1.	3811	3	0.00	1097	2	0.00	1607	1	0.00	1107	0	0.00			
00618	NITRATE NITROGEN, DISSOLVED AS N	Drinking Water	10.	178	0	0.00	45	0	0.00	86	0	0.00	47	0	0.00			
00620	NITRATE NITROGEN, TOTAL AS N	Drinking Water	10.	3546	3	0.00	1008	0	0.00	1486	3	0.00	1052	0	0.00			
00630	NITRITE PLUS NITRATE, TOTAL 1 DET.	Drinking Water	10.	406	0	0.00	154	0	0.00	148	0	0.00	104	0	0.00			
00631	NITRITE PLUS NITRATE, DISS. 1 DET.	Drinking Water	10.	462	0	0.00	143	0	0.00	163	0	0.00	156	0	0.00			
00720	CYANIDE, TOTAL	Fresh Acute	0.022	41	1	0.02	10	0	0.00	22	0	0.00	9	1	0.11			
		Drinking Water	0.2	41	0	0.00	10	0	0.00	22	0	0.00	9	0	0.00			
00940	CHLORIDE, TOTAL IN WATER	Fresh Acute	860.	2291	0	0.00	693	0	0.00	927	0	0.00	671	0	0.00			
		Drinking Water	250.	2291	0	0.00	693	0	0.00	927	0	0.00	671	0	0.00			
00941	CHLORIDE, DISSOLVED IN WATER	Fresh Acute	860.	7896	0	0.00	2140	0	0.00	3392	0	0.00	2364	0	0.00			
		Drinking Water	250.	7896	0	0.00	2140	0	0.00	3392	0	0.00	2364	0	0.00			
00945	SULFATE, TOTAL (AS SO4)	Drinking Water	250.	2556	9	0.00	753	6	0.01	1043	3	0.00	760	0	0.00			
00946	SULFATE, DISSOLVED (AS SO4)	Drinking Water	250.	7896	0	0.00	2140	0	0.00	3392	0	0.00	2364	0	0.00			
00950	FLUORIDE, DISSOLVED AS F	Drinking Water	4.	554	0	0.00	160	0	0.00	220	0	0.00	174	0	0.00			
00951	FLUORIDE, TOTAL AS F	Drinking Water	4.	391	0	0.00	107	0	0.00	180	0	0.00	104	0	0.00			
01000	ARSENIC, DISSOLVED	Fresh Acute	360.	24	0	0.00	9	0	0.00	7	0	0.00	8	0	0.00			
		Drinking Water	50.	24	1	0.04	9	0	0.00	7	1	0.14	8	0	0.00			
01002	ARSENIC, TOTAL	Fresh Acute	360.	288	0	0.00	125	0	0.00	83	0	0.00	80	0	0.00			
		Drinking Water	50.	288	0	0.00	125	0	0.00	83	0	0.00	80	0	0.00			
01012	BERYLLIUM, TOTAL	Fresh Acute	130.	6	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	4.	2 &	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01025	CADMIUM, DISSOLVED	Fresh Acute	3.9	24	2	0.08	9	0	0.00	7	0	0.00	8	2	0.25			
		Drinking Water	5.	24	2	0.08	9	0	0.00	7	0	0.00	8	2	0.25			
01027	CADMIUM, TOTAL	Fresh Acute	3.9	82 &	18	0.22	38	3	0.08	5	5	1.00	39	10	0.26			
		Drinking Water	5.	84 &	18	0.21	38	3	0.08	5	5	1.00	41	10	0.24			
01030	CHROMIUM, DISSOLVED	Drinking Water	100.	14	0	0.00	6	0	0.00	4	0	0.00	4	0	0.00			
01034	CHROMIUM, TOTAL	Drinking Water	100.	631	12	0.02	191	2	0.01	236	7	0.03	204	3	0.01			
01040	COPPER, DISSOLVED	Fresh Acute	18.	56	9	0.16	16	0	0.00	23	5	0.22	17	4	0.24			
		Drinking Water	1300.	56	0	0.00	16	0	0.00	23	0	0.00	17	0	0.00			
01042	COPPER, TOTAL	Fresh Acute	18.	583 &	65	0.11	170	10	0.06	206	19	0.09	207	36	0.17			
		Drinking Water	1300.	586	0	0.00	173	0	0.00	206	0	0.00	207	0	0.00			
01049	LEAD, DISSOLVED	Fresh Acute	82.	24	0	0.00	9	0	0.00	7	0	0.00	8	0	0.00			
		Drinking Water	15.	24	0	0.00	9	0	0.00	7	0	0.00	8	0	0.00			
01051	LEAD, TOTAL	Fresh Acute	82.	538	1	0.00	174	0	0.00	205	1	0.00	159	0	0.00			
		Drinking Water	15.	538	51	0.09	174	21	0.12	205	26	0.13	159	4	0.03			
01057	THALLIUM, DISSOLVED	Fresh Acute	1400.	9	0	0.00	6	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	2.	9	0	0.00	6	0	0.00	3	0	0.00	3	0	0.00			
01059	THALLIUM, TOTAL	Fresh Acute	1400.	6	0	0.00	3	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	2.	2 &	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01065	NICKEL, DISSOLVED	Fresh Acute	1400.	312	0	0.00	99	0	0.00	104	0	0.00	109	0	0.00			
		Drinking Water	100.	312	2	0.01	99	0	0.00	104	0	0.00	109	2	0.02			
01067	NICKEL, TOTAL	Fresh Acute	1400.	44	0	0.00	18	0	0.00	17	0	0.00	9	0	0.00			
		Drinking Water	100.	44	1	0.02	18	0	0.00	17	0	0.00	9	1	0.11			
01075	SILVER, DISSOLVED	Fresh Acute	4.1	10	0	0.00	6	0	0.00	6	0	0.00	4	0	0.00			
		Drinking Water	100.	10	0	0.00	6	0	0.00	6	0	0.00	4	0	0.00			
01077	SILVER, TOTAL	Fresh Acute	4.1	2 &	1	0.50	1	0	0.00	1	1	1.00	4	0	0.00			
		Drinking Water	100.	3	0	0.00	1	0	0.00	1	0	0.00	1	0	0.00			
01090	ZINC, DISSOLVED	Fresh Acute	120.	22	0	0.00	8	0	0.00	6	0	0.00	8	0	0.00			
		Drinking Water	5000.	22	0	0.00	8	0	0.00	6	0	0.00	8	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Entire SHEN Study Area

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	7/01-10/14			10/15-3/19			3/20-6/30			n/a			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
01092	ZINC, TOTAL	Fresh Acute	120.	767	54	0.07	222	20	0.09	279	23	0.08	266	11	0.04			
		Drinking Water	5000.	767	0	0.00	222	0	0.00	279	0	0.00	266	0	0.00			
01095	ANTIMONY, DISSOLVED	Fresh Acute	88.	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	6.	10	0	0.00	6	0	0.00				4	0	0.00			
01097	ANTIMONY, TOTAL	Fresh Acute	88.	2	0	0.00				1	0	0.00	1	0	0.00			
		Drinking Water	6.	2	0	0.00				1	0	0.00	1	0	0.00			
01145	SELENIUM, DISSOLVED	Fresh Acute	20.	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	50.	10	0	0.00	6	0	0.00				4	0	0.00			
01147	SELENIUM, TOTAL	Fresh Acute	20.	10	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	50.	10	0	0.00	4	0	0.00	3	0	0.00	3	0	0.00			
04035	SIMAZINE, DISSOLVED, WATER, TOTAL RECOVER	Drinking Water	4.	4	0	0.00	3	0	0.00				1	0	0.00			
22703	URANIUM, NATURAL DISSOLVED	Drinking Water	20.	29	0	0.00				18	0	0.00	11	0	0.00			
31505	COLIFORM, TOTAL, MPN, CONF. TEST, 35C	Other-Hi Lim.	1000.	325	198	0.61	126	97	0.77	43	20	0.47	156	81	0.52			
31506	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE C	Other-Hi Lim.	1000.	31	31	1.00	31	31	1.00									
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	Other-Hi Lim.	200.	27	26	0.96	27	26	0.96									
31615	FECAL COLIFORM, MPN	Other-Hi Lim.	200.	117	76	0.65	14	14	1.00									
31616	FECAL COLIFORM, MEMBRANE FILTER, BROTH	Other-Hi Lim.	200.	4106 &	1812	0.44	1183	596	0.50	1768	659	0.37	1155	557	0.48			
31625	FECAL COLIFORM, MF	Other-Hi Lim.	200.	1	1	1.00							1	1	1.00			
32101	BROMODICHLOROMETHANE, WHOLE WATER	Drinking Water	100.	1	0	0.00				1	0	0.00						
32102	CARBON TETRACHLORIDE, WHOLE WATER	Fresh Acute	35200.	1	0	0.00				1	0	0.00						
		Drinking Water	5.	1	0	0.00				1	0	0.00						
32103	1,2-DICHLOROETHANE, WHOLE WATER	Fresh Acute	118000.	1	0	0.00				1	0	0.00						
		Drinking Water	5.	1	0	0.00				1	0	0.00						
32104	BROMOFORM, WHOLE WATER	Drinking Water	100.	1	0	0.00				1	0	0.00						
32105	DIBROMOCHLOROMETHANE, WHOLE WATER	Drinking Water	100.	1	0	0.00				1	0	0.00						
32106	CHLOROFORM, WHOLE WATER	Fresh Acute	28900.	1	0	0.00				1	0	0.00						
		Drinking Water	100.	1	0	0.00				1	0	0.00						
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE E	Fresh Acute	17500.	1	0	0.00				1	0	0.00						
		Drinking Water	1000.	1	0	0.00				1	0	0.00						
34205	ACENAPHTHENE, TOTAL	Fresh Acute	1700.	1	0	0.00				1	0	0.00						
34210	ACROLEIN, TOTAL	Fresh Acute	68.	1	0	0.00				1	0	0.00						
34215	ACRYLONITRILE, TOTAL	Fresh Acute	7550.	1	0	0.00				1	0	0.00						
34301	CHLOROBENZENE, TOTAL	Drinking Water	100.	1	0	0.00				1	0	0.00						
34346	1,2-DIPHENYLHYDRAZINE, TOTAL	Fresh Acute	270.	1	0	0.00				1	0	0.00						
34356	ENDOSULFAN, BETA, TOTAL	Fresh Acute	0.22	10	0	0.00	7	0	0.00	1	0	0.00	2	0	0.00			
34361	ENDOSULFAN, ALPHA, TOTAL	Fresh Acute	0.22	10	0	0.00	7	0	0.00	1	0	0.00	2	0	0.00			
34371	ETHYLBENZENE, TOTAL	Fresh Acute	32000.	1	0	0.00				1	0	0.00						
		Drinking Water	700.	1	0	0.00				1	0	0.00						
34376	FLUORANTHENE, TOTAL	Fresh Acute	3980.	1	0	0.00				1	0	0.00						
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL	Fresh Acute	7.	1	0	0.00				1	0	0.00						
		Drinking Water	50.	1	0	0.00				1	0	0.00						
34396	HEXACHLOROETHANE, TOTAL	Fresh Acute	980.	1	0	0.00				1	0	0.00						
34403	INDENO (1,2,3-CD) PYRENE, TOTAL	Drinking Water	0.4	0 &	0	0.00												
34408	ISOPHORONE, TOTAL	Fresh Acute	117000.	1	0	0.00				1	0	0.00						
34423	METHYLENE CHLORIDE, TOTAL	Drinking Water	5.	1	1	1.00				1	1	1.00						
34447	NITROBENZENE, TOTAL	Fresh Acute	27000.	1	0	0.00				1	0	0.00						
34452	PARACHLOROMETA CRESOL, TOTAL	Fresh Acute	30.	1	0	0.00				1	0	0.00						
34461	PHENANTHRENE, TOTAL	Fresh Acute	30.	1	0	0.00				1	0	0.00						
34475	TETRACHLOROETHYLENE, TOTAL	Fresh Acute	5280.	1	0	0.00				1	0	0.00						
		Drinking Water	5.	1	0	0.00				1	0	0.00						
34501	1,1-DICHLOROETHYLENE, TOTAL	Drinking Water	7.	1	0	0.00				1	0	0.00						
34506	1,1,1-TRICHLOROETHANE, TOTAL	Drinking Water	200.	1	0	0.00				1	0	0.00						
34511	1,1,2-TRICHLOROETHANE, TOTAL	Drinking Water	5.	1	0	0.00				1	0	0.00						
34536	1,2-DICHLOROBENZENE, TOTAL	Drinking Water	600.	1	0	0.00				1	0	0.00						
34541	1,2-DICHLOROPROPANE, TOTAL	Drinking Water	5.	1	0	0.00				1	0	0.00						
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATE	Drinking Water	100.	1	0	0.00				1	0	0.00						
34551	1,2,4-TRICHLOROBENZENE, TOTAL	Drinking Water	70.	1	0	0.00				1	0	0.00						
34566	1,3-DICHLOROBENZENE, TOTAL	Drinking Water	600.	1	0	0.00				1	0	0.00						
34571	1,4-DICHLOROBENZENE, TOTAL	Drinking Water	75.	1	0	0.00				1	0	0.00						
34586	2-CHLOROPHENOL, TOTAL	Fresh Acute	4380.	1	0	0.00				1	0	0.00						
34601	2,4-DICHLOROPHENOL, TOTAL	Fresh Acute	2020.	1	0	0.00				1	0	0.00						

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Entire SHEN Study Area

Parameter	Std. Type	Std. Value	Total Obs	Exceed Standard	Prop. Exceeding	-----7/01-10/14-----			-----10/15-3/19-----			-----3/20-6/30-----			-----n/a-----			
						Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.	
34606	2,4-DIMETHYLPHENOL, TOTAL	Fresh Acute	2120.	1	0	0.00				1	0	0.00						
34611	2,4-DINITROTOLUENE, TOTAL	Fresh Acute	330.	1	0	0.00				1	0	0.00						
34653	P,P'-DDE, DISSOLVED	Fresh Acute	1050.	4	0	0.00	3	0	0.00				1	0	0.00			
34675	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN, TOT	Fresh Acute	0.01	0 &	0	0.00							0	0.00				
		Drinking Water	0.000	03									0	0.00				
34694	PHENOL (C6H5OH) - SINGLE COMPOUND, TOTAL	Fresh Acute	10200.	1	0	0.00				1	0	0.00						
34696	NAPHTHALENE, TOTAL	Fresh Acute	2300.	1	0	0.00				1	0	0.00						
38933	CHLORPYRIFOS, DISSOLVED	Fresh Acute	0.083	4	0	0.00	3	0	0.00				1	0	0.00			
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMP	Fresh Acute	20.	26	0	0.00	24	0	0.00	1	0	0.00	1	0	0.00			
		Drinking Water	1.	25 &	0	0.00	24	0	0.00				1	0	0.00			
39033	ATRAZINE IN WHOLE WATER SAMPLE	Drinking Water	3.	3	0	0.00	3	0	0.00									
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	Fresh Acute	2000.	1	0	0.00				1	0	0.00						
		Drinking Water	6.	1	0	0.00				1	0	0.00						
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE	Drinking Water	2.	0 &	0	0.00												
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE	Fresh Acute	45000.	1	0	0.00				1	0	0.00						
		Drinking Water	5.	1	0	0.00				1	0	0.00						
39300	P,P' DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	27	0	0.00	24	0	0.00	1	0	0.00	2	0	0.00			
39310	P,P' DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	27	0	0.00	24	0	0.00	1	0	0.00	2	0	0.00			
39320	P,P' DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	27	0	0.00	24	0	0.00	1	0	0.00	2	0	0.00			
39330	ALDRIN IN WHOLE WATER SAMPLE	Fresh Acute	3.	40	0	0.00	34	0	0.00	3	0	0.00	3	0	0.00			
39340	GAMMA-BHC(LINDANE), WHOLE WATER	Fresh Acute	2.	14	0	0.00	8	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	0.2	14	0	0.00	8	0	0.00	3	0	0.00	3	0	0.00			
39341	GAMMA-BHC(LINDANE), DISSOLVED	Fresh Acute	2.	4	0	0.00	3	0	0.00				1	0	0.00			
		Drinking Water	0.2	4	0	0.00	3	0	0.00				1	0	0.00			
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATE	Fresh Acute	2.4	25	0	0.00	21	0	0.00	2	0	0.00	2	0	0.00			
		Drinking Water	2.	25	0	0.00	21	0	0.00	2	0	0.00	2	0	0.00			
39360	DDD IN WHOLE WATER SAMPLE	Fresh Acute	0.6	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39365	DDE IN WHOLE WATER SAMPLE	Fresh Acute	1050.	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39370	DDT IN WHOLE WATER SAMPLE	Fresh Acute	1.1	10 &	0	0.00	4	0	0.00	5	0	0.00	1	0	0.00			
39380	DIELDRIN IN WHOLE WATER SAMPLE	Fresh Acute	2.5	32	0	0.00	25	0	0.00	3	0	0.00	4	0	0.00			
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE	Fresh Acute	2.5	4	0	0.00	3	0	0.00				1	0	0.00			
39390	ENDRIN IN WHOLE WATER SAMPLE	Fresh Acute	0.18	33	0	0.00	25	0	0.00	3	0	0.00	5	0	0.00			
		Drinking Water	2.	33	0	0.00	25	0	0.00	3	0	0.00	5	0	0.00			
39400	TOXAPHENE IN WHOLE WATER SAMPLE	Fresh Acute	0.73	13	0	0.00	8	0	0.00	2	0	0.00	3	0	0.00			
		Drinking Water	3.	13	0	0.00	8	0	0.00	2	0	0.00	3	0	0.00			
39410	HEPTACHLOR IN WHOLE WATER SAMPLE	Fresh Acute	0.52	14	0	0.00	8	0	0.00	3	0	0.00	3	0	0.00			
		Drinking Water	0.4	14	0	0.00	8	0	0.00	3	0	0.00	3	0	0.00			
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	Fresh Acute	0.52	15	0	0.00	8	0	0.00	3	0	0.00	4	0	0.00			
		Drinking Water	0.2	14 &	0	0.00	7	0	0.00	3	0	0.00	4	0	0.00			
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE	Drinking Water	40.	18	0	0.00	18	0	0.00									
39540	PARATHION IN WHOLE WATER SAMPLE	Fresh Acute	0.065	4	0	0.00	1	0	0.00	2	0	0.00	1	0	0.00			
39542	PARATHION IN FILT. FRAC. OF WATER SAMPLE	Fresh Acute	0.065	4	0	0.00	3	0	0.00				1	0	0.00			
39630	ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	Drinking Water	3.	12	0	0.00	9	0	0.00	2	0	0.00	1	0	0.00			
39632	ATRAZINE DISSOLVED IN WATER	Drinking Water	3.	4	0	0.00	3	0	0.00				1	0	0.00			
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	Fresh Acute	6.	18	0	0.00	17	0	0.00	1	0	0.00						
		Drinking Water	1.	17 &	0	0.00	17	0	0.00									
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMP	Fresh Acute	90.	1	0	0.00				1	0	0.00						
39720	PICLORAM IN WHOLE WATER SAMPLE	Drinking Water	500.	1	0	0.00							1	0	0.00			
39730	2,4-D IN WHOLE WATER SAMPLE	Drinking Water	70.	7	0	0.00	5	0	0.00				2	0	0.00			
39760	SILVEX IN WHOLE WATER SAMPLE	Drinking Water	50.	7	0	0.00	5	0	0.00				2	0	0.00			
39782	LINDANE IN WHOLE WATER SAMPLE	Fresh Acute	2.	1	0	0.00							1	0	0.00			
		Drinking Water	0.2	1	0	0.00							1	0	0.00			
46342	ALACHLOR (LASSO), WATER, DISSOLVED	Drinking Water	2.	4	0	0.00	3	0	0.00				1	0	0.00			
50060	CHLORINE, TOTAL RESIDUAL	Fresh Acute	0.019	90	8	0.09	42	7	0.17	21	1	0.05	27	0	0.00			
71851	NITRATE NITROGEN, DISSOLVED (AS NO3)	Drinking Water	44.	8367	0	0.00	2285	0	0.00	3588	0	0.00	2494	0	0.00			
71856	NITRITE NITROGEN, DISSOLVED (AS NO2)	Drinking Water	3.3	92	0	0.00	26	0	0.00	45	0	0.00	21	0	0.00			
71890	MERCURY, DISSOLVED	Fresh Acute	2.4	10	0	0.00	6	0	0.00				4	0	0.00			
		Drinking Water	2.	10	0	0.00	6	0	0.00				4	0	0.00			
71900	MERCURY, TOTAL	Fresh Acute	2.4	577 &	3	0.01	185	1	0.01	214	1	0.00	178	1	0.01			
		Drinking Water	2.	577 &	4	0.01	185	1	0.01	214	1	0.00	178	2	0.01			
82078	TURBIDITY, FIELD	Other-Hi Lim.	50.	354	9	0.03	89	0	0.00	148	5	0.03	117	4	0.03			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

EPA Water Quality Criteria Analysis for Entire SHEN Study Area

Parameter	Std. Type	Std. Value	Total			7/01-10/14			10/15-3/19			3/20-6/30			n/a			
			Obs	Exceed Standard	Prop. Exceeding	Obs	Exceed	Prop.	Obs	Exceed	Prop.	Obs	Exceed	Prop.				
82079	TURBIDITY, LAB	Other-Hi Lim.	50.	24	0	0.00							24	0	0.00			
82586	ALDICARB SULFOXIDE, WATER, TOTAL RECOVER	Drinking Water	4.	1	0	0.00							1	0	0.00			
82587	ALDICARB SULFONE, WHOLE WATER, TOTAL REC	Drinking Water	2.	1	0	0.00							1	0	0.00			
82613	OXAMYL, WHOLE WATER, TOTAL RECOVERABLE	Drinking Water	200.	1	0	0.00							1	0	0.00			
82615	CARBOFURAN, WHOLE WATER, TOTAL RECOVERAB	Drinking Water	40.	1	0	0.00							1	0	0.00			
82619	ALDICARB, WHOLE WATER, TOTAL RECOVERABLE	Drinking Water	3.	1	0	0.00							1	0	0.00			

& - Below detection limit observations, for which half the detection limit exceeded the criterion, were excluded from the criterion comparison for this parameter

**NPS Servicewide Inventory and Monitoring Program Level I
Water Quality Parameter Inventory Data Evaluation and Analysis:
Missing Level I Groups**

There are STORET Data for Every Level I I&M Parameter Group Within
the SHEN Study Area

NPS Servicewide Inventory and Monitoring Program Level I
Water Quality Parameter Inventory Data Evaluation and Analysis:
Present Level I Groups

STORET Data Within the SHEN Study Area Exist for These Groups:

		Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
Alkalinity						
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS (UEQ/L)	7837	7243	594	0	280
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)	2806	1842	388	576	171
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	17	0	0	17	7
00435	ACIDITY, TOTAL (MG/L AS CaCO3)	21	0	0	21	20
00440	BICARBONATE ION (MG/L AS HCO3)	596	24	58	514	29
00445	CARBONATE ION (MG/L AS CO3)	309	0	6	303	14
		11586	9109	1046	1431	521(455) ¹
pH						
00400	PH (STANDARD UNITS)	13459	9128	2460	1871	536
00403	PH, LAB (STANDARD UNITS)	2754	1831	677	246	131
00406	PH, FIELD (STANDARD UNITS)	611	611	0	0	157
		16824	11570	3137	2117	824(705) ¹
Conductivity						
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	1501	938	563	0	168
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	9816	8616	708	492	367
		11317	9554	1271	492	535(518) ¹
Dissolved Oxygen						
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	1228	1207	21	0	43
00300	OXYGEN, DISSOLVED (MG/L)	4659	1565	1493	1601	274
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION	8	8	0	0	8
		5895	2780	1514	1601	325(295) ¹
Water Temperature						
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	12775	8652	2336	1787	669
		12775	8652	2336	1787	669(669) ¹
Flow						
00060	FLOW, STREAM, MEAN DAILY CFS	570	0	33	537	20
00061	FLOW, STREAM, INSTANTANEOUS CFS	415	18	397	0	70
00065	STAGE, STREAM (FEET)	14	11	3	0	5
00067	TIDE STAGE CODE	2	0	2	0	2
		1001	29	435	537	97 (89) ¹

¹Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Clarity/Turbidity		Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00070	TURBIDITY, (JACKSON CANDLE UNITS)	366	286	0	80	45
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	779	779	0	0	25
00077	TRANSPARENCY, SECCHI DISC (INCHES)	1	0	1	0	1
00078	TRANSPARENCY, SECCHI DISC (METERS)	12	2	10	0	2
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	2844	1800	739	305	60
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS NTU	358	358	0	0	22
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	24	24	0	0	12
		4384	3249	750	385	167 (89) ¹

Nitrate/Nitrogen		Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00600	NITROGEN, TOTAL (MG/L AS N)	1	0	1	0	1
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	2	0	2	0	2
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	342	8	332	2	71
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	3944	1779	1426	739	100
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	178	1	78	99	7
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	3546	1778	1155	613	56
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	6	6	0	0	6
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	3996	1763	1423	810	110
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	406	2	277	127	71
00631	NITRITE PLUS NITRATE, DISS. 1 DET. (MG/L AS N)	462	19	430	13	72
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH4)	1669	972	695	2	74
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO3)	8367	7302	670	395	366
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO2)	92	0	77	15	4
		23011	13630	6566	2815	940(531) ¹

Phosphate/Phosphorus		Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	187	0	1	186	9
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	232	0	84	148	34
00665	PHOSPHORUS, TOTAL (MG/L AS P)	2343	1759	571	13	45
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	33	33	0	0	20
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	1362	663	669	30	40
70505	PHOSPHORUS, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	1464	0	854	610	32
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	2727	1133	862	732	53
		8348	3588	3041	1719	233(114) ¹

Chlorophyll		Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
32210	CHLOROPHYLL A (UG/L) TRICHROMATIC UNCORRECTED	41	3	7	31	18
32211	CHLOROPHYLL A (UG/L) SPECTROPHOTOMETRIC ACID METH.	1	1	0	0	1
		42	4	7	31	19 (18) ¹

Sulfates/Total Dissolved Solids/Hardness		Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	3051	1770	622	659	111
00945	SULFATE, TOTAL (MG/L AS SO4)	2559	1487	498	574	130
00946	SULFATE, DISSOLVED (MG/L AS SO4)	7896	7302	594	0	349
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	530	17	100	413	21
		14036	10576	1814	1646	611(485) ¹

¹Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Bacteria	Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
31505 COLIFORM, TOT, MPN, CONFIRMED TEST,35C(TUBE 31506)	325	0	1	324	50
31506 COLIFORM, TOT, MPN, CONFIRMED TEST, TUBE CONFIG.	31	0	0	31	16
31614 FECAL COLIFORM, MPN, TUBE CONFIGURATION	27	0	0	27	15
31615 FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	117	48	1	68	17
31616 FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	4107	1612	1395	1100	75
31625 FECAL COLIFORM, MF, M-FC, 0.7 UM	1	1	0	0	1
31673 FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	2	2	0	0	2
	4610	1663	1397	1550	176(108) ¹

¹Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Toxic Elements	Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	10	10	0	7
01097	ANTIMONY, TOTAL (UG/L AS SB)	2	0	2	2
01000	ARSENIC, DISSOLVED (UG/L AS AS)	24	10	0	9
01002	ARSENIC, TOTAL (UG/L AS AS)	288	9	163	37
01012	BERYLLIUM, TOTAL (UG/L AS BE)	6	4	2	5
01025	CADMIUM, DISSOLVED (UG/L AS CD)	24	10	0	9
01027	CADMIUM, TOTAL (UG/L AS CD)	401	9	178	59
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	14	10	0	9
01034	CHROMIUM, TOTAL (UG/L AS CR)	631	9	209	50
01040	COPPER, DISSOLVED (UG/L AS CU)	56	10	0	9
01042	COPPER, TOTAL (UG/L AS CU)	586	9	208	59
01049	LEAD, DISSOLVED (UG/L AS PB)	24	10	0	9
01051	LEAD, TOTAL (UG/L AS PB)	538	9	208	59
71890	MERCURY, DISSOLVED (UG/L AS HG)	10	10	0	7
71900	MERCURY, TOTAL (UG/L AS HG)	579	8	206	60
01065	NICKEL, DISSOLVED (UG/L AS NI)	312	10	156	37
01067	NICKEL, TOTAL (UG/L AS NI)	44	9	35	15
01145	SELENIUM, DISSOLVED (UG/L AS SE)	10	10	0	7
01147	SELENIUM, TOTAL (UG/L AS SE)	10	7	3	7
01075	SILVER, DISSOLVED (UG/L AS AG)	10	10	0	7
01077	SILVER, TOTAL (UG/L AS AG)	3	0	3	3
01057	THALLIUM, DISSOLVED (UG/L AS TL)	9	9	0	6
01059	THALLIUM, TOTAL (UG/L AS TL)	6	4	2	5
01090	ZINC, DISSOLVED (UG/L AS ZN)	22	10	0	9
01092	ZINC, TOTAL (UG/L AS ZN)	767	9	314	59
00720	CYANIDE, TOTAL (MG/L AS CN)	41	0	1	3
34675	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD),TOT(UG/L)	1	0	1	1
34210	ACROLEIN, TOTAL (UG/L)	1	0	1	1
34215	ACRYLONITRILE, TOTAL (UG/L)	1	0	1	1
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	1	0	1	1
32104	BROMOFORM, WHOLE WATER, (UG/L)	1	0	1	1
32102	CARBON TETRACHLORIDE, WHOLE WATER, (UG/L)	1	0	1	1
34301	CHLOROBENZENE, TOTAL (UG/L)	1	0	1	1
32105	DIBROMOCHLOROMETHANE, WHOLE WATER, (UG/L)	1	0	1	1
34311	CHLOROETHANE, TOTAL (UG/L)	1	0	1	1
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (UG/L)	1	0	1	1
32106	CHLOROFORM, WHOLE WATER (UG/L)	1	0	1	1
32101	BROMODICHLOROMETHANE, WHOLE WATER (UG/L)	1	0	1	1
34496	1,1-DICHLOROETHANE, TOTAL (UG/L)	1	0	1	1
32103	1,2-DICHLOROETHANE, WHOLE WATER (UG/L)	1	0	1	1
34501	1,1-DICHLOROETHYLENE, TOTAL (UG/L)	1	0	1	1
34541	1,2-DICHLOROPROPANE, TOTAL (UG/L)	1	0	1	1
34561	1,3-DICHLOROPROPENE, TOTAL (UG/L)	1	0	1	1
34371	ETHYLBENZENE, TOTAL (UG/L)	1	0	1	1
34413	METHYL BROMIDE, TOTAL (UG/L)	1	0	1	1
34418	METHYL CHLORIDE, TOTAL (UG/L)	1	0	1	1
34423	METHYLENE CHLORIDE, TOTAL (UG/L)	1	0	1	1
34506	1,1,1-TRICHLOROETHANE, TOTAL (UG/L)	1	0	1	1
34475	TETRACHLOROETHYLENE, TOTAL (UG/L)	1	0	1	1
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	1	0	1	1
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER (UG/L)	1	0	1	1
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (UG/L)	1	0	1	1
34511	1,1,2-TRICHLOROETHANE, TOTAL (UG/L)	1	0	1	1
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE (UG/L)	1	0	1	1
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE (UG/L)	1	0	1	1

¹Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Toxic Elements - Continued ...		Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
34586	2-CHLOROPHENOL, TOTAL (UG/L)	1	0	1	0	1
34601	2,4-DICHLOROPHENOL, TOTAL (UG/L)	1	0	1	0	1
34606	2,4-DIMETHYLPHENOL, TOTAL (UG/L)	1	0	1	0	1
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL), TOTAL (UG/L)	1	0	1	0	1
34616	2,4-DINITROPHENOL, TOTAL (UG/L)	1	0	1	0	1
34591	2-NITROPHENOL, TOTAL (UG/L)	1	0	1	0	1
34646	4-NITROPHENOL, TOTAL (UG/L)	1	0	1	0	1
34452	PARACHLOROMETA CRESOL, TOTAL (UG/L)	1	0	1	0	1
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE (UG/L)	26	8	18	0	16
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTAL (UG/L)	1	0	1	0	1
34621	2,4,6-TRICHLOROPHENOL, TOTAL (UG/L)	1	0	1	0	1
34205	ACENAPHTHENE, TOTAL (UG/L)	1	0	1	0	1
34200	ACENAPHTHYLENE, TOTAL (UG/L)	1	0	1	0	1
34220	ANTHRACENE, TOTAL (UG/L)	1	0	1	0	1
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	1	0	1	0	1
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, TOTAL (UG/L)	1	0	1	0	1
34247	BENZO-A-PYRENE, TOTAL (UG/L)	1	0	1	0	1
34230	BENZO(B)FLUORANTHENE, WHOLE WATER (UG/L)	1	0	1	0	1
34521	BENZO(GH)PERYLENE1,12-BENZOPERYLENE, TOTAL (UG/L)	1	0	1	0	1
34242	BENZO(K)FLUORANTHENE, TOTAL (UG/L)	1	0	1	0	1
34278	BIS (2-CHLOROETHOXY) METHANE, TOTAL (UG/L)	1	0	1	0	1
34273	BIS (2-CHLOROETHYL) ETHER, TOTAL (UG/L)	1	0	1	0	1
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER (UG/L)	1	0	1	0	1
34636	4-BROMOPHENYL PHENYL ETHER, TOTAL (UG/L)	1	0	1	0	1
34292	N-BUTYL BENZYL PHTHALATE, WHOLE WATER (UG/L)	1	0	1	0	1
34581	2-CHLORONAPHTHALENE, TOTAL (UG/L)	1	0	1	0	1
34641	4-CHLOROPHENYL PHENYL ETHER, TOTAL (UG/L)	1	0	1	0	1
34320	CHRYSENE, TOTAL (UG/L)	1	0	1	0	1
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (UG/L)	1	0	1	0	1
34536	1,2-DICHLOROBENZENE, TOTAL (UG/L)	1	0	1	0	1
34566	1,3-DICHLOROBENZENE, TOTAL (UG/L)	1	0	1	0	1
34571	1,4-DICHLOROBENZENE, TOTAL (UG/L)	1	0	1	0	1
34631	3,3'-DICHLOROBENZIDINE, TOTAL (UG/L)	1	0	1	0	1
34336	DIETHYL PHTHALATE, TOTAL (UG/L)	1	0	1	0	1
34341	DIMETHYL PHTHALATE, TOTAL (UG/L)	1	0	1	0	1
39110	DI-N-BUTYL PHTHALATE, WHOLE WATER (UG/L)	1	0	1	0	1
34611	2,4-DINITROTOLUENE, TOTAL (UG/L)	1	0	1	0	1
34626	2,6-DINITROTOLUENE, TOTAL (UG/L)	1	0	1	0	1
34596	DI-N-OCTYL PHTHALATE, TOTAL (UG/L)	1	0	1	0	1
34346	1,2-DIPHENYLHYDRAZINE, TOTAL (UG/L)	1	0	1	0	1
34376	FLUORANTHENE, TOTAL (UG/L)	1	0	1	0	1
34381	FLUORENE, TOTAL (UG/L)	1	0	1	0	1
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	18	0	18	0	10
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE (UG/L)	1	0	1	0	1
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (UG/L)	1	0	1	0	1
34396	HEXACHLOROETHANE, TOTAL (UG/L)	1	0	1	0	1
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (UG/L)	1	0	1	0	1
34408	ISOPHORONE, TOTAL (UG/L)	1	0	1	0	1
34696	NAPHTHALENE, TOTAL (UG/L)	1	0	1	0	1
34447	NITROBENZENE, TOTAL (UG/L)	1	0	1	0	1
34438	N-NITROSODIMETHYLAMINE, TOTAL (UG/L)	1	0	1	0	1
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (UG/L)	1	0	1	0	1
34433	N-NITROSODIPHENYLAMINE, TOTAL (UG/L)	1	0	1	0	1
34461	PHENANTHRENE, TOTAL (UG/L)	1	0	1	0	1
34469	PYRENE, TOTAL (UG/L)	1	0	1	0	1

¹Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

Toxic Elements - Continued ...		Total Obs.	01/01/85 to 12/21/98	01/01/75 to 12/31/84	Before 01/01/75	Total Stations
34551	1,2,4-TRICHLOROBENZENE, TOTAL (UG/L)	1	0	1	0	1
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	40	8	29	3	19
34253	A-BHC-ALPHA, DISSOLVED (UG/L)	4	4	0	0	4
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	10	8	2	0	9
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	10	8	2	0	9
39340	GAMMA-BHC(LINDANE), WHOLE WATER (UG/L)	14	8	3	3	11
39341	GAMMA-BHC(LINDANE), DISSOLVED (UG/L)	4	4	0	0	4
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	1	0	0	1	1
34259	DELTA BENZENE HEXACHLORIDE, TOTAL (UG/L)	10	8	2	0	9
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER (UG/L)	26	3	20	3	16
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	27	8	19	0	17
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	11	0	1	10	6
34653	P,P'-DDE, DISSOLVED (UG/L)	4	4	0	0	4
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	27	8	19	0	17
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	27	8	19	0	17
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	4	0	1	3	2
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	32	8	20	4	20
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	4	4	0	0	4
34361	ENDOSULFAN, ALPHA, TOTAL (UG/L)	10	8	2	0	9
34356	ENDOSULFAN, BETA, TOTAL (UG/L)	10	8	2	0	9
34351	ENDOSULFAN SULFATE, TOTAL (UG/L)	10	8	2	0	9
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	33	8	20	5	21
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	14	8	3	3	11
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	15	8	3	4	12
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE (UG/L)	10	8	2	0	9
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE (UG/L)	5	3	2	0	5
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE (UG/L)	10	8	2	0	9
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE (UG/L)	10	8	2	0	9
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE (UG/L)	10	8	2	0	9
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE (UG/L)	10	8	2	0	9
34671	PCB - 1016, TOTAL (UG/L)	10	8	2	0	9
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	14	8	3	3	11
		4984	411	1996	2577	969 (74) ¹

¹Since a station can have data for more than one of the parameters in the parameter group, the number in the parenthesis is the number of unique stations having data for this parameter group.

NPS Servicewide Inventory and Monitoring Program Level I
Water Quality Parameter Inventory Data Evaluation and Analysis:
Park Summary: Level I Group Currentness and Distribution

Parameter Group	Total Obs.	Obs. Since 1985	% Obs. Since 1985	Stations Measuring This Group	% of Total Stations Measuring This Group	Obs. Per Station Measuring This Group	Period of Record For This Group	Observations Per Year of Period of Record
Alkalinity	11586	9109	78.6	455	60.4	25.5	09/04/30-12/21/98	169.6
pH	16824	11570	68.8	705	93.6	23.9	08/02/45-12/21/98	315.1
Conductivity	11317	9554	84.4	518	68.8	21.8	10/01/48-12/21/98	225.3
Dissolved Oxygen	5895	2780	47.2	295	39.2	20.0	06/14/67-12/21/98	187.0
Water Temperature	12775	8652	67.7	669	88.8	19.1	06/14/67-12/21/98	405.3
Flow	1001	29	2.9	89	11.8	11.2	09/04/30-09/19/95	15.4
Clarity/Turbidity	4384	3249	74.1	89	11.8	49.3	02/25/68-12/21/98	142.2
Nitrate/Nitrogen	23011	13630	59.2	531	70.5	43.3	09/04/30-12/21/98	336.9
Phosphate/Phosphorus	8348	3588	43.0	114	15.1	73.2	10/30/67-12/21/98	268.0
Chlorophyll	42	4	9.5	18	2.4	2.3	07/28/69-07/31/90	2.0
Sulfates/Total Dissolved Solids/Hardness	14036	10576	75.3	485	64.4	28.9	09/04/30-12/21/98	205.5
Bacteria	4610	1663	36.1	108	14.3	42.7	06/14/67-12/21/98	146.2
Toxic Elements	4984	411	8.2	74	9.8	67.4	09/19/67-06/25/98	162.0

**Water Quality Observations
Outside STORET Edit Criteria for SHEN**

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter	Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
SHEN0006	00915	CALCIUM, DISSOLVED (MG/L AS CA)	970723	0940	21300.0000000	21VASWCB	1BSTH025.83 X
SHEN0006	00915	CALCIUM, DISSOLVED (MG/L AS CA)	970804	1015	26500.0000000	21VASWCB	1BSTH025.83 X
SHEN0006	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	970723	0940	7230.0000000	21VASWCB	1BSTH025.83 X
SHEN0006	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	970804	1015	9100.0000000	21VASWCB	1BSTH025.83 X
SHEN0015	01034	CHROMIUM, TOTAL (UG/L AS CR)	730417	1056	16000.0000000	1112A9WQ	UP-POT-060
SHEN0015	39370	DDT IN WHOLE WATER SAMPLE (UG/L)	730417	1056	100.0000000	1112A9WQ	UP-POT-060
SHEN0019	00915	CALCIUM, DISSOLVED (MG/L AS CA)	970723	1020	44500.0000000	21VASWCB	1BSTH023.73 X
SHEN0019	00915	CALCIUM, DISSOLVED (MG/L AS CA)	970804	1055	24300.0000000	21VASWCB	1BSTH023.73 X
SHEN0019	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	970723	1020	12300.0000000	21VASWCB	1BSTH023.73 X
SHEN0019	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	970804	1055	8900.0000000	21VASWCB	1BSTH023.73 X
SHEN0021	00915	CALCIUM, DISSOLVED (MG/L AS CA)	970723	1110	26800.0000000	21VASWCB	1BSTH022.19 X
SHEN0021	00915	CALCIUM, DISSOLVED (MG/L AS CA)	970804	1130	24600.0000000	21VASWCB	1BSTH022.19 X
SHEN0021	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	970723	1110	8900.0000000	21VASWCB	1BSTH022.19 X
SHEN0021	00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	970804	1130	9100.0000000	21VASWCB	1BSTH022.19 X
SHEN0287	71900	MERCURY, TOTAL (UG/L AS HG)	700908	2015	17.5000000	21VASWCB	1BSSF092.69
SHEN0297	00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	930624	1300	0.0000000	21VASWCB	3-RAP077.28 X
SHEN0305	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	730214	1120	22.0000000	1112A9WQ	UP-POT-124
SHEN0305	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	720522	1445	33.8800000	1112A9WQ	UP-POT-124
SHEN0305	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	730416	1108	32.6700000	1112A9WQ	UP-POT-124
SHEN0389	00310	BOD, 5 DAY, 20 DEG C MG/L	720919	1030	177.0000000	1112A9WQ	UP-POT-125
SHEN0389	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	720522	1325	43.0000000	1112A9WQ	UP-POT-125
SHEN0389	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	720919	1030	33.5000000	1112A9WQ	UP-POT-125
SHEN0389	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	730214	1035	33.0000000	1112A9WQ	UP-POT-125
SHEN0389	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	720522	1325	60.0500000	1112A9WQ	UP-POT-125
SHEN0389	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	720522	1325	32.5300000	1112A9WQ	UP-POT-125
SHEN0389	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	720919	1030	46.2000000	1112A9WQ	UP-POT-125
SHEN0588	00927	MAGNESIUM, TOTAL (MG/L AS MG)	930301	1205	1540.0000000	21VASWCB	3-THO021.19
SHEN0585	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	731108	1100	21.0000000	21VASWCB	1BHKS006.04
SHEN0585	01034	CHROMIUM, TOTAL (UG/L AS CR)	731108	1100	4500.0000000	21VASWCB	1BHKS006.04
SHEN0585	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	731108	1100	22.0000000	21VASWCB	1BHKS006.04
SHEN0585	70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	731108	1100	12.0000000	21VASWCB	1BHKS006.04
SHEN0587	00310	BOD, 5 DAY, 20 DEG C MG/L	720919	0905	270.0000000	1112A9WQ	UP-POT-126
SHEN0587	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	720919	0905	46.0000000	1112A9WQ	UP-POT-126
SHEN0587	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	730214	0907	25.0000000	1112A9WQ	UP-POT-126
SHEN0587	00660	PHOSPHATE, ORTHO (MG/L AS PO4)	720522	1000	33.0000000	1112A9WQ	UP-POT-126
SHEN0587	71886	PHOSPHORUS, TOTAL, AS PO4 - MG/L	720522	1000	36.1400000	1112A9WQ	UP-POT-126
SHEN0588	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	731023	1150	30.0000000	21VASWCB	1BHKS005.85
SHEN0588	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	730302	1110	14.0000000	21VASWCB	1BHKS005.85
SHEN0588	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	730514	1500	13.0000000	21VASWCB	1BHKS005.85
SHEN0588	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	730705	1415	15.5000000	21VASWCB	1BHKS005.85
SHEN0588	70505	PHOSPHATE, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	730807	1730	12.0000000	21VASWCB	1BHKS005.85

**Water Quality Observations
Outside STORET Edit Criteria for SHEN**

(Disposition: X = Discarded, Blank = Retained)

NPS Station ID	Parameter	Date	Time	Parameter Value	Agency	STORET Station ID	Disposition
SHEN0588	70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	731023	1150	13.0000000	21VASWCB	1BHKS005.85	
SHEN0588	70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	740412	1110	13.0000000	21VASWCB	1BHKS005.85	
SHEN0588	70507 PHOSPHORUS,IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	730807	1730	11.0000000	21VASWCB	1BHKS005.85	
SHEN0651	00927 MAGNESIUM, TOTAL (MG/L AS MG)	930301	1228	1800.0000000	21VASWCB	3-RUS005.66	
SHEN0750	00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	781031	1205	29.5000000	21VASWCB	1BHPY002.60	
SHEN0750	70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	731023	1400	20.0000000	21VASWCB	1BHPY002.60	
SHEN0750	70505 PHOSPHATE,TOTAL,COLORIMETRIC METHOD (MG/L AS P)	781031	1205	24.0000000	21VASWCB	1BHPY002.60	
SHEN0756	00440 BICARBONATE ION (MG/L AS HCO3)	550511		1330.0000000	112WRD	01631000	
SHEN0765	00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	720920	1430	29.5000000	1112A9WQ	UP-POT-127	
SHEN0765	00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	730214	1534	26.5000000	1112A9WQ	UP-POT-127	
SHEN0765	71886 PHOSPHORUS, TOTAL, AS PO4 - MG/L	720920	1430	34.2000000	1112A9WQ	UP-POT-127	
SHEN0769	71886 PHOSPHORUS, TOTAL, AS PO4 - MG/L	720524	1220	100.0000000	1112A9WQ	UP-POT-090	
SHEN0772	00610 NITROGEN, AMMONIA, TOTAL (MG/L AS N)	770829	1645	22.5000000	21VASWCB	1BHPY000.10	
SHEN0772	00680 CARBON, TOTAL ORGANIC (MG/L AS C)	780531	1320	135.0000000	21VASWCB	1BHPY000.10	
SHEN0774	00403 PH, LAB, STANDARD UNITS SU	770914	1100	83.0000000	21VASWCB	1BSSF000.58	X
SHEN0774	00403 PH, LAB, STANDARD UNITS SU	800428	1340	73.0000000	21VASWCB	1BSSF000.58	X
SHEN0777	00403 PH, LAB, STANDARD UNITS SU	820105	1305	75.0000000	21VASWCB	1BNFS000.57	X

APPENDICES

Appendix A

Computer Files Transmitted With Park Baseline Water Quality Data Inventory and Analysis

Computer disk(s) accompanying this report include up to seven (depending on the presence or absence of certain data elements) compressed (ZIP) files containing digital copies of nearly all the tables, figures, and other materials used to produce this report. To decompress these files, you must use the commonly available shareware program PKUNZIP. The command to type at the DOS prompt is:

```
PKUNZIP -E COMPRESS.ZIP FILENAME.EXT
```

where COMPRESS.ZIP is the name of one of the seven compressed (ZIP) files listed below and FILENAME.EXT is the name of the file you wish to extract. If you want to decompress all of the files in COMPRESS.ZIP, simply omit the FILENAME.EXT. To obtain a listing of all the files compressed into a particular ZIP file, type the following:

```
PKUNZIP -V COMPRESS.ZIP |MORE
```

where COMPRESS.ZIP is the name of one of the seven compressed ZIP files listed below. If a ZIP file spans multiple disks, use the last disk of the series (span) when obtaining a listing of all the files compressed into a particular ZIP file. Once you see the file you wish to obtain, substitute this file name for FILENAME.EXT in the first command line above to extract and decompress this particular file.

Included on one of the disk(s) accompanying this report is a program named PRINTZIP. This program will decompress ZIP files which don't span multiple disks and print certain files to a Hewlett-Packard (or compatible) Laser Printer. To use PRINTZIP, however, you must still have a copy of PKUNZIP in a directory listed in your path or in the same directory as the PRINTZIP program. PRINTZIP provides an easy, menu-driven interface for using PKUNZIP to decompress files and then send them to the printer. PRINTZIP allows you to send individual files, groups of files, or all files to the printer. PRINTZIP will not work with ZIP files that span multiple disks.

The following compressed (ZIP) files are included on the disk(s) accompanying this report:

(1) SHENTABS.ZIP

This compressed file contains all the tables presented in the report. The files compressed into this file include:

- (a) SHENSITE.DOC - Descriptive listing of select fields from the industrial facilities discharges, drinking water intakes, and EPA-USGS stream gages databases.
- (b) SHENAGNC.DOC - Contacts for agencies whose data were retrieved within the study area.
- (c) SHENAGNQ.DOC - Number of stations, observations, and parameters retrieved by agency code within the study area and park.

- (d) SHENOV0.DOC - Overview of park and retrieved data.
- (e) SHENOV1.DOC - Station period of record table.
- (f) SHENOV2.DOC - Parameter period of record table.
- (g) SHENOV3.DOC - Station/parameter period of record table.
- (h) SHENINV.DOC - Station by station descriptive statistics over the entire period of record and comparison against EPA Water Quality Criteria for each station.
- (i) SHENSEAN.DOC - Seasonal and annual water quality descriptive statistics at stations with water quality data meeting the default seasonal and annual criteria.
- (j) SHENEPAS.DOC - EPA Water Quality Criteria comparison for data at all stations combined within the study area.
- (k) SHENIDEA.DOC - Comparison of downloaded STORET data with NPS Servicewide Inventory and Monitoring Program "Level I" water quality parameters.
- (l) SHENBAD.DOC - Water quality observation values that were outside the range of one of 190 STORET edit criteria and were either discarded or retained.

All these compressed document files are in ASCII format and contain printer codes appropriate to Hewlett-Packard (or compatible) Laser Printers. While at the DOS prompt, any of these document files may be printed directly to a Hewlett-Packard (or compatible) Laser Printer by using the PRINT command. For example, if the document SHENOV1.DOC is in the subdirectory C:\WATER, you could type: PRINT C:\WATER\SHENOV1.DOC. This will print the file to your local or networked Hewlett-Packard (or compatible) Laser Printer attached to parallel port one (LPT1:). Alternatively, you can use the PRINTZIP program to decompress and print any of these files provided the ZIP file doesn't span multiple disks. These ASCII files can also be imported into word-processed documents, but the printer codes will then have to be removed.

(2) SHENFIGS.ZIP

This compressed file contains graphics files for all the statistical figures (time series plots; annual box and whiskers plots; seasonal box and whiskers plots) in the report in two different formats: Computer Graphic Metafile (CGM) and Hewlett-Packard Printer Control Language (PCL). The files are named with the last three digits of the Station Name followed by the five digit STORET code. The file name extension begins with either a 1 (time series), 2 (annual), or 3 (seasonal) and then either GM for CGM or CL for PCL. For example, 00100300.2GM would denote the file contains an annual box and whiskers plot in CGM format for parameter 00300 (dissolved oxygen) at station SHEN0001. While at the DOS prompt, any PCL file can be printed directly to a Hewlett-Packard (or compatible) Laser Printer by using the COPY command. For example, if the graphic 00100300.2CL (an annual box and whiskers plot of parameter 00300, dissolved oxygen, at station SHEN0001) is in the subdirectory C:\WATER, you would type: COPY C:\WATER\00100300.2CL LPT1: /B. This will print the file to your local or networked Hewlett-Packard (or compatible) Laser Printer attached to parallel port one (LPT1:). The /B is necessary because the PCL file is in a binary format. Alternatively, you can use the PRINTZIP program to decompress and print any of the PCL files provided the ZIP file doesn't span multiple disks. The CGM files can be imported and/or edited in most graphics packages, including WordPerfect.

(3) SHENPARM.ZIP

This file compresses SHENPARM.DBF which contains all the actual values (raw data) of all the water quality data downloaded from STORET and summarized in the report. The detailed database structure for this file is contained in Appendix B.

(4) SHENSITE.ZIP

This compressed file contains up to five geo-referenced, DBASE III+ compatible site (point location) files documenting the location in the study area of water quality monitoring stations, industrial facilities discharges, drinking water intakes, water gages, and water impoundments. These files include:

- (a) SHENWQ.DBF - All water quality monitoring station locations within the project's study area downloaded from STORET.
- (b) SHENIFD.DBF - All municipal and industrial facility discharges within the project's study area downloaded from the IFD database.
- (c) SHENDRIN.DBF - All drinking water intakes within the project's study area downloaded from the DRINKS database.
- (d) SHENGAGE.DBF - All water gages within the project's study area downloaded from the GAGES database.
- (e) SHENDAMS.DBF - All water impoundments within the project's study area downloaded from the DAMS database.

The absence of any of these files indicates that none of the particular sites were found within the study area. Detailed database structures for each of these files are contained in Appendix B.

(5) SHENMISC.ZIP

This compressed file contains a variety of graphic and document files that are contained in the report. They are grouped into this miscellaneous compressed (ZIP) file because they don't fit neatly into any of the other compressed files. The files contained in this compressed file include:

- (a) SHENEXEC.DOC - WordPerfect Ver. 5.1 copy of the Executive Summary in the report.
- (b) SHENTOC.DOC - WordPerfect Ver. 5.1 copy of the report's Table of Contents.
- (c) INTRO.DOC - WordPerfect Ver. 5.1 copy of all the text in the report from the Introduction through the Interpretive Guide to Water Quality Results.
- (d) APPENDIX.DOC - WordPerfect Ver. 5.1 copy of all the Appendices in the report.
- (e) SHENREGI - PCL and CLP (Windows Clipboard) copies of map displaying the regional location of the park and study area.
- (f) SHENWQ - PCL and CLP (Windows Clipboard) copies of park maps displaying water quality station locations within the park's study area. If, due to scaling and aesthetic concerns, multiple maps were needed, these files will have alphabetically ordered suffixes (SHENWQA, SHENWQB, SHENWQC, etc.) and the index map name will end with an ampersand (&).

- (g) SHENIDG - PCL and CLP (Windows Clipboard) copies of park maps displaying locations of industrial facilities discharges, drinking water intakes, and stream gages within the park's study area. If, due to scaling and aesthetic concerns, multiple maps were needed, these files will have alphabetically ordered suffixes (SHENIDGA, SHENIDGB, SHENIDGC, etc.) and the index map name will end with an ampersand (&). If no industrial facilities discharges, drinking water intakes, water gages, or water impoundments exist within the park's study area, these files will not be in the compressed (ZIP) file.
- (h) SHENSEHY - PCL and CLP (Windows Clipboard) copies of the hydrographs or other materials used by WRD staff as the basis for a first attempt at a seasonal analysis of the park's water quality data.

Other materials may also be included in this miscellaneous compressed (ZIP) file as warranted by conditions at the park. As with SHENFIGS.ZIP and SHENTABS.ZIP, you can use the PRINTZIP program to print any of the PCL files in SHENMISC.ZIP provided the ZIP file doesn't span multiple disks. You should not, however, use PRINTZIP to print the WordPerfect document files. The CLP (Windows Clipboard) files can be imported (pasted) and/or edited in most Windows-based word processors and graphics packages.

(6) SHENRF3.ZIP

This compressed file contains the Environmental Protection Agency's River Reach File Ver. 3.0 provisional data for the USGS catalog unit(s) encompassing the study area. The attribute data exist in both ASCII and DBASE III+ format, while the geographic traces exist in ASCII format. This compressed file contains four files for each catalog unit that touches the study area. Catalog units are identified by unique 8-character numeric names which identify the region, subregion, accounting unit, and catalog unit. Examples (your 8-character numeric names will be different) of the file types included in this compressed file are:

- (a) 12345678.RF3 - ASCII formatted attribute file from the River Reach File for all hydrographic traces within the catalog unit.
- (b) 12345678.DBF - DBASE III+ formatted attribute file from the River Reach File for all hydrographic traces within the catalog unit.
- (c) 12345678.TRC - ASCII formatted geographic file from the River Reach File containing digital, geo-referenced descriptions of all hydrographic traces within the catalog unit at a scale of 1:100,000 suitable for import into a geographic information system.
- (d) 12345678.CUB - ASCII formatted geographic file from the River Reach File containing a digital, geo-referenced description of the catalog unit boundary suitable for import into a geographic information system.

Detailed database structures for RF3-related files are contained in Appendix B.

(7) SHENWQMW.ZIP

Between 2000 and 2002, all Baseline Water Quality Data Inventory and Analysis Reports were compiled or re-compiled in Microsoft Word 2000 (Ver. 9.0) format. This complete, digital version of the report will be made available through various means, including the Internet. Although the reports can be opened in Microsoft Word 1997 (Ver. 8.0), the time series and annual and seasonal box-plots may not be centered appropriately on a page due to discrepancies with how Word 2000 formats pictures and how Word 1997 formatted pictures. Consequently, Word 2000 is the recommended software for viewing the report. Prior to printing the report from Word, be sure to enable "Print Text as Graphics" or "Print True Type Font as Graphics" in the Printer Properties. This ensures a more faithful reproduction of the maps included in the Word document.

The Microsoft Word version of the Baseline Water Quality Data Inventory and Analysis Report may differ slightly from the original analog version. Reports issued during 1994-1996 didn't have as many "bells-and-whistles" as subsequent reports. In compiling digital Microsoft Word versions of these earlier reports, attempts were made to bring these 1994-1996 reports up to the current standard wherever feasible and practicable. Unfortunately, some changes were not feasible or practicable. For example, water quality criteria screens were added or modified over time when newer criteria became available. The digital Microsoft Word version of Appendix F presents the latest criteria screening parameters and values. Some of these parameters and/or values may not have been screened against in the EPA water quality criteria analyses for each station and the entire study area in the 1994-1996 analog versions of the report. Similarly, the Introduction, Methodology, and Interpretive Guide to Water Quality Results may mention certain features that aren't included in the 1994-1996 reports. Additionally, to prepare a Microsoft Word version of this report, data were processed through different versions of software than used originally. Consequently, some results presented in the Overview and Executive Summary may differ slightly from those presented in the analog report (eg. # of In Park and Longer Term Stations).

Appendix B

Water Quality Database File Structures

The following table provides the DBASE III+ database field structure for all the water quality parameter data downloaded from STORET. This data will allow parks or other interested parties to replicate the statistical analyses and graphics contained in this report; perform more sophisticated analyses; or to establish a baseline park water quality database.

Parameter Data File: SHENPARM.DBF in SHENPARM.ZIP				
Field Name	Start	Stop	Length	Field Description
NPSSTATID	1	8	8	NPS Station ID (NPS park code + 4 digit sequence number)
BEGDATE	9	14	6	Measurement Start Date [yymmdd]
BEGTIME	15	18	4	Measurement Start Time [hhmm]
PARMCODE	19	23	5	STORET Parameter Code
PARMVALU	24	39	16.7	Parameter Value
REMARK	40	40	1	Parameter Remark Value
				A=Value is Mean of 2 or More Determinations
				B=Results Based Upon Colony Counts Outside Acceptable Range
				C=Value Calculated
				D=Field Measurement
				E=Extra Sample Taken in Compositing Process
				F=Female Species
				G=Maximum of 2 or More Determinations
				H=Based on Field Kit Determination
				I=Value is Less Than Practical Quantitation Limit and Greater Than or Equal to the Method Detection Limit
				J=Estimated, Not the Result of Analytic Measurement
				K=Off-scale Low, Actual Value Not Known, But Known to be Less Than Value Shown
				L=Off-scale High, Actual Value Not Known, But Known to be Greater Than Value Shown

Parameter Data File: SHENPARM.DBF in SHENPARM.ZIP

Field Name	Start	Stop	Length	Field Description
				M=Presence Verified, But Not Quantified, Below Quantification Limit; For Species, Male; For Oxygen Reduction Potential, Indicates a Negative Value
				N=Presumptive Evidence of Presence
				O=Analysis Lost
				P=Too Numerous to Count
				Q=Exceeded Normal Holding Time
				R=Significant Rain in Last 48 Hours
				S=Laboratory test
				T=Less Than Detection Criteria
				U=Analyzed For But Not Detected, Value is Detection Limit For Process Used; If Species, Undetermined
				V=Analyte was Detected in Sample and Method Blank
				W=Less Than Lowest Value Reportable Under Remark "T"
				X=Quasi Vertically-Integrated Sample
				Y=Analysis of Unpreserved Sample
				Z=Too Many Colonies Were Present to Count (TNTC), Value Represents Filtration Value
				\$=Calculated By Retrieval Software
MEDIA	41	46	6	Sample Media
DEPTH	47	55	9.3	Depth of Sample [in feet]
ENDDATE	56	61	6	Measurement End Date [yymmdd] [all composite samples]
ENDTIME	62	65	4	Measurement End Time [hhmm] [all composite samples]
SAMPTYPE	66	69	4	Type of Sample ["sophisticated" composite samples]
				C=Continuous Collection
				G=Collection of Individual Grab Samples
				GNxx=xx is the Number of Individual Grab Samples
				B=N/A

Parameter Data File: SHENPARM.DBF in SHENPARM.ZIP				
Field Name	Start	Stop	Length	Field Description
COMPTYPE	70	70	1	Composite Value Type ["sophisticated" composite samples]
				A=Average
				H=Maximum
				L=Minimum
				N=Number of Observations
				#=Number of Observations
				S=Standard Deviation
				U=Sum of Squares
				V=Variance
				C=Coefficient of Error
				X=Coefficient of Variance
				E=Skewness
				F=Kurtosis
				Z=Number of Observations That Exceed an Established Limit
				%=Precision
				\$=Accuracy
				B=N/A
				D=Indicates Replicate Sample
COMPST	71	71	1	Composite Space/Time Indicator
				S=Space
				T=Time
				B=Space and Time
				F=Flow Proportional
				1-9=Replicate Number

Note: DBASE III+ record lengths will be one greater than the last stop column displayed (71 here) because DBASE III+ reserves the first space/column of every record for a deletion flag. Hence, DBASE III+ will display a record length of 72 for this database.

The following table provides the DBASE III+ database field structure for all the water quality station locations downloaded from STORET. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Quality Station Data File: SHENWQ.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
NPSSTATID	1	8	8	NPS Station ID (NPS park code + 4 digit sequence number)
AGENCY	9	16	8	Agency Code of Station Owner
STORIDP	17	31	15	STORET Primary Station Code
STORIDS1	32	43	12	STORET First Secondary Station Code
STORIDS2	44	55	12	STORET Second Secondary Station Code
STORIDS3	56	65	10	STORET Third Secondary Station Code
LATITUDE	66	73	8	Station Latitude [degrees:minutes:seconds]
LONGITUDE	74	82	9	Station Longitude [degrees:minutes:seconds]
LAT	83	93	11.6	Station Latitude [decimal degrees, (-) below equator]
LON	94	104	11.6	Station Longitude [decimal degrees, (-) western hemisphere]
LLPREC	105	105	1	Latitude/Longitude Precision Code
RMI	106	329	224	River Mile Index
STATLOC	330	377	48	Station Location Description
CNTYCODE	378	382	5	FIPS State/County Code
STNAME	383	398	16	State Name
CNTYNAME	399	418	20	County Name
HYDUNIT	419	426	8	Hydrologic Unit Code (MAJ/MIN/SUB = Catalog Unit)
MAJBASN	427	450	24	Major Basin Name
MINBASN	451	490	40	Minor Basin Name
STATTYPE	491	550	60	Station Type
STORDATE	551	556	6	Date Station was Stored in STORET
RF1INDEX	557	567	11	RF1 Reach Number Location [2]
RF1MILE	568	575	8.3	Mile Point on RF1 Reach [2]
RF1LOC	576	578	3	Indicates the Location as ON or OFF RF1 Reach [2]
RF1DIST	579	584	6.2	Distance From RF1 Reach

Water Quality Station Data File: SHENWQ.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
RF3INDEX	585	601	17	RF3 Reach Number Location [3]
RF3MILE	602	607	6.2	Mile point on RF3 Reach [3]
RF3LOC	608	610	3	Indicates the Location as ON or OFF RF3 Reach [2]
RF3DIST	611	616	6.2	Distance From RF3 Reach
DEPH2O	617	620	4	Depth of Water at Station Location [in feet]
ELEV	621	625	5	Station Elevation
ECOREG	626	628	3	ECO Region
H2OBODY	629	678	50	Waterbody ID
AQUIFERS	679	718	40	Aquifer Description
STATDESC1	719	790	72	Station Sentence Description
STATDESC2	791	862	72	Station Sentence Description
STATDESC3	863	934	72	Station Sentence Description
STATDESC4	935	1006	72	Station Sentence Description
STATDESC5	1007	1078	72	Station Sentence Description
STATDESC6	1079	1150	72	Station Sentence Description
STATDESC7	1151	1222	72	Station Sentence Description
STATDESC8	1223	1294	72	Station Sentence Description
STATDESC9	1295	1366	72	Station Sentence Description
STATDESC10	1367	1438	72	Station Sentence Description
STATDESC11	1439	1510	72	Station Sentence Description
STATDESC12	1511	1582	72	Station Sentence Description
STATDESC13	1583	1654	72	Station Sentence Description
STATDESC14	1655	1726	72	Station Sentence Description
STATDESC15	1727	1798	72	Station Sentence Description
STATLOCKED	1799	1799	1	Station Locked (Logical) True/False

The following table provides the DBASE III+ database field structures for the EPA Industrial Facilities Discharge database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Industrial Facilities Discharges File: SHENIFD.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
SITEID	1	9	9	Site Identifier (NPDES Number)
LATITUDE	10	17	8	Facility Latitude (Degrees:Minutes:Seconds)
LONGITUDE	18	26	9	Facility Longitude (Degrees:Minutes:Seconds)
LAT	27	37	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	38	48	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	49	59	11	RF1 Reach Number Location
RF1MILE	60	65	6.2	Mile Point on RF1 Reach
RF1DIST	66	71	6.2	Distance From RF1 Reach
RF3INDEX	72	88	17	RF3 Reach Number Location
RF3MILE	89	94	6.2	Mile Point on RF3 Reach
RF3DIST	95	100	6.2	Distance From RF3 Reach
ADR	101	125	25	Address
BFL	126	132	7.2	Total Direct Combined C&P Flow (1000 GPD)
CCFLG	133	133	1	Coastal County Flag "Y"/"N"/"E"=Estuary
CC1	134	138	5	City Code #1 (EPA Code)
CFL	139	145	7.2	Total Direct Cooling Flow (1000 GPD)
CNC	146	148	3	County Code (FIPS)
CTY	149	168	20	City Name
CZIP	169	177	9	Canadian Zip Code
DNB	178	186	9	Dunn & Bradstreet Number
DNBFLG	187	187	1	Dunn & Bradstreet PCS Source Flag
EGF	188	202	15.4	Flow From Effluent Guidelines (1000 GPD)
EGS	203	208	6	Effluent Guidelines Subcategory
EXPDT	209	216	8	Expiration Date (mm/dd/yy)
E308SN	217	220	4	Effluent Guidelines Survey Number
FAC	221	229	9	SCS Facility Identifier (Cross-Reference)
FDS	230	232	3	Facility Data Source

Industrial Facilities Discharges File: SHENIFD.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
FFL	233	239	7.2	Total Facility Flow (1000 GPD)
FHF	240	240	1	Fac. Hit Flag (Reach File) V=Versar Assumed
FLOTYP	241	243	3	I=Blow Down, R=Bottom Ash, S=Fly Ash
FLR	244	250	7.2	Flow Recvd-Industrial (1000 GPD) Permit Data
FRDS	251	259	9	FRDS ID# - XREF To Water Supply
FRW	260	289	30	Facility Receiving Water Name
FS1	290	293	4	Facility SIC Code (From PCS)
FS2	294	297	4	Facility SIC Code #1
FS3	298	301	4	Facility SIC Code #2
FS4	302	305	4	Facility SIC Code #3
FS5	306	309	4	Facility SIC Code #4
FUD	310	317	8	Facility Level Last Date Updated (mm/dd/yy)
IACC	318	318	1	Inactive/Active Indicator ("I" or "A")
ICAT	319	320	2	WQAB Industrial Category
ICAT2	321	322	2	WQAB Industrial Category 2
ICAT3	323	324	2	WQAB Industrial Category 3
IFL	325	331	7	Total Indirect Flow (1000 GPD)
IFT	332	332	1	Illinois Facility Type (A thru Z)
IG1	333	334	2	Facility Industrial Group #1
IG2	335	336	2	Facility Industrial Group #2
IJCN	337	346	10	Canadian Record Identifier
INACT	347	353	7	Inactive/Rescinded P=Based on Permit;A=Actual
INDCNT	354	357	4	Computed Number of Indirect Dischargers
LATLON	358	372	15	Polygon Retrieval Lat/Long.
MAJ	373	373	1	Major-Minor Flag (From PCS)
MAPID	374	377	4	Map Identifier
MJMN	378	381	4	Major/Minor Basin (EPA-STORET)
NAM	382	441	60	Facility Name
NDC	442	444	3	Number of Discharges (Pipes)

Industrial Facilities Discharges File: SHENIFD.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
NDSFLO	445	451	7.2	NEEDS Flow (1000 GPD)
NDSIFLO	452	458	7.2	NEEDS Industrial Flow (1000 GPD)
NID	459	462	4	Number of Indirect Dischargers
NPC	463	463	1	NEEDS Pre-Treatment Code "Y"=Yes, "N"=No
NPS	464	464	1	NPDES Facility Source/Status
NSN	465	473	9	NEEDS Survey Number
NTC	474	474	1	NEEDS Treatment Code
OCP	475	480	6	Organic Chemical Producers ID Number
ODESCC	481	481	1	ODES Coastal County "Y"=Yes; "N"=No
OFL	482	488	7.2	Total Non-Direct Other Flow (1000 GPD)
OWN	489	491	3	Ownership Code
PFL	492	498	7.2	Total Direct Process Flow (1000 GPD)
REG	499	500	2	EPA Region
REGKEY	501	504	4	Region Key
RSLOFLO	505	511	7.2	Receiving Stream Low Flow
RSMNFLO	512	518	7.2	Receiving Stream Mean Flow
STA	519	520	2	State Postal Abbreviation
STAID	521	535	15	State Identifier
STC	536	537	2	State Code (FIPS)
STCITY	538	544	7	State/City Code
TFLOW	545	551	7.2	Type Flow (1000 GPD)
UFL	552	558	7.2	Total Direct Undefined Flow (1000 GPD)
XEGS	559	561	3	Effluent Guidelines Subcat Index
XKEY	562	562	1	"1","2","3","4","5","6","7","8","9"
XNME	563	565	3	GLP,DIR,F2C,ENF,CET,LAG,PPB,M85,M86
ZIP	566	570	5	Zip Code

The following table provides the DBASE III+ database field structures for drinking water intakes from the EPA DRINKS database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Drinking Water Intakes File: SHENDRIN.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
SITEID	1	20	20	Site Identifier
LATITUDE	21	28	8	Facility Latitude (Degrees:Minutes:Seconds)
LONGITUDE	29	37	9	Facility Longitude (Degrees:Minutes:Seconds)
LAT	38	48	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	49	59	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	60	70	11	RF1 Reach Number Location
RF1MILE	71	76	6.2	Mile Point on RF1 Reach
RF1DIST	77	82	6.2	Distance From RF1 Reach
RF3INDEX	83	99	17	RF3 Reach Number Location
RF3MILE	100	105	6.2	Mile Point on RF3 Reach
RF3DIST	106	111	6.2	Distance From RF3 Reach
AQCD	112	115	4	Aquifer Code
ASC	116	138	23	STORET Agency/Station Code
AVGD	139	142	4	Average Depth
BUY	143	143	1	Purchase Code
CC1	144	148	5	City Code #1 (EPA Code)
CNC	149	151	3	County Code (FIPS)
CNME	152	166	15	Contact Name
CNN	167	186	20	County Name
CTITLE	187	201	15	Contact Title
CTY	202	221	20	City Name
DUD	222	229	8	Date of Update
FRDS	230	238	9	FRDS ID# - Cross-Reference
GEOAG	239	258	20	Geologic Age
GEOCDE	259	261	3	Geologic Age Code
IDAT	262	269	8	Date (mm/dd/yy)

Drinking Water Intakes File: SHENDRIN.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
INTAKET	270	270	1	Type Source G/S/B
INTRVWR	271	285	15	Interviewer
MAXD	286	289	4	Maximum Depth
MILES	290	296	7.2	Miles
MIND	297	300	4	Minimum Depth
NAME	301	320	20	Name
NPD	321	329	9	NPDES# XREF to IFD Database
NWLS	330	332	3	Number of Wells
OWN	333	335	3	Ownership
PAVGF	336	342	7.2	Production Avg. Daily (Gal/Day)
PCTSUP	343	345	3	%Surface / %Ground
PHONE	346	355	10	Telephone Number
PMAXF	356	362	7.2	Production Max. Daily (Gal/Day)
POPSV	363	371	9	Population Served
REG	372	373	2	EPA Region
SHLAT	374	379	6	Sitehelp Latitude (DDMMSS)
SHLNG	380	386	7	Sitehelp Longitude (DDDMMSS)
SHMILES	387	393	7.2	Sitehelp Miles
SHNME	394	403	10	Sitehelp Source Name
SHPCT	404	410	7.2	Sitehelp Percent of Reach Miles
SRC	411	413	3	Sitehelp Source Code
STA	414	415	2	State Abbreviation
STC	416	417	2	State Code (FIPS)
TUF	418	424	7.2	Total Utility Flow
TYPCDE	425	425	1	Type Code
UHF	426	426	1	Utility Hit Flag (Reach File)
VCDE	427	427	1	Versar Code='V'=>25K; '*!<=25K POPSVD
WFPC	428	428	1	Wellfield Precision Code
WFTYP	429	429	1	Well Type (Cassing,Artesian,Infiltration,etc.)

Drinking Water Intakes File: SHENDRIN.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
WUN	430	449	20	Water Utility Name

The following table provides the DBASE III+ database field structures for the Water Gage database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Gage File: SHENGAGE.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
SITEID	1	20	20	Site Identifier
LATITUDE	21	28	8	Facility Latitude (DDMMSS)
LONGITUDE	29	37	9	Facility Longitude (DDDMMSS)
LAT	38	48	11.6	Facility Latitude (decimal degrees, (-) below equator)
LON	49	59	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
RF1INDEX	60	70	11	RF1 Reach Number Location
RF1MILE	71	76	6.2	Mile Point on RF1 Reach
RF1DIST	77	82	6.2	Distance From RF1 Reach
RF3INDEX	83	99	17	RF3 Reach Number Location
RF3MILE	100	105	6.2	Mile Point on RF3 Reach
RF3DIST	106	111	6.2	Distance From RF3 Reach
JAN	112	118	7.2	Monthly Flow - January
FEB	119	125	7.2	Monthly Flow - February
MAR	126	132	7.2	Monthly Flow - March
APR	133	139	7.2	Monthly Flow - April
MAY	140	146	7.2	Monthly Flow - May
JUN	147	153	7.2	Monthly Flow - June
JUL	154	160	7.2	Monthly Flow - July
AUG	161	167	7.2	Monthly Flow - August
SEP	168	174	7.2	Monthly Flow - September
OCT	175	181	7.2	Monthly Flow - October
NOV	182	188	7.2	Monthly Flow - November
DEC	189	195	7.2	Monthly Flow - December
RGN	196	197	2	Region Code
AREA	198	204	7.2	Drainage Area (SQ.MI.)
DUD	205	212	8	Date of Update

Water Gage File: SHENGAGE.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
FBCF	213	213	1	Flag - Basic Characteristic File ('Y')
FDFE	214	214	1	Flag - Daily Flows File ('Y')
FQMINV	215	224	10	IHS Pt. Files Index
GHF	225	225	1	Hit Flag (Reach File)
ICDE	226	226	1	Integrity Code
LFVEL	227	233	7.2	Low Flow Velocity
METHOD	234	236	3	Calculation Method Code
MFVEL	237	243	7.2	Mean Flow Velocity
MNFLO	244	250	7.2	USGS Mean Annual Flow
NME	251	298	48	Station Name
SHLAT	299	304	6	Sitehelp Latitude (DDMMSS)
SHLNG	305	311	7	Sitehelp Longitude (DDDMMSS)
SHMILES	312	318	7.2	Sitehelp Miles
SHNME	319	328	10	Sitehelp Source Name
SHPCT	329	335	7.2	Sitehelp Percent of Reach Miles
SITE	336	337	2	Site Location
SRC	338	340	3	Sitehelp Source Code
STCTY	341	345	5	State/County Numeric Code
SVTEN	346	352	7.2	USGS 7-10 Year Flow
BEG_WYR	353	356	4	Beginning Water Year
END_WYR	357	359	4	Ending Water Year
ELEV	361	368	8.2	Elevation (Feet)
WELL_DP	369	376	8.2	Well Depth (Feet)

The following table provides the DBASE III+ database field structures for the Water Impoundment database. As this file is geo-referenced, it should import easily into the park's Geographic Information System.

Water Impoundment File: SHENDAMS.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
SITEID	1	7	7	Site Identifier
SOURCE	8	10	3	Source of Data
ST1	11	12	2	Primary State Code Abbreviation
STCTY1	13	17	5	State/County Numeric Code
NAME	18	47	30	Official Name of Dam
LATITUDE	48	53	6	Facility Latitude (DDMMSS)
LONGITUDE	54	60	7	Facility Longitude (DDDMMSS)
LAT	61	70	10.6	Facility Latitude (decimal degrees, (-) below equator)
LON	71	81	11.6	Facility Longitude (decimal degrees, (-) west. hem.)
INME	82	111	30	Impoundment Name
RNME	112	139	28	River, Stream, or Tributary Name on Which Dam Built
CUSEGMI	140	149	10	Catalog Unit, Segment, and Segment Length
REGN	150	151	2	Water Resources Council Region Code
RGBSN	152	155	4	Water Resources Region/Basin Code
CU	156	163	8	Catalog Unit
SEG	164	166	3	Reach Segment of Dam
SEGL	167	171	5.2	Reach Segment Length
PURP	172	172	1	Major Purpose of Dam
				I=Irrigation
				H=Hydroelectric
				N=Navigation
				S=Water Supply
				R=Recreation
				P=Stock/Farm Pond
				D=Debris Control
				F=Flood Control

Water Impoundment File: SHENDAMS.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
				O=Other
FRF3	173	189	17	RF3 Reach Number Location
FRF3MI	190	194	5	Mile Point on RF3 Reach
PURPKEY	195	195	1	Purpose Key
PUR2	196	196	1	Purpose of Dam 2 (See Above)
PUR3	197	197	1	Purpose of Dam 3 (See Above)
PUR4	198	198	1	Purpose of Dam 4 (See Above)
PUR5	199	199	1	Purpose of Dam 5 (See Above)
PUR6	200	200	1	Purpose of Dam 6 (See Above)
PUR7	201	201	1	Purpose of Dam 7 (See Above)
PUR8	202	202	1	Purpose of Dam 8 (See Above)
PUR9	203	203	1	Purpose of Dam 9 (See Above)
PUR10	204	204	1	Purpose of Dam 10 (See Above)
TYPDAM	205	206	2	Major Dam Portion Type
				RE=Earth
				VA=Vaulted Arch
				CD=Buttress
				PG=Gravity
				ER=Rockfill
				MV=Multi-Arch
				OT=Other
YRCMP	207	210	4	Year Dam Completed
SHGT	211	214	4	Structural Height (Feet)
HHGT	215	218	4	Hydraulic Height (Feet)
VNORM	219	236	8	Normal Storage of Impoundment (Acre-Feet)
VMAX	227	234	8	Maximum Storage of Impoundment (Acre-Feet)
LCRST	235	239	5	Crest Length of Dam (Feet)
TSPL	240	240	1	Spillway Type
				C=Controlled

Water Impoundment File: SHENDAMS.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
				U=Uncontrolled
				N=None
				X=Unknown
WSPL	241	244	4	Dam Spillway Width (Feet)
QMAX	245	251	7	Maximum Spillway Discharge (CFS)
PINS	252	258	7.2	Quantity of Installed Power (Megawatts)
PPRO	259	265	7.2	Quantity of Proposed Power (Megawatts)
LOCK	266	266	1	Number of Navigational Locks
OWNR	267	290	24	Name of Impoundment Owner
PFOWN	291	291	1	Ownership Code
				N=Non-Federal
				G=Federal Government Agency
				C=Corps of Engineers
				X=Unknown
FEDR	292	292	1	Federally Regulated (Y=Yes, N=No, X=Unknown)
FLND	293	293	1	Private Dam on Federal Land (Y=Yes, N=No, X=Unknown)
SCSA	294	294	1	Type of Soil Conservation Service Assistance
				N=No Assistance
				T=Technical Assistance
				F=Financial Assistance
				B=Both Technical and Financial Assistance
				X=Unknown
DHAZ	295	295	1	Degree of Downstream Hazard
				1=High (More than a Few Lives Lost; Excessive Economic Loss)
				2=Significant (A Few Lives Lost; Appreciable Economic Loss)
				3=Low (No Lives Expected Lost; Minimal Economic Loss)
DCITY	296	319	24	Nearest Downstream City

Water Impoundment File: SHENDAMS.DBF in SHENSITE.ZIP				
Field Name	Start	Stop	Length	Field Description
POP	320	326	7	Population of Downstream City
DMILE	327	331	5.2	Distance of Downstream City From Dam (Miles)
RET	332	342	11.2	Retention Coefficient (Dimensionless)
MIX	343	353	11.2	Mixing Coefficient (Dimensionless)
SAREA	354	361	8	Surface Area of Impoundment (Acres)
SAFLG	362	362	1	Surface Area Flag (C=Calc., M=Measured, O=Other)
ILNTH	363	367	5	Length of Impoundment (Feet)
ILFLG	368	368	1	Impoundment Length Flag (C=Calc., M=Measured, O=Other)
UPKEY	369	374	6	Update Key (YYMMDD)

The following table provides the ASCII and DBASE III+ database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) attributes. The actual numeric file names will vary depending on the catalog unit(s). This information can be readily incorporated into the park's Geographic Information System.

RF3 Structure File: 12345678.RF3 and 12345678.DBF in SHENRF3.ZIP				
Field Name	Start	Stop	Length	Field Description
CATUNIT	1	8	8	Cataloging Unit (CU)
SEGM	9	12	4	Segment Number (SEG)
MI	13	17	5.2	Mile Point (MI)
UPMI	18	22	5.2	Upstream Mile Pt.
SEQNO	23	33	11.6	Hydro Sequence No.
RFLAG	34	34	1	Reach Flag (0,1)
OWFLAG	35	35	1	Open Water Flag (0,1)
TFLAG	36	36	1	Terminal Flag (0,1)
SFLAG	37	37	1	Start Flag (0,1)
RCHTYPE	38	38	1	Reach Type Code
LEV	39	40	2	Stream Level
JUNC	41	42	2	Level of Downstream Reach
DIVERGENCE	43	43	1	Divergence Code
STARTCU	44	51	8	Start CU
STRTSG	52	55	4	Start SEG
STOPCU	56	63	8	Stop CU
STOPSG	64	67	4	Stop SEG
USDIR	68	68	1	Upstream Direction
TERMID	69	73	5	Terminal Stream ID
TRMBLV	74	74	1	Terminal Base Level
PNAME	75	104	30	Primary Name
PNMCD	105	115	11	Primary Name Code
CNAME	116	145	30	Complement Name
CNMCD	146	156	11	Complement Name Code

RF3 Structure File: 12345678.RF3 and 12345678.DBF in SHENRF3.ZIP

Field Name	Start	Stop	Length	Field Description
OWNAME	157	186	30	Open Water Name
OWNMCD	187	197	11	Open Water Name Code
DSCU	198	205	8	Downstream CU
DSSEG	206	209	4	Downstream SEG
DSMI	210	214	5.2	Downstream MI
CCU	215	222	8	Complement CU
CSEG	223	226	4	Complement SEG
CMILE	227	231	5.2	Complement MI
CDIR	232	232	1	Complement Direction
ULCU	233	240	8	Upstream Left CU
ULSEG	241	244	4	Upstream Left SEG
ULMI	245	249	5.2	Upstream Left MI
URCU	250	257	8	Upstream Right CU
URSEG	258	261	4	Upstream Right SEG
URMI	262	266	5.2	Upstream Right MI
SEGL	267	272	6.2	Reach Length (Miles)
RFORGFLAG	273	273	1	RF Orgin flag(1,2,3)
ALTPNMCD	274	281	8	Alt. Primary Name Code
ALTOWNMC	282	289	8	Alt. OW Name Code
DLAT	290	297	8.4	Downstream Latitude
DLONG	298	305	8.4	Downstream Longitude
ULAT	306	313	8.4	Upstream Latitude
ULONG	314	321	8.4	Upstream Longitude
MINLAT	322	329	8.4	Minimum Latitude
MINLONG	330	337	8.4	Minimum Longitude
MAXLAT	338	345	8.4	Maximum Latitude
MAXLONG	346	353	8.4	Maximum Longitude
NDLGREC	354	357	4	No. of DLG Records
LLIKEY1	358	367	10	Starting DLG LL Key1

RF3 Structure File: 12345678.RF3 and 12345678.DBF in SHENRF3.ZIP

Field Name	Start	Stop	Length	Field Description
LL2KEY1	368	377	10	Ending DLG LL Key1
LL1KEY2	378	387	10	Starting DLG LL Key2
LL2KEY2	388	497	10	Ending DLG LL Key2
LL1KEY3	398	407	10	Starting DLG LL Key3
LL2KEY3	408	417	10	Ending DLG LL Key3
LL1KEY4	418	427	10	Starting DLG LL Key4
LL2KEY4	428	437	10	Ending DLG LL Key4
LL1KEY5	438	447	10	Starting DLG LL Key5
LL2KEY5	448	457	10	Ending DLG LL Key5
LL1KEY6	458	467	10	Starting DLG LL Key6
LL2KEY6	468	477	10	Ending DLG LL Key6
LL1KEY7	478	487	10	Starting DLG LL Key7
LL2KEY7	488	597	10	Ending DLG LL Key7
LL1KEY8	498	507	10	Starting DLG LL Key8
LL2KEY8	508	517	10	Ending DLG LL Key8
LL1KEY9	518	527	10	Starting DLG LL Key9
LL2KEY9	528	537	10	Ending DLG LL Key9
LL1KEY10	538	547	10	Start DLG LL Key 10
LL2KEY10	548	557	10	Ending DLG LL Key10
LN1AT2	558	561	4	DLG Line Attr. 1
LN2AT2	562	565	4	DLG Line Attr. 2
AREA1	566	569	4	DLG Area ID 1
AREA2	570	573	4	DLG Area ID 2
AR1AT2	574	577	4	DLG Area Attribute
AR1AT4	578	581	4	DLG Area Attribute
AR2AT2	582	585	4	DLG Area Attribute
AR2AT4	586	589	4	DLG Area Attribute
UPDATE1	590	595	6	Update Date #1 (mmddyy)
UPDTC1	596	603	8	Update Type Code #1

RF3 Structure File: 12345678.RF3 and 12345678.DBF in SHENRF3.ZIP				
Field Name	Start	Stop	Length	Field Description
UPDTSRC1	604	611	8	Update Source #1
UPDATE2	612	617	6	Update Date #2 (mmddy)
UPDTCD2	618	625	8	Update Type Code#2
UPDTSRC2	626	633	8	Update Source #2
UPDATE3	634	639	6	Update Date #3 (mmddy)
UPDTCD3	640	647	8	Update Type Code #3
UPDTSRC3	648	655	8	Update Source #3
DIVCU	656	663	8	Divergent CU
DIVSEG	664	667	4	Divergent SEG
DIVMILE	668	672	5.2	Divergent MI
DLGID	673	678	6	DLG Number Special Use For Internal State Codes
FILLER	678	685	7	Filler: Future Use

Note: The structure for the .DBF file varies slightly from the RF3 structure displayed here in that the fields UPDATE1, UPDATE2, and UPDATE3 have a width of 8 and the last two fields, DLGID and FILLER, have been replaced with a field named ID of length 17. This ID field combines the CATUNIT, SEGM, and MI fields.

The following table provides the ASCII database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) traces. The actual numeric file names will vary depending on the catalog unit(s). This file contains the actual hydrographic network and is suitable for conversion into a variety of Geographic Information System formats.

RF3 Trace File: 12345678.TRC in SHENRF3.ZIP				
Field Name	Start	Stop	Length	Field Description
(Header Record)				
CATUNIT	1	8	8	Cataloging Unit
SEGM	9	12	4	Segment Number
MI	13	17	5.2	Mile Point
NPTS	18	21	4	Number of Lat/Lon Coordinates
(Coordinate Record)				
LATITUDE	1	8	8.4	Latitude in Decimal
LONGITUDE	9	16	8.4	Longitude in Decimal
FILLER	17	21	5	

The following table provides the ASCII database field structures for the EPA River Reach File Ver. 3.0 (1:100,000 scale hydrography) catalog unit boundary file. The actual numeric file names will vary depending on the catalog unit(s). This file contains the actual catalog unit boundary and is suitable for conversion into a variety of Geographic Information System formats.

<u>Catalog Unit Boundary File: 12345678.CUB in SHENRF3.ZIP</u>
First Line = Catalog Unit Number (8 Characters)
Subsequent Lines:
L=DDMMSS,L=DDMMSS,L=DDMMSS,L=DDMMSS,L=DDMMSS,L=DDMMSS, ...
Example:
02070010
L=391259,L=0770809,L=391220,L=0770749,L=391147,L=0770715,L=391120,L=0770633,
L=391058,L=0770535,L=391042,L=0770520,L=391016,L=0770427,L=390948,L=0770416,
L=390526,L=0765331,L=390500,L=0765149,L=390456,L=0765139,L=390357,L=0765123,
...
L=390744,L=0771007,L=390826,L=0771022,L=390910,L=0771022,L=390950,L=0771003,
L=391107,L=0770922,
There can be as many as four latitude/longitude pairs per line.

The following table provides the DBASE III+ database field structure of the Water Resources Division's "encyclopedia" file that documents the minimum and maximum parameter values found and the park(s) where they occurred. This file is intended for Water Resources Division internal use, but will be available to anyone upon request after Baseline Water Quality Data Inventory and Analysis reports have been completed for all parks.

Encyclopedia File: WRD File For Internal Use Only				
Field Name	Start	Stop	Length	Field Description
PARAM	1	5	5	STORET Parameter Code
PARAMNAME	6	45	40	Parameter Name
MINVAL	46	61	16.7	Minimum Value
MINVALPARK	62	65	4	Park Unit with Minimum Value
MAXVAL	66	71	16.7	Maximum Value
MAXVALPARK	72	75	4	Park Unit with Maximum Value

Appendix C

STORET Water Quality Control/Edit Checking

The following table provides the high and low values used by STORET since November 1983 for 190 common water quality parameters to screen or error check data. Data entered into STORET prior to November 1983, however, were not subjected to this edit/bounds check. Additionally, data from the USGS WATSTORE system that is loaded into STORET is never subjected to these edit criteria and agencies entering data in STORET can override these edit criteria to enter data values that fall outside a range. As a consequence, all data downloaded from STORET for the purposes of this project were filtered through these edit criteria to document values outside the generally accepted ranges. Decisions were then made on a case-by-case basis to retain or discard obviously incorrect data. Refer to the Water Quality Observations Outside STORET Edit Criteria section of the Interpretive Guide To Water Quality Results chapter for more information on this subject.

STORET Code	STORET Parameter Description	High Value	Low Value
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	37.0	-2.0
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	98.0	31.0
00020	TEMPERATURE, AIR (DEGREES CENTIGRADE)	52.0	-40.0
00021	TEMPERATURE, AIR (DEGREES FAHRENHEIT)	125.0	-40.0
00026	TOXICS-IDENTIFY DATA COLLECTION BY EPA DIRECTIVE	1990.9	1977.0
00032	CLOUD COVER (PERCENT)	101.0	0.0
00035	WIND VELOCITY (MILES PER HOUR)	85.0	0.0
00036	WIND DIRECTION IN DEGREES FROM TRUE N (CLOCKWISE)	361.0	0.0
00045	PRECIPITATION, TOTAL (INCHES PER DAY)	15.0	0.0
00070	TURBIDITY, (JACKSON CANDLE UNITS)	1500.0	0.0
00074	TURBIDITY, TRANSMISSOMETER, PERCENT TRANSMISSION	101.0	0.0
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	500.0	0.0
00076	TURBIDITY,HACH TURBIDIMETER (FORMAZIN TURB UNIT)	1000.0	0.0
00077	TRANSPARENCY, SECCHI DISC (INCHES)	600.0	0.0
00080	COLOR (PLATINUM-COBALT UNITS)	500.0	0.0
00081	COLOR,APPARENT(UNFILTERED SAMPLE) PLAT-COB UNITS	500.0	0.0
00085	ODOR (THRESHOLD NUMBER AT ROOM TEMPERATURE)	250.0	0.0
00094	SPECIFIC CONDUCTANCE,FIELD (UMHOS/CM @ 25C)	60000.0	1.0
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	60000.0	1.0
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	30.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00300	OXYGEN, DISSOLVED (MG/L)	30.0	0.0
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION%	200.0	0.0
00310	BOD, 5 DAY, 20 DEG C (MG/L)	150.0	0.0
00335	COD, .025N K2CR2O7 (MG/L)	1000.0	0.0
00340	COD, .25N K2CR2O7 (MG/L)	1000.0	0.0
00365	CHLORINE DEMAND, 15 MINUTE (MG/L)	15.0	0.0
00400	PH (STANDARD UNITS)	12.0	0.9
00403	PH, LAB, STANDARD UNITS, (STANDARD UNITS)	12.0	0.9
00405	CARBON DIOXIDE (MG/L AS CO2)	100.0	0.0
00406	PH, FIELD (STANDARD UNITS)	12.0	0.9
00410	ALKALINITY, TOTAL (MG/L AS CACO3)	1000.0	0.0
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	750.0	0.0
00435	ACIDITY, TOTAL (MG/L AS CACO3)	1000.0	0.0
00436	ACIDITY, MINERAL (METHYL ORANGE) (MG/L AS CACO3)	1000.0	0.0
00437	ACIDITY, CO2 (PHENOLPHTHALEIN) (MG/L AS CACO3)	750.0	0.0
00440	BICARBONATE ION (MG/L AS HCO3)	450.0	0.0
00445	CARBONATE ION (MG/L AS CO3)	100.0	0.0
00480	SALINITY - PARTS PER THOUSAND	40.0	0.0
00500	RESIDUE, TOTAL (MG/L)	15000.0	0.0
00505	RESIDUE, TOTAL VOLATILE (MG/L)	10000.0	0.0
00510	RESIDUE, TOTAL FIXED (MG/L)	10000.0	0.0
00515	RESIDUE, TOTAL FILTRABLE (DRIED AT 105C), (MG/L)	20000.0	0.0
00520	RESIDUE, VOLATILE FILTRABLE (MG/L)	10000.0	0.0
00525	RESIDUE, FIXED FILTRABLE (MG/L)	10000.0	0.0
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	10000.0	0.0
00535	RESIDUE, VOLATILE NONFILTRABLE (MG/L)	10000.0	0.0
00540	RESIDUE, FIXED NONFILTRABLE (MG/L)	10000.0	0.0
00545	RESIDUE, SETTLEABLE (ML/L)	1000.0	0.0
00546	RESIDUE, SETTLEABLE (MG/L)	1000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00550	OIL & GREASE (SOXHLET EXTRACTION) TOTAL,REC., (MG/L)	250.0	0.0
00600	NITROGEN, TOTAL (MG/L AS N)	100.0	0.0
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	15.0	0.0
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	25.0	0.0
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	20.0	0.0
00615	NITRITE NITROGEN, TOTAL (MG/L AS N)	5.0	0.0
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	50.0	0.0
00625	NITROGEN, KJELDAHL, TOTAL, (MG/L AS N)	50.0	0.0
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	55.0	0.0
00635	NITROGEN, AMMONIA & ORG., TOTAL 1 DET (MG/L AS N)	70.0	0.0
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	30.0	0.0
00653	PHOSPHATE, TOTAL SOLUBLE (MG/L)	30.0	0.0
00655	PHOSPHATE, POLY (MG/L AS PO4)	30.0	0.0
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	30.0	0.0
00665	PHOSPHORUS, TOTAL (MG/L AS P)	10.0	0.0
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	10.0	0.0
00680	CARBON, TOTAL ORGANIC (MG/L AS C)	100.0	0.0
00681	CARBON, DISSOLVED ORGANIC (MG/L AS C)	100.0	0.0
00685	CARBON, TOTAL INORGANIC (MG/L AS C)	100.0	0.0
00690	CARBON, TOTAL (MG/L AS C)	150.0	0.0
00720	CYANIDE, TOTAL (MG/L AS CN)	10.0	0.0
00745	SULFIDE, TOTAL (MG/L AS S)	1500.0	0.0
00746	SULFIDE, DISSOLVED (MG/L AS S)	1500.0	0.0
00760	SULFITE WASTE LIQUOR, PEARL BENSON INDEX (MG/L)	150.0	0.0
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	5000.0	0.0
00910	CALCIUM (MG/L AS CaCO3)	3000.0	0.0
00915	CALCIUM, DISSOLVED (MG/L AS Ca)	1000.0	0.0
00916	CALCIUM, TOTAL (MG/L AS Ca)	1000.0	0.0
00920	MAGNESIUM (MG/L AS CaCO3)	3000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)	1000.0	0.0
00927	MAGNESIUM, TOTAL (MG/L AS MG)	1000.0	0.0
00929	SODIUM, TOTAL (MG/L AS NA)	5000.0	0.0
00930	SODIUM, DISSOLVED (MG/L AS NA)	5000.0	0.0
00931	SODIUM ADSORPTION RATIO	50.0	0.0
00935	POTASSIUM, DISSOLVED (MG/L AS K)	175.0	0.0
00937	POTASSIUM, TOTAL MG/L AS K)	175.0	0.0
00940	CHLORIDE, TOTAL IN WATER, (MG/L)	22000.0	0.0
00945	SULFATE, TOTAL (MG/L AS SO4)	2500.0	0.0
00946	SULFATE, DISSOLVED (MG/L AS SO4)	2500.0	0.0
00950	FLUORIDE, DISSOLVED (MG/L AS F)	15.0	0.0
00951	FLUORIDE, TOTAL (MG/L AS F)	15.0	0.0
00955	SILICA, DISSOLVED (MG/L AS SI02)	2000.0	0.0
00956	SILICA, TOTAL (MG/L AS SI02)	2000.0	0.0
01000	ARSENIC, DISSOLVED (UG/L AS AS)	5000.0	0.0
01002	ARSENIC, TOTAL (UG/L AS AS)	5000.0	0.0
01005	BARIUM, DISSOLVED (UG/L AS BA)	2000.0	0.0
01007	BARIUM, TOTAL (UG/L AS BA)	2000.0	0.0
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	2000.0	0.0
01012	BERYLLIUM, TOTAL (UG/L AS BE)	2000.0	0.0
01020	BORON, DISSOLVED (UG/L AS B)	5000.0	0.0
01022	BORON, TOTAL (UG/L AS B)	5000.0	0.0
01025	CADMIUM, DISSOLVED (UG/L AS CD)	500.0	0.0
01027	CADMIUM, TOTAL (UG/L AS CD)	500.0	0.0
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	2000.0	0.0
01032	CHROMIUM, HEXAVALENT (UG/L AS CR)	2000.0	0.0
01033	CHROMIUM, TRI-VAL (UG/L AS CR)	2000.0	0.0
01034	CHROMIUM, TOTAL (UG/L AS CR)	2000.0	0.0
01040	COPPER, DISSOLVED (UG/L AS CU)	2000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
01042	COPPER, TOTAL (UG/L AS CU)	5000.0	0.0
01045	IRON, TOTAL (UG/L AS FE)	56000.0	0.0
01046	IRON, DISSOLVED (UG/L AS FE)	56000.0	0.0
01047	IRON, FERROUS (UG/L AS FE)	56000.0	0.0
01049	LEAD, DISSOLVED (UG/L AS PB)	1000.0	0.0
01051	LEAD, TOTAL (UG/L AS PB)	1000.0	0.0
01055	MANGANESE, TOTAL (UG/L AS MN)	5000.0	0.0
01056	MANGANESE, DISSOLVED (UG/L AS MN)	5000.0	0.0
01065	NICKEL, DISSOLVED (UG/L AS NI)	2000.0	0.0
01067	NICKEL, TOTAL (UG/L AS NI)	2000.0	0.0
01075	SILVER, DISSOLVED (UG/L AS AG)	5000.0	0.0
01077	SILVER, TOTAL (UG/L AS AG)	5000.0	0.0
01090	ZINC, DISSOLVED (UG/L AS ZN)	25000.0	0.0
01092	ZINC, TOTAL (UG/L AS ZN)	25000.0	0.0
01105	ALUMINUM, TOTAL (UG/L AS AL)	20000.0	0.0
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	20000.0	0.0
01145	SELENIUM, DISSOLVED (UG/L AS SE)	100.0	0.0
01501	ALPHA, TOTAL	200.0	0.0
01503	ALPHA, DISSOLVED	75.0	0.0
01505	ALPHA, SUSPENDED	150.0	0.0
03501	BETA, TOTAL	3500.0	0.0
03503	BETA, DISSOLVED	3000.0	0.0
03505	BETA, SUSPENDED	1500.0	0.0
09503	RADIUM 226, DISSOLVED	500.0	0.0
13501	STRONTIUM 90, TOTAL	500.0	0.0
22703	URANIUM, NATURAL, DISSOLVED	500.0	0.0
31501	COLIFORM, TOT, MEMBRANE FILTER, IMMED. M-ENDO MED, 35C	24000000.0	0.0
31502	COLIFORM, TOTAL, 10/ML	24000000.0	0.0
31503	COLIFORM, TOT, MEMBR FILTER, DELAYED, M-ENDO MED, 35C	24000000.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
31504	COLIFORM, TOT, MEMBR FILTER, IMMED, LES ENDO AGAR, 35C	24000000.0	0.0
31613	FECAL COLIFORM, MEMBR FILTER, M-FC AGAR, 44.5C, 24HR	10000000.0	0.0
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	10000000.0	0.0
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	10000000.0	0.0
31672	FECAL STREPTOCOCCI, PLATE COUNT M-ENTER AGAR, 35C, 48HR	500000.0	0.0
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	500000.0	0.0
31677	FECAL STREPTOCOCCI, MPN, AD-EVA, 35C (TUBE 31678)	500000.0	0.0
31679	FECAL STREPTOCOCCI, MF M-ENTEROCOCCUS AGAR, 35C, 48H	500000.0	0.0
31749	PLATE COUNT, TOTAL, TPC AGAR, 20C, 48 HRS	99999999.0	0.0
31751	PLATE COUNT, TOTAL, TPC AGAR, 35C, 24 HRS	99999999.0	0.0
32210	CHLOROPHYLL-A UG/L TRICHROMATIC UNCORRECTED	500.0	0.0
32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH.	750.0	0.0
32212	CHLOROPHYLL-B UG/L TRICHROMATIC UNCORRECTED	1000.0	0.0
32214	CHLOROPHYLL-C UG/L TRICHROMATIC UNCORRECTED	200.0	0.0
32217	CHLOROPHYLL A UG/L FLUOROMETRIC UNCORRECTED	500.0	0.0
32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	200.0	0.0
32219	PHEOPHYTIN RATIO(OD 663)SPECTRO, BEFORE/AFTER ACID	2.0	0.0
32221	CHLOROPHYLL A, % OF(PHEOPHYTIN A+CHL A), SPEC-ACID.	101.0	0.0
32230	CHLOROPHYLL A (MG/L)	0.5	0.0
32231	CHLOROPHYLL B (MG/L)	0.8	0.0
32232	CHLOROPHYLL C (MG/L)	0.2	0.0
32234	CHLOROPHYLL, TOTAL (A+B+C) (MG/L)	1.0	0.0
32270	CHLOROFORM EXTRACTABLES TOTAL IN MG PER LITER	5.0	0.0
32730	PHENOLICS, TOTAL, RECOVERABLE (UG/L)	1500.0	0.0
38260	METHYLENE BLUE ACTIVE SUBST. (DETERGENTS, ETC.)	10.0	0.0
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39340	GAMMA-BHC(LINDANE), WHOLE WATER, (UG/L)	20.0	0.0
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER, (UG/L)	20.0	0.0
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0

STORET Code	STORET Parameter Description	High Value	Low Value
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39480	METHOXYCHLOR IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39516	PCBS IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39530	MALATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39540	PARATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39600	METHYL PARATHION IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	20.0	0.0
50060	CHLORINE, TOTAL RESIDUAL (MG/L)	5.0	0.0
60050	ALGAE, TOTAL (CELLS/ML)	700000.0	0.0
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	4000.0	0.0
70505	PHOSPHATE, TOTAL,COLORIMETRIC METHOD (MG/L AS P)	10.0	0.0
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	10.0	0.0
71850	NITRATE NITROGEN, TOTAL (MG/L AS NO3)	65.0	0.0
71886	PHOSPHORUS, TOTAL, AS PO4 - (MG/L)	30.0	0.0
71890	MERCURY, DISSOLVED (UG/L AS HG)	10.0	0.0
71895	MERCURY, SUSPENDED (UG/L AS HG)	10.0	0.0
71900	MERCURY, TOTAL (UG/L AS HG)	10.0	0.0
74010	IRON, TOTAL (MG/L AS FE)	56000.0	0.0

Appendix D

STORET Administrative Parameters

STORET Code	Description of STORET Administrative Parameters
00022	LENGTH OF EXPOSURE OF SAMPLE OR TEST - DAYS
00026	TOXICS-IDENTIFY DATA COLLECTION BY EPA DIRECTIVE
00027	CODE NO FOR AGENCY COLLECTING SAMPLE
00028	CODE NO FOR AGENCY ANALYZING SAMPLE
00029	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION
00073	SAMPLE LOC CODE DEFINED BY THERMAL STRUCT & DEPTH
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI
00115	SAMPLE TREATMENT CODE (1=RAW,2=TREATED)
00116	INTENSIVE SURVEY IDENTIFICATION NUMBER
00145	TOTAL PRODUCTION OF PRODUCT MANUFACTURED TONS/DAY
01273	TOTAL ACID PRIORITY POLLUTANTS MG/L
01274	TOTAL BASE-NEUTRAL PRIORITY POLLUTANTS MG/L
01275	TOTAL VOLATILE PRIORITY POLLUTANTS MG/L
01365	ANALYSIS DATE (DIOXIN) (YYMMDD)
04177	SAMPLE STABILIZATION, RECOVERY TEST CODE
04178	FIELD PROTOCOL(CONFDNCE ASSIGNED FIELD SAMPLE) CODE
04179	SAMPLE STATION LOCKED CODE
04180	CONDITION OF STATION SITE CODE
04181	LABORATORY QA/QC PLAN CONFIDENCE CODE
04182	SAMPLE TYPE CODE
04183	SAMPLE REMARKS CODE
30333	BAG MESH SIZE, BEDLOAD SAMPLER, MM
34772	NPDES NUMBER, CROSS REFERENCE CODE
34785	GAGE TYPE, METHOD CODE

STORET Code	Description of STORET Administrative Parameters
45575	GC MAKE AND MODEL INFORMATION CODE
45576	GC DETECTOR TYPE CODE
45577	GC COLUMN TYPE CODE
45580	METHOD OF ANALYSIS CODE
45581	LABORATORY LOCATION CODE
46107	SAMPLE LOCATION CODE (TREATMENT PLANT OPERATION)
46390	TOXICITY CHARACTERISTIC LEACHING PROCEDURE P OR F
46396	PROCESS TO SIGNIFICANTLY REDUCE PATHOGENS YES OR NO
46397	PROCESS TO FURTHER REDUCE PATHOGENS YES OR NO
47001	PERMIT EXPIRATION DATE (JULIAN CALENDAR)
47044	OBSERVATIONS,WASTE SITE-SEVERITY OF PROBLEMS CODE
47460	SUBSAMPLE - DECIMAL FRACTION OF WHOLE NUMBER
47477	COMPOSITION AND/OR DISPOSITION OF CATCH NUM CODE
70231	CURRENT DIRECTION (DEGREES FROM DOWNSTREAM FLOW)
71999	SAMPLE PURPOSE CODE
72032	NUMBER OF SPILLWAY GATES OPEN
73672	DATE OF ANALYSIS YYMMDD
73673	DATE OF EXTRACTION YYMMDD
74031	GRANT, PROJECT COST ELIGIBLE FOR CONSTRUCTION
74032	GRANT, AMOUNT OF PL 660 GRANT FOR THIS PROJECT
74033	GRANT, FEDERAL, OTHER THAN PL 660 GRANT
74034	GRANT, FUTURE PL 660 WHICH MAY APPLY TO THIS PROJ
74035	GRANT, TOTAL FEDERAL, WHICH APPLIES TO THIS PROJ
74036	GRANT, PROJ NUMBER ASSIGNED TO THIS APPLICATION
74037	GRANT, TYPE OF PROJECT TO WHICH GRANT APPLIES
74038	GRANT, STATUS OF PROJECT TO WHICH GRANT APPLIES
74039	PCS/STORET WATER QUALITY FILE INTERFACE YR/MO/DAY
74040	SURVEY NUMBER YYMMNO
74041	STORET STORAGE TRANSACTION DATE YR/MO/DAY

STORET Code	Description of STORET Administrative Parameters
74050	RADIOACTIVITY, GENERAL (PERMIT)
74051	ALGICIDES, GENERAL (PERMIT)
74052	CHLORINATED HYDROCARBONS, GENERAL (PERMIT)
74053	PESTICIDES, GENERAL (PERMIT)
74056	COLIFORM, TOTAL, GENERAL (PERMIT)
74065	STREAM FLOW CLASS
74066	ANNUAL RUNOFF
74067	SOIL CLASSIFICATION
74068	WATER QUALITY DESIGNATED USE CLASSIFICATION (IA)
74100	PRIMARY 1972 SIC CODE
74101	SECONDARY 1972 SIC CODE
74102	SECONDARY 1972 SIC CODE
74103	SECONDARY 1972 SIC CODE
74200	SAMPLE PRESERVATION METHODS ONE OR MORE IN COMB.
74205	LAND RESOURCE AREA (IOWA)
74206	SOIL EROSION POTENTIAL (IOWA)
74209	WATER QUALITY INDEX - STATE OF ILLINOIS, EPA
74210	FOREST STREAM WATER QUALITY INDEX CALC. NUMBER
74990	FISH SPECIES NUMERIC CODE - F&W SERVICE
74995	ANATOMY CODE
75000	SPECIES CODE-REMARK=SEX (M=MALE,F=FEMALE,U=UNK.)
81028	WITHDRAWAL OF GROUNDWATER (MILLION GAL/DAY)
82258	WATER CLASSIFICATION CODE (1-9) CODE
82292	DATA RELAY GROUND STATION SOURCE NODE CODE, CODE
82309	CONTAMINATION SOURCE POSSIBLE CODES NUMERIC CODE
82310	DEPTH CONFIDENCE IN REPORTED VALUES NUMERIC CODES
82373	FREQUENCY OF SAMPLING M=MON,Q=QUAR,Y=YR,R=RNFFCODE
82519	DRILLER REGISTRATION NUMBER ALPHA-NUMERIC CODE
82562	NARRATIVE REQUIREMENT EXCEEDANCES INTEGER

STORET Code	Description of STORET Administrative Parameters
82576	DAILY EXCURSION TIME, WATER MIN
82577	MONTHLY EXCURSION TIME, WATER TOTAL MIN
82578	DAY/MAXIMUM EXCURSION TIME, WATER MIN
82579	CODE NUMBER FOR PERSON COLLECTING SAMPLE
84002	CODE, GENERAL INFORMATION - ALPHA, NUMERIC CODE
84003	WATER SHED ID NUMBER (IOWA)
84005	FISH SPECIES CODE-FISH & WILDLIFE SER
84006	OWNERSHIP CLASSIFICATION OF LAKE, ILLINOIS SYSTEM
84010	PUBLIC ACCESS TO LAKE ILLINOIS SYSTEM
84011	CONFIDENCE CODE FOR GLC CONFIRMATION CODE
84012	PATIENT PARAMETERS (AGE, SEX, WT, ETC.) CODE
84013	SAMPLE PARAMETERS D=DESIGN SPECIMEN, S=SURPLUS
84027	CODE NUMBER FOR AGENCY COLLECTING SAMPLE
84028	CODE NO FOR AGENCY ANALYZING SAMPLE
84029	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE FIELD
84033	EGD ANALYTICAL DATA COMPLETENESS Y=YES N=NO CODE
84034	EGD SMPL NO.(SMPL.IDENT) NUMERIC=SCS ALPH+4NUM=JRB
84035	EGD SAMPLE CLASSIFICATION CATEGORY ALPHA CODE
84036	EGD INDUSTRIAL CATEGORY NUMERIC CODE
84037	EGD INDUSTRIAL CATEGORY NAME ALPHA CODE
84038	EGD LABORATORY NUMERIC CODE
84039	EGD LABORATORY NAME ALPHA CODE
84040	EGD SAMPLE STATUS (1-5,9,AND BLANK) NUMERIC CODE
84041	EGD ACID STATUS (1-5,9,AND BLANK) NUMERIC CODE
84042	EGD BASE STATUS (1-5,9AND BLANK) NUMERIC CODE
84043	EGD PESTICIDE STATUS (1-5,9,AND BLANK) NUMERIC CODE
84044	EGD VOA FRACT. STATUS INDICATOR (1-5,9,BLANK) CODE
84045	EGD ACID EXTRACT DATE (YYMMDD) NUMERIC CODE
84046	EGD BASE EXTRACTION DATE (YYMMDD) NUMERIC CODE

STORET Code	Description of STORET Administrative Parameters
84047	EGD PESTICIDE EXTRACTION DATE (YYMMDD) NUMERIC CODE
84048	EGD VOA FRACTION INJECTION DATE YYMMDD NUMERIC CODE
84049	EGD ACID CONC. FACTOR (FIVE NUMERIC DIGITS) CODE
84050	EGD BASE CONC.FACTOR (FIVE NUMERIC DIGITS) CODE
84051	EGD PESTICIDE CONC.FACTOR (FIVE NUMERIC DIGITS) CODE
84052	EGD VOA FRACTION CONC. FACTOR (5 NUMERIC DIGITS) CODE
84053	SAMPLE TYPE AND FREQUENCY OF COLLECTION CODE
84054	LITHOLOGY ALPHA-NUMERIC CODE
84055	AVAILABLE LOGS ALPHA-NUMERIC CODE
84056	WATER USE CATEGORY ALPHA-NUMERIC CODE
84057	INSPECTION TYPE ALPHA-NUMERIC CODE
84058	HYDROGEOLOGIC SYSTEM ALPHA-NUMERIC CODE
84059	WELL OWNERSHIP ALPHA-NUMERIC CODE
84060	TOPOGRAPHY ALPHA-NUMERIC CODE
84061	WELL USE ALPHA-NUMERIC CODE
84062	MEASURING POINT DESCRIPTION ALPHA-NUMERIC CODE
84063	DRILLING METHOD ALPHA-NUMERIC CODE
84064	WELL DATA AVAILABILITY ALPHA-NUMERIC CODE
84065	PERMIT COMPLIANCE DATA ALPHA-NUMERIC CODE
84067	NATURE OF MONITORING ALPHA-NUMERIC CODE
84073	REPLACES EXISTING WELL ALPHA-NUMERIC CODE
84074	AQUIFER TYPE (SEE USGS HANDBOOK) ALPHA CODE
84075	WELL PERMIT NUMBER ALPHA-NUMERIC CODE
84076	TSD MONITORING WELL TYPE ALPHA CODE
84077	TSD MONITORING WELL SAMPLING METHOD ALPHA CODE
84083	POLLUTION VERIFICATION ALPHA CODE
84084	WELL SAMPLE PURPOSE ALPHA CODE
84090	SAMPLE FILE CONTROL PROJECT IDENTIFICATION A-CODE
84091	INFILTRATION DATE/BEGINNING 'YYMMDD'

STORET Code	Description of STORET Administrative Parameters
84092	INFILTRATION DATE/ENDING 'YYMMDD'
84093	ENFORCEMENT FORM #2-C,DATA IDENTIFICATION CODE
84102	SAMPLE SPECIES-SUB ID ALPHA CODE
84103	DIOXIN LABORATORY ALPHA CODE
84104	DIOXIN STUDY ALPHA CODE
84112	SOURCE OF GEOHYDROLOGIC DATA CODE
84119	SOURCE OF EVACUATION DATA CODE
84121	REGULATING AGENCY CODE
84122	SAMPLE PURPOSE CODE
84126	SOURCE OF DEPTH DATA CODE
84127	METHOD OF DEPTH MEASUREMENT CODE
84128	SOURCE OF WATER-LEVEL DATA CODE
84129	DATA QUALITY
84141	LAKE, PHYSICAL CONDITION AT SAMPLE TIME, 1-5, CODE
84142	LAKE,RECREATIONAL SUITABILITY @ SMPL TIME,1-5, CODE
84164	SAMPLER TYPE, CODE
85300	PROBLEM CODE NES SURVEY
85327	WATER LEVEL AT SAMPLE COLLECTION TIME-CODE-NES
85332	CLOUD COVER AT SAMPLE COLLECTION TIME-CODE-NES
85553	WELL COMPLETION DATE (MONTH/YEAR)
85554	WELL WORKOVER DATE, LATEST (MONTH/YEAR)

Appendix E

STORET Parameters Not Suitable for Statistical Analysis

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
00001	X-SEC. LOC., HORIZ (FT. FROM R BANK LOOK UPSTR.)
00002	X-SEC. LOC., HORIZ (% FROM R BANK LOOK UPSTR.)
00003	SAMPLING STATION LOCATION, VERTICAL (FEET)
00005	X-SEC. LOC., VERTICAL (PERCENT OF TOTAL DEPTH)
00006	DISTANCE FROM LOCATION IN X MILES
00007	DISTANCE FROM LOCATION IN Y MILES
00008	NUMBER USED IN SAMPLE ACCOUNTING PROCEDURE
00009	X-SEC. LOC.(FT FROM LEFT BANK LOOKING DOWNSTRM)
00027	CODE NO FOR AGENCY COLLECTING SAMPLE
00028	CODE NO FOR AGENCY ANALYZING SAMPLE
00033	WEATHER CODE FOR OCEAN-OBSERV. (WMO CODE 4677)
00037	WIND FORCE (BEAUFORT UNITS)
00038	WIND DIRECTION (WMO CODES 0885 + 0887)
00041	WEATHER (WMO CODE 4501)
00042	ALTITUDE IN FEET ABOVE MEAN SEA LEVEL
00043	CLOUD TYPE (WMO CODE 0500)
00044	CLOUD AMOUNT (WMO CODE 2700)
00047	TOTAL PARTIAL PRESSURE DISSOLVED GASES (MM HG)
00048	TOTAL PARTIAL PRESSURE DISSOLVED GASES (% SAT)
00049	SURFACE AREA IN SQUARE MILES
00050	EVAPORATION, TOTAL (INCHES PER DAY)
00051	SURFACE AREA IN SQUARE FEET
00053	SURFACE AREA, ACRES
00054	RESERVOIR STORAGE - ACRE FEET
00063	SAMPLING POINTS, NUMBER OF IN A CROSS SECTION
00067	TIDE STAGE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
00069	SEA WAVES(0=NONE;1=0-3";2=4-20";3=21-48";4=4-8')
00097	SAMPLING STATION LOCATION, VERTICAL (FEET)
00098	SAMPLING STATION LOCATION, VERTICAL (METERS)
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI
00115	SAMPLE TREATMENT CODE (1=RAW,2=TREATED)
01300	OIL-GREASE (SEVERITY)
01305	DETERGENT SUDS (SEVERITY)
01310	GAS BUBBLES (SEVERITY)
01315	SLUDGE, FLOATING (SEVERITY)
01320	GARBAGE, FLOATING (SEVERITY)
01325	ALGAE, FLOATING MATS (SEVERITY)
01330	ODOR, ATMOSPHERIC (SEVERITY)
01331	TASTE (SEVERITY)
01335	SEWAGE SOLIDS, FRESH, FLOATING (SEVERITY)
01340	FISH, DEAD (SEVERITY)
01345	DEBRIS, FLOATING (SEVERITY)
01350	TURBIDITY (SEVERITY)
01351	FLOW, STRM,1DRY,2LOW,3NORM,4FLOOD,5ABOVE NORM,CODE
01355	ICE COVER, FLOATING OR SOLID (SEVERITY)
03595	BIOASSAY (96 HR), EFFLUENT, TOTAL CODE
03596	BIOASSAY (48 HR), EFFLUENT, TOTAL CODE
03597	BIOASSAY (24 HR), EFFLUENT, TOTAL CODE
03598	TOXICITY, EFFLUENT, TOTAL CODE
03599	TOXICITY, CHOICE OF SPECIES, EFFLUENT CODE
03600	TOXICITY, TROUT, EFFLUENT, TOTAL CODE
03601	TOXICITY, SAND DOLLAR, EFFLUENT CODE
03602	BIOCHEMICAL OXYGEN DEMAND, EFFLUENT, TOTAL CODE
03603	SOLIDS, TOTAL SUSPENDABLE, EFFLUENT, TOTAL CODE
03605	FLOW METER CALIBRATION, WATER CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
03717	ONCORHYNCHUS MYKISS, WATER CODE
04117	TETHER LINE USED FOR COLLECTING SAMPLE CODE
04160	HALOCARBONS, PURGEABLE, SCAN, EFFLUENT CODE
04161	HALOCARBONS, PURGEABLE, SCAN, SLUDGE CODE
04162	AROMATIC, PURGEABLE, SCAN, EFFLUENT CODE
04163	AROMATIC, PURGEABLE, SCAN, SLUDGE CODE
04164	PHENOLIC, TOTAL, SCAN, EFFLUENT CODE
04165	PHENOLIC, TOTAL, SCAN, SLUDGE CODE
04166	PCB, TOTAL, SCAN, EFFLUENT CODE
04167	PCB, TOTAL, SCAN, SLUDGE CODE
04174	FREE LIQUIDS IN SEWAGE SLUDGE CODE
34765	AVIAN NUMERICAL SPECIES CODE (BIRDS)
34766	MAMMALIAN NUMERICAL SPECIES CODE
34771	MACROPHYTE, INSTREAM, VISUAL SIGHTING CODE
34773	ODOR, AMBIENT WATER CODE
34774	FISH, INSTREAM, VISUAL SIGHTING CODE
34775	STREAMBANK CHANNEL ALTERATIONS CODE
34776	HYDRAULIC STRUCTURES, INSTREAM CODE
34780	LAND USE, ADJACENT STREAM CODE
34781	SAMPLE POINTS, # OF LONGTDNL TRANSECTS, REACH CODE
34782	STREAM STAGE TREND CODE
34789	HABITATS, TYPES SAMPLED CODE
45613	FLOATING SOLIDS/VISIBLE FOAM, VISUAL, YES=1, NO=0, CODE
45614	SANITARY WASTE DISCHARGE ASSESSMENT, YES=1, NO=0, CODE
45615	INTERMITTENT DISCHARGE ASSESSMENT, YES=1, NO=0, CODE
46001	WATER APPEARANCE CODE (BASED ON FIELD ASSESSMENT)
46478	EQUIPMENT INSPECTION, VISUAL CODE
46486	TOXICITY, ACUTE 24HR (STATIC) CERIODAPHNIA (P/F) CODE
47454	FLOW METER REVOLUTIONS NUMBER

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
47455	LATITUDE, STARTING, OF A SAMPLE TOW DDMMS
47456	LONGITUDE, STARTING, OF A SAMPLE TOW DDDMMSS
47457	LATITUDE, FINISHING, OF A SAMPLE TOW DDMMS
47458	LONGITUDE, FINISHING, OF A SAMPLE TOW DDDMMSS
47459	LENGTH FREQUENCY NUMBER
47461	TIME THAT THE EQUIPMENT WAS SAMPLING MINUTES
47476	DIRECTION OF TOW IN RELATION TO CURRENT NUM CODE
50044	HYDROGRAPH LIMB, 1BASE, 2RISING, 3PEAK, 4FALLING, CODE
61390	DIATOMS, FIRST DOMINANT SPECIES OF UNITS - CODE
61391	DIATOMS, SECOND DOMINANT SPECIES OF UNITS - CODE
61392	DIATOMS, THIRD DOMINANT SPECIES OF UNITS - CODE
61393	DIATOMS, FOURTH DOMINANT SPECIES OF UNITS - CODE
70220	WAVE DIRECTION (WMO CODES 0885 + 0887)
70222	WAVE HEIGHT (WMO CODE 1555)
70223	WAVE PERIOD (WMO CODE 3155)
71090	BIVALVE SPECIES CODE
71500	EQUITABILITY INDEX, BENTHIC MACROINVER CODE
72000	ELEVATION OF LAND SURFACE DATUM (FT. ABOVE MSL)
72001	DEPTH, TOTAL OF HOLE (FT BELOW LAND SURFACE DATUM)
72002	DEPTH TO TOP OF WATER-BEARING ZONE SAMPLED (FT)
72003	DEPTH TO BOTTOM OF WATER-BEARING ZONE SAMPLED (FT)
72004	PUMP OR FLOW PERIOD PRIOR TO SAMPLING MINUTES
72005	SAMPLE SOURCE CODE (BM WELL DATA)
72006	SAMPLING CONDITION CODE (BM WELL DATA)
72007	FORMATION NAME CODE (BM WELL DATA)
72017	SERIES CODE (BM WELL DATA)
72018	SYSTEM CODE (BM WELL DATA)
72111	DIRECT READOUT GROUND STATN TRANSMIT ERROR CODE NUM
74054	FECAL STREPTOCOCCI, GENERAL (PERMIT)

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
74055	FECAL COLIFORM, GENERAL (PERMIT)
80889	ACTIVATED SLUDGE PROCESS MODIFICATION CODE
81024	DRAINAGE AREA IN SQUARE MILES (SQ. MI.)
81637	SHELLFISH SPECIES NUMERIC CODE
82289	LAGOON OBSERVATION, VISUAL, Y=YES N=NO CODE
82398	SAMPLING METHOD (CODES)
82524	STORAGE COEFFICIENT NUMERICAL CODE
82923	ATMOSPHERIC DEPOSITION TYPE, WET CODE
83205	ATMOSPHERIC DEPOSITION TYPE, BULK CODE
84000	GEOLOGIC AGE CODE (SEE USGS CATALOG)
84001	AQUIFER NAME CODE (SEE USGS CATALOG)
84004	LAKE TYPE ILLINOIS CLASSIFICATION SYSTEM
84007	ANATOMY ALPHA CODE
84008	LIFE STYLE/HABITAT OF THE INDIVIDUALS IN THE SAMPLE
84009	SHELLFISH SPECIES ALPHANUMERIC CODE
84014	SPECIES SEX CODE
84030	CLOUD AMOUNT ALPHA WEATHER CODES
84031	PHYSICAL WEATHER ALPHA WEATHER CODES
84032	STREAM CONDITION ALPHA WEATHER CODES
84066	OIL AND GREASE, VISUAL, ALPHA-NUMERIC CODE
84068	SERIES CODE ALPHA-NUMERIC CODE
84069	FORMATION CODE ALPHA-NUMERIC CODE
84070	METHOD OF TESTING WELL YIELD ALPHA-NUMERIC CODE
84071	WATER LEVEL MEASUREMENT CONDITIONS ALPHA-NUM CODE
84072	WATER LEVEL MEASUREMENT METHOD ALPHA-NUMERIC CODE
84078	GIARDIA LAMBLIA, 2HSO4 OR SUC GRAD, MICRO, CODE
84079	BACTERIA, CELLUOLYTIC, AEROBIC-ANAEROBIC, RT 5-7, CODE
84080	BACTERIA, HYDROCARBONOCLASTIC, SHAKE INC 32C/WK, CODE
84081	YERSINIA ENTEROCOLITICA, SB BROTH, MAC AGAR,22C, CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84082	SALMONELLA/SHIGELLA, QUANT OR QUAL, HVF OR SWAB, CODE
84085	ORGANICS, VOLATILE, DETECTED, NUMERIC CODE, CODE
84086	MACROINVERTEBRATE SPECIES NUMERIC CODE
84087	MACROINVERTEBRATE HABITAT CODE
84088	BIOLOGY 1 MACROINVERTEBRATE CODE
84089	BIOLOGY 2 MACROINVERTEBRATE CODE
84094	PHYTOPLANKTON SPECIES CODE, NUMERIC
84095	PHYTOPLANKTON SPECIES CODE, ALPHA
84096	SEVERITY OF NON-PLANKTON ALGAE-MAT COVERAGE CODE
84097	LAGOON MOUTH CONDITION CODE
84098	COLOR OF NON-PLANKTONIC ALGAE CODE
84099	WATER - RELATIVE WATER LEVEL CODE
84100	SEX(1-MALE,2-FEMALE,3-MIXED,4-UNKNOWN) NUM CODE
84101	METAFORM, BENTHIC, ADULT(A), PUPAE(P), LARVAE(L) CODE
84105	OIL-SEPARATOR OBSERVATION ASSESS (0=DID NOT,1=DID)
84106	EVAPORAT/BED OBS ASSESS (0=DID NOT LOOK, 1=DID LOOK)
84107	AREA INSPECTION, VISUAL (0=DID NOT, 1=DID) CODE
84108	DRAIN FIELD INSPECTION ASSESS (0=DID NOT, 1=DID) CODE
84109	SLUDGE BUILD-UP IN WATER (0=DID NOT OBS, 1=OBS) CODE
84110	POND OBSERVATION ASSESS WATER (0=DID NOT, 1=DID) CODE
84111	LITHOLOGIC MODIFIER CODE
84113	WELL INTAKE FINISH CODE
84114	WELL CASING MATERIAL CODE
84115	TYPE OF MATERIAL FROM WHICH OPENING IS MADE CODE
84116	DRILLING FLUID CODE
84117	TYPE OF SURFACE SEAL CODE
84118	METHOD OF DEVELOPMENT CODE
84120	PACKING MATERIAL CODE
84124	METHOD OF EVACUTAION CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84125	METHOD OF WATER-LEVEL MEASUREMENT CODE
84130	OUTFALL OBSERVATION, VISUAL, Y=YES N=NO CODE
84131	SAMPLING METHOD, CONFIDENCE CODE (A,B,C,D) CODE
84132	STREAMBANK, VEGETATIVE STABILITY RATING CODE
84133	STREAMBANK, STABILITY (BANK EROSION) RATING CODE
84134	PARTICLES, DEGREE SURROUNDED BY FINE SEDIMENT, CODE
84135	STREAMSIDE, (SHORELINE) COVER RATING CODE
84136	CANOPY TYPE CODE
84137	CHANNEL STABILITY RATING CODE (E,G,F,P) CODE
84138	COLIFORM, TOTAL, WATER, WHOLE, MPN, PRES=1, ABSNT=2, CODE
84139	ENTEROBACTER AGGLOMERANS, WTR, MF, PRES=1, ABSNT=2, CODE
84140	KLEBSIELLA PNEUMONIAE, WTR, WH, MF, PRES=1, ABSNT=2, CODE
84143	WELL, PURGING CONDITION CODE
84144	WELL, SELECTION CRITERIA CODE
84145	PROJECT COMPONENT CODE
84146	LAND USE, PREDOMINANT, WITHIN 100 FT OF WELL, CODE
84147	LAND USE, PREDOMINANT, 1/4 MI.RADIUS OF WELL, CODE
84148	LAND USE, PREDMNT., FRAC., WITHIN 1/4 MI OF WELL, CODE
84149	LAND USE, CHANGE, LAST 10 YRS, WITHIN 1/4MI WELL, CODE
84150	HABITAT QUALITY INDEX RATING CODE
84151	AQUATIC LIFE, USE CLASSES CODE
84152	STREAM, STAGE CLASS CODE
84153	STREAMBANKS, GRAZING DAMAGE CODE
84154	CHANNEL, MAJOR ALTERATIONS CODE
84155	RIFFLE/RUNS, OCCURRENCE CODE
84156	POOL, DESCRIPTION CODE
84157	SANDBARS, LARGE, OCCURRENCE CODE
84158	LAND USE, NEAR STREAM, PREDOMINANT CODE
84159	STREAM,COVER (INSTREAM SHELTER FOR ADULT FISH), CODE

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
84160	STREAM, DEGRADATION RATING CODE
84161	STREAM, ORDER CODE
84162	LAND RESOURCE AREA CODE
84163	FLOW, STREAM, CLASSIFICATION CODE
84165	DISCHARGE EVENT OBSERVATION, YES=1 NO=0, CODE
84166	STORM HYDROGRAPH, DIRECTION, (RISE,FALL), CODE
84167	MICROSCOPIC EXAMINATION CODE
84168	AVIAN SPECIES ALPHA CODE (BIRDS)
84169	MAMMALIAN ALPHA SPECIES CODE
84170	ALPHA AGE TEXT CODE
84200	LATITUDE/LONGITUDE COORDINATES OF WELL, METHOD CODE
84201	NATIONAL REFERENCE DATUM, ALTITUDE(VERTICAL) CODE
84202	ALTITUDE METHOD CODE
85000	STREAM MILE, ACTUAL MILES
85014	HABITAT, 1970 ACRES THIS TYPE FOR THIS STATION
85015	HAB., ESTIMATED ACRES THIS TYPE THIS STATION
85016	HAB., ESTIMATED ACRES THIS TYPE THIS STA. BY 1990
85017	HAB., ESTIMATED ACRES THIS TYPE THIS STA. BY 2000
85018	TYPE CODES: 1=CLEAR CUT/2=SELECT CUT/3=RNGE DEVL P
85019	ACRES, NO. ALTERED FROM 1965-1970 (0-5 YEARS OLD)
85020	ACRES, NO. ALTERED 1960-1965 (5-10 YEARS OLD)
85021	ACRES, NO. ALTERED 1955-1960 (10-15 YEARS OLD)
85022	ACRES, NO. ALTERED 1950-1955 (15-20 YEARS OLD)
85023	ACRES, NO. ALTERED BEFORE 1950 (20+ YEARS OLD)
85024	ACRES,PREDICTED YRLY.AVE.TO BE ALTERED IN FUTURE
85025	LANDOWNERS, CODES FOR ALL IN STATE OF OREGON
85026	ACRES, CURRENT OWNED THIS LANDOWNER THIS STATION
85027	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 1980
85028	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 1990

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85029	ACRES, ESTIMATED OWNED BY L-O THIS STA. BY 2000
85030	LAND USES, CODES FOR ALL IN STATE OF OREGON
85031	ACRES, CURRENT DEDICATED TO THIS USE THIS STATION
85032	ACRES, ESTM. DEDICTD TO THIS USE THIS STA BY 1980
85033	ACRES, ESTM. DEDICTD TO THIS USE THIS STA BY 1990
85034	ACRES, ESTM. DEDICTD TO THIS USE BY YR.2000 --STA.
85035	HAB., INDICATED ANIMAL USES THIS TYPE IN WINTER
85036	HAB., INDICATED ANIMAL USES THIS TYPE IN SPRING
85037	HAB., INDICATED ANIMAL USES THIS TYPE IN SUMMER
85038	HAB., INDICATED ANIMAL USES THIS TYPE IN FALL
85039	HAB., INDICATED ANML USES THIS TYPE FOR WINTERING
85040	HAB., INDICATED ANML USES THIS TYPE FOR FEEDING
85041	HAB., INDICATED ANML USES TYPE FOR REARING YOUNG
85042	HAB., INDICATED BIRD USES THIS TYPE FOR NESTING
85043	HAB., INDICATED ANML USES THIS TYPE FOR SHELTER
85044	HAB., INDICATED ANML USES THIS TYPE FOR REST AREA
85045	ANML, SHOWS PRESENCE/ABSNC OF COMMENTS ON THIS ANML
85046	HAB.,ACRES OCCUPIED BY THIS ANML THIS UNIT & CO.
85050	ANIMALS ARE NOT PRESENT THIS STATION
85051	ANIMALS, ONLY A FEW ARE PRESENT THIS STATION
85052	ANIMALS COMMONLY SEEN; USE MODERATE THIS STATION
85053	ANIMALS FREQUENTLY SEEN; USE HEAVY THIS STATION
85070	OWNERSHIP (.1) AND ACCESS (.2) BY YEAR
85071	PRIVATE OWNERSHIP AND ACCESS MILEAGE
85072	FEDERAL OWNERSHIP AND ACCESS MILEAGE
85073	STATE OWNERSHIP AND ACCESS MILEAGE
85074	COUNTY OWNERSHIP AND ACCESS MILEAGE
85075	CITY OWNERSHIP AND ACCESS MILEAGE
85076	WATER YEAR DATA REFERS TO

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85077	CALENDAR YEAR DATA REFERS TO
85088	MONTHS POLLUTION IS A PROBLEM JAN THRU JUNE
85089	MONTHS POLLUTION IS A PROBLEM JULY TO DECEMBER
85090	MAN-CAUSED CHANNEL CHANGE IN MILES
85091	STREAM BANK HABITAT DESTROYED IN MILES
85092	STREAMBED SILTED IN MILES
85093	TURBIDITY PROBLEM IN MILES
85094	SEVERITY: 1=ELIMINATES 2=INTERFERES 3=NO PROBLEM
85095	DURATION OF TURBIDITY PROBLEM IN MONTHS
85096	SEASON OF NATURAL DRY CHANNEL 1=SP 2=SU 3=F 4=W
85097	NATURAL DRY CHANNEL IN MILES
85098	MAN-CAUSED DRY CHANNEL SEASON 1=SP 2=SU 3=F 4=W
85099	MAN-CAUSED DRY CHANNEL IN MILES
85100	YEAR BARRIER IS PRESENT
85101	NUMBER OF NATURAL BARRIERS
85102	MILES BLOCKED BY NATURAL BARRIERS
85103	NUMBER OF NATURAL BARRIERS TO BE REMOVED
85104	NUMBER OF DAMS AND MAN CAUSED OBSTRUCTIONS
85105	MILES BLOCKED BY DAMS OR MAN CAUSED OBSTRUCTIONS
85106	NUMBER OF DAMS TO BE ALTERED
85107	MILES OF STREAM OCCUPIED BY IMPOUNDMENT
85108	LOWER END OF SECTION COVERED BY THIS FORM
85109	UPPER END OF SECTION COVERED BY THIS FORM
85110	LOWER LIMIT THIS SPECIES THIS FORM BY RIVER MILE
85111	UPPER LIMIT THIS SPECIES THIS FORM BY RIVER MILE
85112	STREAM SURVEY:1=COMPLETE 2=INCOMPLETE 3=NONE
85113	ABUNDANCE: 1=FSHWY/TAG&R 2=SURVEY 3=EST PLUS 4=EST
85114	ABUNDANCE: N=S&ST 1=ABUNDANT 4=SCARCE RGH FSH 3=SCARCE
85116	SQUARE YARDS OF SPAWNING AREA IN 1970

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85117	SQUARE YARDS OF SPAWNING AREA IN 1980
85118	SQUARE YARDS OF SPAWNING AREA IN 1990
85119	SQUARE YARDS OF SPAWNING AREA IN 2000
85120	MILES OF REARING AREA IN 1970
85121	MILES OF REARING AREA IN 1980
85122	MILES OF REARING AREA IN 1990
85123	MILES OF REARING AREA IN 2000
85124	CATCH BY SPORT ANGLING IN 1970
85125	RECREATION DAYS SPENT ANGLING IN 1970
85126	RECREATION DAYS SPENT ANGLING IN 1980
85127	RECREATION DAYS SPENT ANGLING IN 1990
85128	RECREATION DAYS SPENT ANGLING IN 2000
85129	CONTRIBUTION TO COMMERCIAL CATCH IN 1970
85130	PERCENT OF TOTAL FISHING DONE FROM BOAT IN 1970
85131	PERCENT OF TOTAL FISHING DONE FROM BANK IN 1970
85132	PERCENT OF TOTAL FISHING DONE WITH LURE IN 1970
85133	PERCENT OF TOTAL FISHING DONE WITH BAIT IN 1970
85134	PERCENT OF TOTAL FISHING DONE WITH A FLY IN 1970
85146	YEAR THIS FACTOR HAS A LIMITING EFFECT
85157	MAN DAYS OF WATER SKIING
85158	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85159	MAN DAYS OF BOATING OTHER THAN ANGLING
85160	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85161	MAN DAYS OF SWIMMING
85162	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NO ACTIVITY
85163	SEVERITY: 1=INTERFERES 2=NO INTER. 3=NOT PRESENT
85165	NUMBER OF MONTHS SUSPENDED SOLIDS ARE A PROBLEM
85167	NUMBER OF MONTHS PLANKTON IS A PROBLEM
85168	1=ELIMINATE PROD 2=REDUCE 3=NO INTER. 4=NOT PRES

STORET Code	Description of STORET Parameters Not Suitable for Statistical Analysis
85169	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85170	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85171	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85172	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85173	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85174	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85175	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85176	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85177	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85178	1=ELIMINATE PROD 2=UNDESIRABLE 3=REDUCE 4=NO PROB
85179	YEAR THIS NUMBER OF FACILITIES PRESENT
85180	NUMBER OF BOAT RAMPS
85181	NUMBER OF MOORAGES
85182	NUMBER OF PICNIC AREAS
85183	NUMBER OF CAMP AREAS
85184	NUMBER OF RESORTS
85185	YEAR THIS ZONED AREA PRESENT
85186	ACRES SET ASIDE FOR OTHER BOATING
85187	ACRES SET ASIDE FOR WATER SKIING
85188	MILES OF SHORE LOST TO ACCESS BY HOME SITES
85189	TOTAL MILES OF SHORELINE
85193	WILL RECR BE INC BY RELEASE OF FINGERL 0=NO 1=YES
85195	CATCH AND RECREATION ESTIMATE 1=BEST 4=POOREST
85333	PRECIPITATION-SAMPLE COLLECTION TIME-CODE- NES
85538	GAMMA SCAN DATE (YR,MO,DAY)
85539	DATE OF REPORT (YR,MO,DAY)
85658	TIME NIGHT CO2 HR
85661	TIME, INTERVAL DAY CO2 HR

Appendix F

National EPA Water Quality Criteria Summary¹

The following table presents the national water quality criteria that were used to assess water quality data on a station-by-station basis and within the entire study area. Criteria are, for the most part, maximum values (except for dissolved oxygen, pH, and as noted). Criteria exist in any of four categories: Fresh Acute, Drinking Water, Marine Acute, and Other. Acute criteria are the highest 1-hour average concentrations which should not result in unacceptable impacts to aquatic organisms in either fresh or marine waters, respectively. The Drinking Water criteria are intended for human consumption; while the Other criteria represents National Park Service or other concerns. Parameters are listed in ascending order by STORET code. It is important to note that similar parameters often have non-consecutive codes. Consequently, scanning the entire list is necessary to obtain the criteria for all parameters of a particular type (eg. lead, copper, etc.). Refer to the Parameter Period of Record Tabulation to obtain the STORET code for any parameter measured in the park.

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	00070				50 ^l	TURBIDITY, JACKSON CANDLE UNITS	JTU	Physical
	00076				50 ^l	TURBIDITY, HACH TURBIDIMETER, FORMAZIN TUR. UNITS	FTU	Physical
14808798	00154		250 ^s			SULFATE (AS S) WHOLE WATER	MG/L	General Inorganic
7782447	00299				4.0 ^u	OXYGEN, DISSOLVED, ANALYSIS BY PROBE	MG/L	Dissolved Oxygen
7782447	00300				4.0 ^u	OXYGEN, DISSOLVED	MG/L	Dissolved Oxygen
	00400				≤6.5, ≥9.0 [#]	PH	SU	Physical
	00403				≤6.5, ≥9.0 [#]	PH, LAB	SU	Physical
	00406				≤6.5, ≥9.0 [#]	PH, FIELD	SU	Physical

¹Sources: (1) U.S. Environmental Protection Agency, Quality Criteria for Water 1995, Final Draft; (2) U.S. Environmental Protection Agency, 40 CFR 141 - National Primary Drinking Water Regulations, and 40 CFR 143 - National Secondary Drinking Water Regulations, July 1, 1994; and (3) Others as Noted in Footnotes.

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
471341	00409				<200 ^m	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS	UEQ/L	General Inorganic
17778880	00613		1			NITRITE NITROGEN, DISSOLVED AS N	MG/L	Nitrogen
17778880	00615		1			NITRITE NITROGEN, TOTAL AS N	MG/L	Nitrogen
17778880	00618		10			NITRATE NITROGEN, DISSOLVED AS N	MG/L	Nitrogen
17778880	00620		10			NITRATE NITROGEN, TOTAL AS N	MG/L	Nitrogen
17778880	00628		10			NITRITE + NITRATE, SUSPENDED AS N	MG/L	Nitrogen
17778880	00630		10			NITRITE PLUS NITRATE, TOTAL 1 DET.	MG/L	Nitrogen
17778880	00631		10			NITRITE PLUS NITRATE, DISSOLVED 1 DET.	MG/L	Nitrogen
57125	00718	22	200	1.0		CYANIDE, WEAK ACID, DISSOCIABLE, WATER, WHOLE	UG/L	General Inorganic
57125	00719	22	200	1.0		CYANIDE, FREE, IN WATER & WASTEWATERS, HBG METHOD	UG/L	General Inorganic
57125	00720	0.022	0.2	0.001		CYANIDE, TOTAL	MG/L	General Inorganic
57125	00722	0.022	0.2	0.001		CYANIDE, FREE (AMENABLE TO CHLORINATION)	MG/L	General Inorganic
57125	00723	22	200	1.0		CYANIDE, DISSOLVED STD METHOD	UG/L	General Inorganic
57125	00724	22	200	1.0		CYANIDE COMPLEXED TO A RANGE OF COMPNDS, WATER	UG/L	General Inorganic
16887006	00940	860	250 ^s			CHLORIDE, TOTAL IN WATER	MG/L	General Inorganic
16887006	00941	860	250 ^s			CHLORIDE, DISSOLVED IN WATER	MG/L	General Inorganic
14808798	00945		250 ^s			SULFATE, TOTAL (AS SO4)	MG/L	General Inorganic
14808798	00946		250 ^s			SULFATE, DISSOLVED (AS SO4)	MG/L	General Inorganic
1332214	00948		7000000			ASBESTOS, WHOLE SAMPLE	CNT/L	General Inorganic
16984488	00950		4.0			FLUORIDE, DISSOLVED AS F	MG/L	General Inorganic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
16984488	00951		4.0			FLUORIDE, TOTAL AS F	MG/L	General Inorganic
7782414	00953		4000			FLUORINE, TOTAL	UG/L	General Inorganic
7440382	00978	360	50	69		ARSENIC, TOTAL RECOVERABLE IN WATER AS AS	UG/L	Metal
7782492	00981	20	50	300		SELENIUM,TOTAL RECOVERABLE IN WATER AS SE	UG/L	Metal
7440280	00982	1400*	2.0	2130*		THALLIUM, TOTAL RECOVERABLE IN WATER AS TL	UG/L	Metal
7782492	00990	20	50	300		SELENITE, TOTAL RECOVERABLE INORGANIC	UG/L	Metal
7440382	00991	360	50	69		ARSENIC, TOTAL RECOVERABLE TRIVALENT INORGANIC	UG/L	Metal
7440382	00995	360	50	69		ARSENIC, INORGANIC DISS	UG/L	Metal
7440382	00996	360	50	69		ARSENIC, INORGANIC SUSP	UG/L	Metal
7440382	00997	360	50	69		ARSENIC, INORGANIC TOT	UG/L	Metal
7440417	00998	130*	4.0			BERYLLIUM,TOTAL RECOVERABLE IN WATER AS BE	UG/L	Metal
7440382	01000	360	50	69		ARSENIC, DISSOLVED	UG/L	Metal
7440382	01001	360	50	69		ARSENIC, SUSPENDED	UG/L	Metal
7440382	01002	360	50	69		ARSENIC, TOTAL	UG/L	Metal
7440393	01005		2000			BARIUM, DISSOLVED	UG/L	Metal
7440393	01006		2000			BARIUM, SUSPENDED	UG/L	Metal
7440393	01007		2000			BARIUM, TOTAL	UG/L	Metal
7440393	01009		2000			BARIUM,TOTAL RECOVERABLE IN WATER AS BA	UG/L	Metal
7440417	01010	130*	4.0			BERYLLIUM, DISSOLVED	UG/L	Metal
7440417	01011	130*	4.0			BERYLLIUM, SUSPENDED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440417	01012	130*	4.0			BERYLLIUM, TOTAL	UG/L	Metal
7440439	01025	3.9 ⁺	5.0	43		CADMIUM, DISSOLVED	UG/L	Metal
7440439	01026	3.9 ⁺	5.0	43		CADMIUM, SUSPENDE	UG/L	Metal
7440439	01027	3.9 ⁺	5.0	43		CADMIUM, TOTAL	UG/L	Metal
7440473	01030		100			CHROMIUM, DISSOLVED	UG/L	Metal
7440473	01031		100			CHROMIUM, SUSPENDE	UG/L	Metal
7440473	01032	16	100	1100		CHROMIUM, HEXAVALENT	UG/L	Metal
16065831	01033	1700 ⁺	100	10300*		CHROMIUM, TRI-VAL	UG/L	Metal
7440473	01034		100			CHROMIUM, TOTAL	UG/L	Metal
7440508	01040	18 ⁺	1300 ^a	2.9		COPPER, DISSOLVED	UG/L	Metal
7440508	01041	18 ⁺	1300 ^a	2.9		COPPER, SUSPENDE	UG/L	Metal
7440508	01042	18 ⁺	1300 ^a	2.9		COPPER, TOTAL	UG/L	Metal
7439921	01049	82 ⁺	15 ^a	220		LEAD, DISSOLVED	UG/L	Metal
7439921	01050	82 ⁺	15 ^a	220		LEAD, SUSPENDE	UG/L	Metal
7439921	01051	82 ⁺	15 ^a	220		LEAD, TOTAL	UG/L	Metal
7440280	01057	1400*	2.0	2130*		THALLIUM, DISSOLVED	UG/L	Metal
7440280	01058	1400*	2.0	2130*		THALLIUM, SUSPENDE	UG/L	Metal
7440280	01059	1400*	2.0	2130*		THALLIUM, TOTAL	UG/L	Metal
7440020	01065	1400 ⁺	100	75		NICKEL, DISSOLVED	UG/L	Metal
7440020	01066	1400 ⁺	100	75		NICKEL, SUSPENDE	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440020	01067	1400 ⁺	100	75		NICKEL, TOTAL	UG/L	Metal
7440020	01074	1400 ⁺	100	75		NICKEL, TOTAL RECOVERABLE IN WATER AS NI	UG/L	Metal
7440224	01075	4.1 ⁺	100 ^s	0.12		SILVER, DISSOLVED	UG/L	Metal
7440224	01076	4.1 ⁺	100 ^s	0.12		SILVER, SUSPENDED	UG/L	Metal
7440224	01077	4.1 ⁺	100 ^s	0.12		SILVER, TOTAL	UG/L	Metal
7440224	01079	4.1 ⁺	100 ^s	0.12		SILVER, TOTAL RECOVERABLE IN WATER AS AG	UG/L	Metal
7440508	01089	0.018 ⁺	1.3 ^a	0.0029		COPPER AS SUSPENDED BLACK OXIDE IN WATER	MG/L	General Inorganic
7440666	01090	120 ⁺	5000 ^s	95		ZINC, DISSOLVED	UG/L	Metal
7440666	01091	120 ⁺	5000 ^s	95		ZINC, SUSPENDED	UG/L	Metal
7440666	01092	120 ⁺	5000 ^s	95		ZINC, TOTAL	UG/L	Metal
7440666	01094	120 ⁺	5000 ^s	95		ZINC, TOTAL RECOVERABLE IN WATER AS ZN	UG/L	Metal
7440360	01095	88 ^p	6.0	1500 ^p		ANTIMONY, DISSOLVED	UG/L	Metal
7440360	01096	88 ^p	6.0	1500 ^p		ANTIMONY, SUSPENDED	UG/L	Metal
7440360	01097	88 ^p	6.0	1500 ^p		ANTIMONY, TOTAL	UG/L	Metal
7440439	01113	3.9 ⁺	5.0	43		CADMIUM, TOTAL RECOVERABLE IN WATER AS CD	UG/L	Metal
7439921	01114	82 ⁺	15 ^a	220		LEAD, TOTAL RECOVERABLE IN WATER AS PB	UG/L	Metal
7440473	01118		100			CHROMIUM TOTAL RECOVERABLE IN WATER AS CR	UG/L	Metal
7440508	01119	18 ⁺	1300 ^a	2.9		COPPER, TOTAL RECOVERABLE IN WATER AS CU	UG/L	Metal
7440280	01124	1400 [*]	2.0	2130 [*]		THALLIUM, ACID SOLUBLE, WATER, WHOLE	UG/L	Metal
7440280	01128	1400 [*]	2.0	2130 [*]		THALLIUM, TOTAL RECOVERABLE <95%	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782492	01145	20	50	300		SELENIUM, DISSOLVED	UG/L	Metal
7782492	01146	20	50	300		SELENIUM, SUSPENDED	UG/L	Metal
7782492	01147	20	50	300		SELENIUM, TOTAL	UG/L	Metal
7782492	01167	20	50	300		SELENIUM, ACID SOLUBLE, WATER, WHOLE	UG/L	Metal
18540299	01220	16	100	1100		CHROMIUM, HEXAVALENT, DISSOLVED	UG/L	Metal
7440360	01268	88 ^p	6.0	1500 ^p		ANTIMONY (SB), WATER, TOTAL RECOVERABLE	UG/L	Metal
57125	01291	22	200	1.0		CYANIDE, FILTERABLE, TOTAL IN WATER	UG/L	General Inorganic
7440666	01303	0.120 ⁺	5.0 ^s	0.095		ZINC, POTENTIALLY DISSOLVED WATER	MG/L	Metal
7440224	01304	0.0041 ⁺	0.1 ^s	0.00012		SILVER, POTENTIALLY DISSOLVED WATER	MG/L	Metal
7440508	01306	0.018 ⁺	1.3 ^a	0.0029		COPPER, POTENTIALLY DISSOLVED WATER	MG/L	Metal
18540299	01307	0.016	0.1	1.1		CHROMIUM, HEXAVALENT, POTENTIALLY DISSOLVED	MG/L	Metal
7440382	01309	0.36	0.05	0.069		ARSENIC, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440393	01311		2.0			BARIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440417	01312	0.13 [*]	0.004			BERYLLIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440439	01313	0.0039 ⁺	0.005	0.043		CADMIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
16065831	01314	1.7 ⁺	0.1	10.3 [*]		CHROMIUM, TRIVALENT, POTENTIALLY DISSOLVED	MG/L	Metal
7439921	01318	0.082 ⁺	0.015 ^a	0.220		LEAD, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7439976	01321	0.0024	0.002	0.0021		MERCURY, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440020	01322	1.4 ⁺	0.1	0.075		NICKEL, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7782492	01323	0.020	0.050	0.300		SELENIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440280	01324	1.4 ⁺	0.002	2.13 ⁺		THALLIUM, POTENTIALLY, DISSOLVED, WATER	MG/L	Metal
7440611	01326		0.020 ^e			URANIUM, POTENTIALLY DISSOLVED, WATER	MG/L	Metal
7440224	01523	4.1 ⁺	100 ^s	0.12		SILVER, IONIC	UG/L	Metal
50328	03648		0.2			BENZO (A) PYRENE, LIQUID FRACTION, ELUTRIATE	UG/L	General Organic
122349	04035		4.0			SIMAZINE, DISSOLVED, WATER, TOTAL RECOVERABLE	UG/L	Pesticide
10028178	04124		20 ^r			TRITIUM, TOTAL, WATER	PC/ML	Radiological
10028178	07000		20000 ^r			TRITIUM, TOTAL	PC/L	Radiological
10028178	07005		20000 ^r			TRITIUM, DISSOLVED	PC/L	Radiological
10028178	07010		20000 ^r			TRITIUM, SUSPENDED	PC/L	Radiological
	09501		5.0			RADIUM 226, TOTAL	PC/L	Radiological
	09503		5.0			RADIUM 226, DISSOLVED	PC/L	Radiological
	09505		5.0			RADIUM 226, SUSPENDED	PC/L	Radiological
	11500		5.0			RADIUM 226 + RADIUM 228, DISSOLVED	PC/L	Radiological
	11501		5.0			RADIUM 228, TOTAL	PC/L	Radiological
	11503		5.0			RADIUM 226 + RADIUM 228, TOTAL	PC/L	Radiological
10098972	13501		8.0 ^r			STRONTIUM 90, TOTAL	PC/L	Radiological
10098972	13503		8.0 ^r			STRONTIUM 90, DISSOLVED	PC/L	Radiological
10098972	13505		8.0 ^r			STRONTIUM 90, SUSPENDED	PC/L	Radiological
7782492	22675	20	50	300		SELENIUM, DISSOLVED ORGANIC	UG/L	Metal
7782492	22676	20	50	300		SELENIUM, HEXAVALENT, DISSOLVED	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782492	22677	20	50	300		SELENIUM, TETRAVALENT, DISSOLVED	UG/L	Metal
7440382	22678	360	50	69		ARSENIC, DISSOLVED ORGANIC	UG/L	Metal
7440382	22679	850*	50	2319*		ARSENIC, PENTAVALENT, DISSOLVED	UG/L	Metal
7440382	22680	360	50	69		ARSENIC, TRIVALENT, DISSOLVED	UG/L	Metal
7440611	22703		20°			URANIUM, NATURAL DISSOLVED	UG/L	Metal
7440611	22705		20°			URANIUM, NATURAL SUSPENDED	UG/L	Metal
7440611	22706		20°			URANIUM, TOTAL AS U308	UG/L	Metal
7440611	22708		0.020°			URANIUM, NATURAL, TOTAL	MG/L	Radiological
7440611	28011		20°			URANIUM, NATURAL, TOTAL	UG/L	Radiological
88857	30191		7.0			DINOSEB, WATER, WHOLE RECOVERABLE	UG/L	Pesticide
75990	30200		200			DALAPON, WATER, WHOLE RECOVERABLE	UG/L	Pesticide
106934	30203		0.05			ETHANE, 1,2-DIBROMO-, WATER, WHOLE, RECOVERABLE	UG/L	Pesticide
	31501		1.0 ⁿ		1000 ^b	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED.	CFU/100ML	Bacteriological
	31503		1.0 ⁿ		1000 ^b	COLIFORM, TOTAL, MEMBRANE FILTER, DELAY. M-ENDO	CFU/100ML	Bacteriological
	31504		1.0 ⁿ		1000 ^b	COLIFORM, TOTAL, MEMBRANE FILTER, IMMED. LES-ENDO	CFU/100ML	Bacteriological
	31505		1.0 ⁿ		1000 ^b	COLIFORM, TOTAL, MPN, CONF. TEST 35C (TUBE 31506)	MPN/100ML	Bacteriological
	31506		1.0 ⁿ		1000 ^b	COLIFORM, TOTAL, MPN, CONF. TEST, TUBE CONFIG	MPN/100ML	Bacteriological
	31507		1.0 ⁿ		1000 ^b	COLIFORM, TOTAL, MPN, COMP. TEST 35C (TUBE 31508)	MPN/100ML	Bacteriological
	31508		1.0 ⁿ		1000 ^b	COLIFORM, TOTAL, MPN, COMP. TEST, TUBE CONFIG	MPN/100ML	Bacteriological
	31613				200 [^]	FECAL COLIFORM, MEMBRANE FILTER, AGAR	CFU/100ML	Bacteriological

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
	31614				200 [^]	FECAL COLIFORM, MPN, TUBE CONFIGURATION	MPN/100ML	Bacteriological
	31615				200 [^]	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	MPN/100ML	Bacteriological
	31616				200 [^]	FECAL COLIFORM, MEMBRANE FILTER, BROTH, 44.5C	CFU/100ML	Bacteriological
	31617				200 [^]	FECAL COLIFORM, MPN, EIJKMAN, 44.5C (TUBE 31618)	MPN/100ML	Bacteriological
	31625				200 [^]	FECAL COLIFORM, MF, M-FC, 0.7 UM	CFU/100ML	Bacteriological
	31648				126 [^]	E. COLI, MTEC, MF	CFU/100ML	Bacteriological
	31649				33 [^]	ENTEROCOCCI, ME, MF	CFU/100ML	Bacteriological
67663	32003	28900 [*]	100 ^l			CARBON CHLOROFORM AND CARBON ALCOHOL EXTRS.,TOTAL	UG/L	General Organic
67663	32005	28900 [*]	100 ^l			CARBON CHLOROFORM EXTRACTABLES	UG/L	General Organic
67663	32021	28900 [*]	100 ^l			CARBON CHLOROFORM EXTRACTS, ETHER INSOLUBLES OF	UG/L	General Organic
67663	32022	28900 [*]	100 ^l			CARBON CHLOROFORM EXTRACTS, WATER SOLUBLES OF	UG/L	General Organic
75274	32101		100 ^l			BROMODICHLOROMETHANE, WHOLE WATER	UG/L	General Organic
56235	32102	35200 [*]	5.0	50000 [*]		CARBON TETRACHLORIDE, WHOLE WATER	UG/L	General Organic
107062	32103	118000 [*]	5.0	113000 [*]		1,2-DICHLOROETHANE,WHOLE WATER	UG/L	General Organic
75252	32104		100 ^l			BROMOFORM, WHOLE WATER	UG/L	General Organic
124481	32105		100 ^l			DIBROMOCHLOROMETHANE, WHOLE WATER	UG/L	General Organic
67663	32106	28900 [*]	100 ^l			CHLOROFORM, WHOLE WATER	UG/L	General Organic
56235	32260	35.2 [*]	0.005	50 [*]		CARBON TETRACHLORIDE EXTRACTABLES	MG/L	General Organic
67663	32270	28.9 [*]	0.1 ^l			CHLOROFORM EXTRACTABLES TOTAL	MG/L	General Organic
108883	34010	17500 [*]	1000	6300 [*]		TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXTR.	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
1330207	34020		10000			XYLENES IN WTR SMPLE GC-MS, HEXADECONE EXTR.	UG/L	General Organic
83329	34205	1700*		970*		ACENAPHTHENE, TOTAL	UG/L	General Organic
83329	34206	1700*		970*		ACENAPHTHENE, DISSOLVED	UG/L	General Organic
83329	34207	1700*		970*		ACENAPHTHENE, SUSPENDEDED	UG/L	General Organic
107028	34210	68*		55*		ACROLEIN, TOTAL	UG/L	Pesticide
107028	34211	68*		55*		ACROLEIN, DISSOLVED	UG/L	Pesticide
107028	34212	68*		55*		ACROLEIN, SUSPENDEDED	UG/L	Pesticide
107131	34215	7550*				ACRYLONITRILE, TOTAL	UG/L	General Organic
107131	34216	7550*				ACRYLONITRILE, DISSOLVED	UG/L	General Organic
107131	34217	7550*				ACRYLONITRILE, SUSPENDEDED	UG/L	General Organic
71432	34235	5300*	5.0	5100*		BENZENE, DISSOLVED	UG/L	General Organic
71432	34236	5300*	5.0	5100*		BENZENE, SUSPENDEDED	UG/L	General Organic
92875	34239	2500*				BENZIDINE, DISSOLVED	UG/L	General Organic
92875	34240	2500*				BENZIDINE, SUSPENDEDED	UG/L	General Organic
58899	34265	2.0	0.2	0.16		R-BHC (LINDANE) GAMMA, DISSOLVED	UG/L	Pesticide
58899	34266	2.0	0.2	0.16		R-BHC (LINDANE) GAMMA, SUSPENDEDED	UG/L	Pesticide
75252	34288		100 ^l			BROMOFORM, DISSOLVED	UG/L	General Organic
75252	34289		100 ^l			BROMOFORM, SUSPENDEDED	UG/L	General Organic
56235	34297	35200*	5.0	50000*		CARBON TETRACHLORIDE, DISSOLVED	UG/L	General Organic
56235	34298	35200*	5.0	50000*		CARBON TETRACHLORIDE, SUSPENDEDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
108907	34301		100			CHLOROBENZENE, TOTAL	UG/L	General Organic
108907	34302		100			CHLOROBENZENE, DISSOLVED	UG/L	General Organic
108907	34303		100			CHLOROBENZENE, SUSPENDED	UG/L	General Organic
124481	34306		100 ^l			CHLORODIBROMOMETHANE, TOTAL	UG/L	General Organic
124481	34307		100 ^l			CHLORODIBROMOMETHANE, DISSOLVED	UG/L	General Organic
124481	34308		100 ^l			CHLORODIBROMOMETHANE, SUSPENDED	UG/L	General Organic
67663	34316	28900*	100 ^l			CHLOROFORM, DISSOLVED	UG/L	General Organic
67663	34317	28900*	100 ^l			CHLOROFORM, SUSPENDED	UG/L	General Organic
57125	34325	0.022	0.2	0.001		CYANIDE, SUSPENDED	MG/L	General Inorganic
75274	34328		100 ^l			DICHLOROBROMOMETHANE, DISSOLVED	UG/L	General Organic
75274	34329		100 ^l			DICHLOROBROMOMETHANE, SUSPENDED	UG/L	General Organic
122667	34346	270*				1,2-DIPHENYLHYDRAZINE, TOTAL	UG/L	General Organic
122667	34347	270*				1,2-DIPHENYLHYDRAZINE, DISSOLVED	UG/L	General Organic
122667	34348	270*				1,2-DIPHENYLHYDRAZINE, SUSPENDED	UG/L	General Organic
33213659	34356	0.22		0.034		ENDOSULFAN, BETA, TOTAL	UG/L	Pesticide
33213659	34357	0.22		0.034		ENDOSULFAN, BETA, DISSOLVED	UG/L	Pesticide
33213659	34358	0.22		0.034		ENDOSULFAN, BETA, SUSPENDED	UG/L	Pesticide
959988	34361	0.22		0.034		ENDOSULFAN, ALPHA, TOTAL	UG/L	Pesticide
959988	34362	0.22		0.034		ENDOSULFAN, ALPHA, DISSOLVED	UG/L	Pesticide
959988	34363	0.22		0.034		ENDOSULFAN, ALPHA, SUSPENDED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
100414	34371	32000*	700	430*		ETHYLBENZENE, TOTAL	UG/L	General Organic
100414	34372	32000*	700	430*		ETHYLBENZENE, DISSOLVED	UG/L	General Organic
100414	34373	32000*	700	430*		ETHYLBENZENE, SUSPENDED	UG/L	General Organic
206440	34376	3980*		40*		FLUORANTHENE, TOTAL	UG/L	General Organic
206440	34377	3980*		40*		FLUORANTHENE, DISSOLVED	UG/L	General Organic
206440	34378	3980*		40*		FLUORANTHENE, SUSPENDED	UG/L	General Organic
77474	34386	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, TOTAL	UG/L	General Organic
77474	34387	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, DISSOLVED	UG/L	General Organic
77474	34388	7.0*	50	7.0*		HEXACHLOROCYCLOPENTADIENE, SUSPENDED	UG/L	General Organic
87683	34391	90*		32*		HEXACHLOROBUTADIENE, TOTAL	UG/L	General Organic
87683	34392	90*		32*		HEXACHLOROBUTADIENE, DISSOLVED	UG/L	General Organic
87683	34393	90*		32*		HEXACHLOROBUTADIENE, SUSPENDED	UG/L	General Organic
67721	34396	980*		940*		HEXACHLOROETHANE, TOTAL	UG/L	General Organic
67721	34397	980*		940*		HEXACHLOROETHANE, DISSOLVED	UG/L	General Organic
67721	34398	980*		940*		HEXACHLOROETHANE, SUSPENDED	UG/L	General Organic
118741	34401	6.0 ^P	1.0			HEXACHLOROBENZENE, DISSOLVED	UG/L	General Organic
118741	34402	6.0 ^P	1.0			HEXACHLOROBENZENE, SUSPENDED	UG/L	General Organic
193395	34403		0.40 ^c			INDENO (1,2,3-CD) PYRENE, TOTAL	UG/L	General Organic
193395	34404		0.40 ^c			INDENO (1,2,3-CD) PYRENE, DISSOLVED	UG/L	General Organic
193395	34405		0.40 ^c			INDENO (1,2,3-CD) PYRENE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
78591	34408	117000*		12900*		ISOPHORONE, TOTAL	UG/L	Pesticide
78591	34409	117000*		12900*		ISOPHORONE, DISSOLVED	UG/L	Pesticide
78591	34410	117000*		12900*		ISOPHORONE, SUSPENDED	UG/L	Pesticide
75092	34423		5.0			METHYLENE CHLORIDE, TOTAL	UG/L	General Organic
75092	34424		5.0			METHYLENE CHLORIDE, DISSOLVED	UG/L	General Organic
75092	34425		5.0			METHYLENE CHLORIDE, SUSPENDED	UG/L	General Organic
91203	34443	2300*		2350*		NAPHTHALENE, DISSOLVED	UG/L	General Organic
91203	34444	2300*		2350*		NAPHTHALENE, SUSPENDED	UG/L	General Organic
98953	34447	27000*		6680*		NITROBENZENE, TOTAL	UG/L	General Organic
98953	34448	27000*		6680*		NITROBENZENE, DISSOLVED	UG/L	General Organic
98953	34449	27000*		6680*		NITROBENZENE, SUSPENDED	UG/L	General Organic
59507	34452	30*				PARACHLOROMETA CRESOL, TOTAL	UG/L	General Organic
59507	34453	30*				PARACHLOROMETA CRESOL, DISSOLVED	UG/L	General Organic
59507	34454	30*				PARACHLOROMETA CRESOL, SUSPENDED	UG/L	General Organic
87865	34459	20***	1.0	13		PCP (PENTACHLOROPHENOL), DISSOLVED	UG/L	Pesticide
87865	34460	20***	1.0	13		PCP (PENTACHLOROPHENOL), SUSPENDED	UG/L	Pesticide
85018	34461	30 ^P		7.7 ^P		PHENANTHRENE, TOTAL	UG/L	General Organic
85018	34462	30 ^P		7.7 ^P		PHENANTHRENE, DISSOLVED	UG/L	General Organic
85018	34463	30 ^P		7.7 ^P		PHENANTHRENE, SUSPENDED	UG/L	General Organic
108952	34466	10200*		5800*		PHENOL, DISSOLVED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
108952	34467	10200*		5800*		PHENOL, SUSPENDED	UG/L	General Organic
127184	34475	5280*	5.0	10200*		TETRACHLOROETHYLENE, TOTAL	UG/L	General Organic
127184	34476	5280*	5.0	10200*		TETRACHLOROETHYLENE, DISSOLVED	UG/L	General Organic
127184	34477	5280*	5.0	10200*		TETRACHLOROETHYLENE, SUSPENDED	UG/L	General Organic
108883	34481	17500*	1000	6300*		TOLUENE, DISSOLVED	UG/L	General Organic
108883	34482	17500*	1000	6300*		TOLUENE, SUSPENDED	UG/L	General Organic
79016	34485	45000*	5.0	2000*		TRICHLOROETHYLENE, DISSOLVED	UG/L	General Organic
79016	34486	45000*	5.0	2000*		TRICHLOROETHYLENE, SUSPENDED	UG/L	General Organic
75014	34493		2.0			VINYL CHLORIDE, DISSOLVED	UG/L	General Organic
75014	34494		2.0			VINYL CHLORIDE, SUSPENDED	UG/L	General Organic
75354	34501		7.0			1,1-DICHLOROETHYLENE, TOTAL	UG/L	General Organic
75354	34502		7.0			1,1-DICHLOROETHYLENE, DISSOLVED	UG/L	General Organic
75354	34503		7.0			1,1-DICHLOROETHYLENE, SUSPENDED	UG/L	General Organic
71556	34506		200	31200*		1,1,1-TRICHLOROETHANE, TOTAL	UG/L	General Organic
71556	34507		200	31200*		1,1,1-TRICHLOROETHANE, DISSOLVED	UG/L	General Organic
71556	34508		200	31200*		1,1,1-TRICHLOROETHANE, SUSPENDED	UG/L	General Organic
79005	34511		5.0			1,1,2-TRICHLOROETHANE, TOTAL	UG/L	General Organic
79005	34512		5.0			1,1,2-TRICHLOROETHANE, DISSOLVED	UG/L	General Organic
79005	34513		5.0			1,1,2-TRICHLOROETHANE, SUSPENDED	UG/L	General Organic
79345	34516			9020*		1,1,2,2-TETRACHLOROETHANE, TOTAL	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
79345	34517			9020*		1,1,2,2-TETRACHLOROETHANE, DISSOLVED	UG/L	General Organic
79345	34518			9020*		1,1,2,2-TETRACHLOROETHANE, SUSPENDED	UG/L	General Organic
107062	34531	118000*	5.0	113000*		1,2-DICHLOROETHANE, TOTAL	UG/L	General Organic
107062	34532	118000*	5.0	113000*		1,2-DICHLOROETHANE, DISSOLVED	UG/L	General Organic
107062	34533	118000*	5.0	113000*		1,2-DICHLOROETHANE, SUSPENDED	UG/L	General Organic
95501	34536		600			1,2-DICHLOROBENZENE, TOTAL	UG/L	General Organic
95501	34537		600			1,2-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
95501	34538		600			1,2-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
78875	34541		5.0			1,2-DICHLOROPROPANE, TOTAL	UG/L	General Organic
78875	34542		5.0			1,2-DICHLOROPROPANE, DISSOLVED	UG/L	General Organic
78875	34543		5.0			1,2-DICHLOROPROPANE, SUSPENDED	UG/L	General Organic
156605	34546		100			TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER	UG/L	General Organic
156605	34547		100			TRANS-1,2-DICHLOROETHENE, DISSOLVED	UG/L	General Organic
156605	34548		100			TRANS-1,2-DICHLOROETHENE, SUSPENDED	UG/L	General Organic
120821	34551		70			1,2,4-TRICHLOROBENZENE, TOTAL	UG/L	General Organic
120821	34552		70			1,2,4-TRICHLOROBENZENE, DISSOLVED	UG/L	General Organic
120821	34553		70			1,2,4-TRICHLOROBENZENE, SUSPENDED	UG/L	General Organic
541731	34566		600			1,3-DICHLOROBENZENE, TOTAL	UG/L	General Organic
541731	34567		600			1,3-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
541731	34568		600			1,3-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
106467	34571		75			1,4-DICHLOROBENZENE, TOTAL	UG/L	General Organic
106467	34572		75			1,4-DICHLOROBENZENE, DISSOLVED	UG/L	General Organic
106467	34573		75			1,4-DICHLOROBENZENE, SUSPENDED	UG/L	General Organic
95578	34586	4380*				2-CHLOROPHENOL, TOTAL	UG/L	General Organic
95578	34587	4380*				2-CHLOROPHENOL, DISSOLVED	UG/L	General Organic
95578	34588	4380*				2-CHLOROPHENOL, SUSPENDED	UG/L	General Organic
120832	34601	2020*				2,4-DICHLOROPHENOL, TOTAL	UG/L	General Organic
120832	34602	2020*				2,4-DICHLOROPHENOL, DISSOLVED	UG/L	General Organic
120832	34603	2020*				2,4-DICHLOROPHENOL, SUSPENDED	UG/L	General Organic
105679	34606	2120*				2,4-DIMETHYLPHENOL, TOTAL	UG/L	General Organic
105679	34607	2120*				2,4-DIMETHYLPHENOL, DISSOLVED	UG/L	General Organic
105679	34608	2120*				2,4-DIMETHYLPHENOL, SUSPENDED	UG/L	General Organic
121142	34611	330*		590*		2,4-DINITROTOLUENE, TOTAL	UG/L	General Organic
121142	34612	330*		590*		2,4-DINITROTOLUENE, DISSOLVED	UG/L	General Organic
121142	34613	330*		590*		2,4-DINITROTOLUENE, SUSPENDED	UG/L	General Organic
72548	34651	0.6*		3.6*		P,P'-DDD, DISSOLVED	UG/L	Pesticide
72548	34652	0.6*		3.6*		P,P'-DDD, SUSPENDED	UG/L	Pesticide
72559	34653	1050*		14*		P,P'-DDE, DISSOLVED	UG/L	Pesticide
72559	34654	1050*		14*		P,P'-DDE, SUSPENDED	UG/L	Pesticide
50293	34655	1.1		0.13		P,P'-DDT, DISSOLVED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
50293	34656	1.1		0.13		P,P'-DDT, SUSPENDED	UG/L	Pesticide
1746016	34675	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), TOT	UG/L	General Organic
1746016	34676	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), DISS	UG/L	General Organic
1746016	34677	0.01*	0.00003			2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN(TCDD), SUSP	UG/L	General Organic
108952	34694	10200*		5800*		PHENOL (C6H5OH) - SINGLE COMPOUND, TOTAL	UG/L	General Organic
91203	34696	2300*		2350*		NAPHTHALENE, TOTAL	UG/L	General Organic
75990	38432		200			DALAPON, WATER, TOTAL	UG/L	Pesticide
75990	38433		200			DALAPON, WATER, DISSOLVED	UG/L	Pesticide
75990	38434		200			DALAPON, WATER, SUSPENDED	UG/L	Pesticide
96128	38437		0.2			DIBROMOCHLOROPROPANE, WATER, TOTAL	UG/L	Pesticide
96128	38438		0.2			DIBROMOCHLOROPROPANE, WATER, DISSOLVED	UG/L	Pesticide
96128	38439		0.2			DIBROMOCHLOROPROPANE WATER, SUSPENDED	UG/L	Pesticide
96128	38760		0.2			DBCP, WATER, TOTAL	UG/L	Pesticide
96128	38761		0.2			DBCP, WATER, DISSOLVED	UG/L	Pesticide
96128	38762		0.2			DBCP, WATER, SUSPENDED	UG/L	Pesticide
88857	38779		7.0			DINOSEB, DISSOLVED	UG/L	Pesticide
88857	38780		7.0			DINOSEB, SUSPENDED	UG/L	Pesticide
23135220	38865		200			OXAMYL, TOTAL	UG/L	Pesticide
23135220	38866		200			OXAMYL, DISSOLVED	UG/L	Pesticide
23135220	38867		200			OXAMYL, SUSPENDED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
145733	38926		100			ENDOTHALL, WHOLE WATER SAMPLE	UG/L	Pesticide
2921882	38932	0.083		0.011		CHLORPYRIFOS, TOTAL RECOVERABLE	UG/L	Pesticide
2921882	38933	0.083		0.011		CHLORPYRIFOS, DISSOLVED	UG/L	Pesticide
2163806	38935		50			MONOSODIUM METHANEARSONATE (MSMA)	UG/L	Pesticide
2921882	39012	0.083		0.011		DURSBAN, FLAME PHOTOMETRIC, WATER SAMPLE	UG/L	Pesticide
56382	39015	0.065				ETHYLPARATHION, FLAME IONIFATION, WATER SAMPLE	UG/L	Pesticide
122349	39025		4.0			SIMAZINE, COULSON CONDUCTIVITY WATER SAMPLE	UG/L	Pesticide
87865	39032	20***	1.0	13		PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE	UG/L	Pesticide
1912249	39033		3.0			ATRAZINE IN WHOLE WATER SAMPLE	UG/L	Pesticide
118741	39039	6.0 ^P	1.0			HEXACHLOROBENZENE WATER SAMPLE, ELECTRON CPT	UG/L	Pesticide
93721	39045		50			2,4,5-TP INCLUDES ACIDS & SALTS WATER SAMPLE	UG/L	Pesticide
116063	39053		3.0			ALDICARB IN WHOLE WATER	UG/L	Pesticide
122349	39055		4.0			SIMAZINE IN WHOLE WATER	UG/L	Pesticide
117817	39100	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER	UG/L	General Organic
117817	39103	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, DISSOLVED	UG/L	General Organic
117817	39104	2000*	6.0			BIS(2-ETHYLHEXYL) PHTHALATE, SUSPENDED	UG/L	General Organic
	39117	0.94*		2.994*		PHTHLATE ESTERS IN WATER	MG/L	General Organic
75014	39175		2.0			VINYL CHLORIDE-WHOLE WATER SAMPLE	UG/L	General Organic
79016	39180	45000*	5.0	2000*		TRICHLOROETHYLENE-WHOLE WATER SAMPLE	UG/L	General Organic
50293	39300	1.1		0.13		P,P' DDT IN WHOLE WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
72548	39310	0.6*		3.6*		P,P' DDD IN WHOLE WATER SAMPLE	UG/L	Pesticide
72559	39320	1050*		14*		P,P' DDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
309002	39330	3.0		1.3		ALDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
309002	39331	3.0		1.3		ALDRIN IN FILT. FRAC. OF WAT. SAMP.	UG/L	Pesticide
309002	39332	3.0		1.3		ALDRIN IN SUSP. FRAC. OF WAT. SAMP.	UG/L	Pesticide
58899	39340	2.0	0.2	0.16		GAMMA-BHC(LINDANE), WHOLE WATER	UG/L	Pesticide
58899	39341	2.0	0.2	0.16		GAMMA-BHC(LINDANE), DISSOLVED	UG/L	Pesticide
58899	39342	2.0	0.2	0.16		GAMMA-BHC(LINDANE), SUSPENDED	UG/L	Pesticide
57749	39350	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), WHOLE WATER	UG/L	Pesticide
57749	39352	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), DISSOLVED	UG/L	Pesticide
57749	39353	2.4	2.0	0.09		CHLORDANE(TECH MIX & METABS), SUSPENDED	UG/L	Pesticide
72548	39360	0.6*		3.6*		DDD IN WHOLE WATER SAMPLE	UG/L	Pesticide
72548	39361	0.6*		3.6*		DDD IN FILT. FRAC. OF WATER SMAPLE	UG/L	Pesticide
72548	39362	0.6*		3.6*		DDD IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72559	39365	1050*		14*		DDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
72559	39366	1050*		14*		DDE IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72559	39367	1050*		14*		DDE IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
50293	39370	1.1		0.13		DDT IN WHOLE WATER SAMPLE	UG/L	Pesticide
50293	39371	1.1		0.13		DDT IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
50293	39372	1.1		0.13		DDT IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
60571	39380	2.5		0.71		DIELDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
60571	39381	2.5		0.71		DIELDRIN IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
60571	39382	2.5		0.71		DIELDRIN IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
115297	39388	0.22		0.034		ENDOSULFAN IN WHOLE WATER SAMPLE	UG/L	Pesticide
72208	39390	0.18	2.0	0.037		ENDRIN IN WHOLE WATER SAMPLE	UG/L	Pesticide
72208	39391	0.18	2.0	0.037		ENDRIN IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
72208	39392	0.18	2.0	0.037		ENDRIN IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
8001352	39400	0.73	3.0	0.21		TOXAPHENE IN WHOLE WATER SAMPLE	UG/L	Pesticide
8001352	39401	0.73	3.0	0.21		TOXAPHENE IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
8001352	39402	0.73	3.0	0.21		TOXAPHENE IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
76448	39410	0.52	0.4	0.053		HEPTACHLOR IN WHOLE WATER SAMPLE	UG/L	Pesticide
76448	39411	0.52	0.4	0.053		HEPTACHLOR IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
76448	39412	0.52	0.4	0.053		HEPTACHLOR IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
1024573	39420	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE	UG/L	Pesticide
1024573	39421	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN FILT. FRAC. WATER SAMPLE	UG/L	Pesticide
1024573	39422	0.52	0.2	0.053		HEPTACHLOR EPOXIDE IN SUSP. FRAC. WATER SAMPLE	UG/L	Pesticide
72435	39478		40			METHOXYCHLOR IN WHOLE WATER DISSOLVED	UG/L	Pesticide
72435	39479		40			METHOXYCHLOR IN WHOLE WATER SUSPENDED	UG/L	Pesticide
72435	39480		40			METHOXYCHLOR IN WHOLE WATER SAMPLE	UG/L	Pesticide
56382	39540	0.065				PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
56382	39542	0.065				PARATHION IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
56382	39543	0.065				PARATHION IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
1912249	39630		3.0			ATRAZINE(AATREX) IN WHOLE WATER SAMPLE	UG/L	Pesticide
1912249	39632		3.0			ATRAZINE DISSOLVED IN WATER	PPB	Pesticide
118741	39700	6.0 ^P	1.0			HEXACHLOROBENZENE IN WHOLE WATER SAMPLE	UG/L	General Organic
87683	39702	90 [*]		32 [*]		HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE	UG/L	General Organic
1918021	39720		500			PICLORAM IN WHOLE WATER SAMPLE	UG/L	Pesticide
94757	39730		70			2,4-D IN WHOLE WATER SAMPLE	UG/L	Pesticide
94757	39732		70			2,4-D IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
94757	39733		70			2,4-D IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
93721	39760		50			SILVEX IN WHOLE WATER SAMPLE	UG/L	Pesticide
93721	39762		50			SILVEX IN FILT. FRAC. OF WATER SAMPLE	UG/L	Pesticide
93721	39763		50			SILVEX IN SUSP. FRAC. OF WATER SAMPLE	UG/L	Pesticide
58899	39782	2.0	0.2	0.16		LINDANE IN WHOLE WATER SAMPLE	UG/L	Pesticide
1071836	39941		700			ROUNDUP IN WHOLE WATER SAMPLE (GLYPHOSATE)	UG/L	Pesticide
7782505	45650	0.019		0.013		CHLORINE, IN ORGANIC COMPOUNDS, WATER, WHOLE	MG/L	General Inorganic
56382	46315	0.065				ETHYL PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
58899	46322	2.0	0.2	0.16		LINDANE PLUS ISOMERS IN WHOLE WATER SAMPLE	UG/L	Pesticide
76448	46326	0.52	0.4	0.053		HEPTACHLOR AND METABOLITES IN WHOLE H2O SAMPLE	UG/L	Pesticide
15972608	46342		2.0			ALACHLOR (LASSO), WATER, DISSOLVED	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7782505	46472	0.019		0.013		CHLORINE, TOTAL RESIDUAL, AVERAGE VALUE, WATER	MG/L	General Inorganic
7782505	46473	0.019		0.013		CHLORINE, FREE AVAILABLE, AVERAGE VALUE, WATER	MG/L	General Inorganic
57125	46479	22	200	1.0		CYANIDE, DISSOLVED, WATER	UG/L	General Inorganic
7440382	46551	360	50	69		ARSENIC, FIELD ACIDIFIED W/HNO3, LAB FILTERED	UG/L	Metal
7440393	46558		2000			BARIUM, FIELD ACIDIFIED W/HNO3-LAB FILT	UG/L	Metal
7440439	46559	3.9 ⁺	5.0	43		CADMIUM, FIELD ACIDIFIED-HNO3-LAB FILTER	UG/L	Metal
7440473	46560		100			CHROMIUM, FIELD ACIDIFIED-HNO3-LAB FILT.	UG/L	Metal
7440508	46562	18 ⁺	1300 ^a	2.9		COPPER, FIELD ACIDIFIED-HNO3- LAB FILTER.	UG/L	Metal
7439921	46564	82 ⁺	15 ^a	220		LEAD, FIELD ACIDIFIED-HNO3-LAB FILTERED	UG/L	Metal
7440224	46566	4.1 ⁺	100 ^s	0.12		SILVER, FIELD ACIDIFIED-HNO3-LAB FILTER.	UG/L	Metal
7440666	46567	120 ⁺	5000 ^s	95		ZINC, EXTRACTABLE, FIELD ACID W/HNO3, LAB FILTR	UG/L	Metal
56382	49011	0.065				UNKNOWN AS PARATHION IN WHOLE WATER SAMPLE	UG/L	Pesticide
7782505	50058	0.019		0.013		CHLORINE DOSE	MG/L	General Inorganic
7782505	50060	0.019		0.013		CHLORINE, TOTAL RESIDUAL	MG/L	General Inorganic
7782505	50064	0.019		0.013		CHLORINE, FREE AVAILABLE	MG/L	General Inorganic
7782505	50066	0.019		0.013		CHLORINE, COMBINED AVAILABLE	MG/L	General Inorganic
7782505	50074	0.019		0.013		CHLORITE, WHOLE WATER	MG/L	General Inorganic
	61215				200 [^]	FECAL COLIFORM, GENERAL #/100ML	#/100ML	Bacteriological
16887006	70352	860	250 ^s			CHLORIDE, ORGANIC	MG/L	General Organic
14797558	71850		44			NITRATE NITROGEN, TOTAL (AS NO3)	MG/L	Nitrogen

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
14797558	71851		44			NITRATE NITROGEN, DISSOLVED (AS NO3)	MG/L	Nitrogen
14797650	71855		3.3			NITRITE NITROGEN, TOTAL (AS NO2)	MG/L	Nitrogen
14797650	71856		3.3			NITRITE NITROGEN, DISSOLVED (AS NO2)	MG/L	Nitrogen
7439976	71890	2.4	2.0	2.1		MERCURY, DISSOLVED	UG/L	Metal
7439976	71895	2.4	2.0	2.1		MERCURY, SUSPENDED	UG/L	Metal
7439976	71900	2.4	2.0	2.1		MERCURY, TOTAL	UG/L	Metal
7439976	71901	2.4	2.0	2.1		MERCURY, TOTAL RECOVERABLE IN WATER AS HG	UG/L	Metal
7440439	71946	3.9 ⁺	5.0	43		CADMIUM, EXTRACTABLE	UG/L	Metal
7440473	71947		100			CHROMIUM, EXTRACTABLE	UG/L	Metal
7439921	71949	82 ⁺	15 ^a	220		LEAD, EXTRACTABLE	UG/L	Metal
7440666	71950	120 ⁺	5000 ^s	95		ZINC, EXTRACTABLE	UG/L	Metal
7440508	71951	18 ⁺	1300 ^a	2.9		COPPER, EXTRACTABLE	UG/L	Metal
1336363	76011	2000	500	10000		PCBS, SUSPENDED, WATER	NG/L	General Organic
1336363	76012	2000	500	10000		PCBS, TOTAL RECOVERABLE, WATER	NG/L	General Organic
156592	77093		70			CIS-1,2-DICHLOROETHYLENE, WHOLE WATER	UG/L	General Organic
100425	77128		100			STYRENE, WHOLE WATER	UG/L	General Organic
106489	77296			29700 [*]		P-CHLOROPHENOL, WHOLE WATER	UG/L	General Organic
106934	77651		0.05			1,2-DIBROMOETHANE, WHOLE WATER	UG/L	General Organic
95954	77687	100 ^p		240 ^p		2,4,5-TRICHLOROPHENOL, WHOLE WATER	UG/L	General Organic
935955	77769			440 [*]		2,3,5,6-TETRACHLOROPHENOL, WHOLE WATER	UG/L	General Organic

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
103231	77903		400			BIS (2-ETHYLHEXYL) ADIPATE, WHOLE WATER	UG/L	General Organic
18540299	78247	16	100	1100		CHROMIUM, HEXAVALENT, TOTAL RECOVERABLE	UG/L	Metal
57125	78248	22	200	1.0		CYANIDE, TOTAL RECOVERABLE, WATER, WHOLE	UG/L	Metal
	78456	11*		12*		HALOMETHANES, SUMMATION, WHOLE WATER	MG/L	General Organic
14808798	78462		250 ^s			SULFATE, WATER, DISSOLVED AS S	MG/L	Metal
85007	78885		20			DIQUAT DIBROMIDE (REGLONE) WHOLE WATER SAMPLE	UG/L	Pesticide
7440611	80020		20 ^c			URANIUM, DISS. BY EXTRACTION FLUOROMETRIC	UG/L	Radiological
16065831	80357	1700	100	10300*		CHROMIUM, TRIVALENT, DISSOLVED	UG/L	Metal
57125	81208	0.022	0.2	0.001		CYANIDE,FREE (NOT AMENABLE TO CHLORINATION)	MG/L	General Inorganic
608731	81283	100*		0.34*		BENZENEHEXACHLORIDE, WHOLE WATER	UG/L	Pesticide
88857	81287		7.0			DNBP(C10H12N2O5), WHOLE WATER SAMPLE	UG/L	Pesticide
26638197	81327	23000*	5.0	10300*		DICHLOROPROPANE, WHOLE WATER SAMPLE	UG/L	General Organic
25321226	81333	1120*		1970*		DICHLOROBENZENE ISOMER, WHOLE WATER SAMPLE	UG/L	General Organic
2921882	81403	0.083		0.011		DURSBAN (CHLOROPYRIFOS) WHOLE WATER SAMPLE	UG/L	Pesticide
1563662	81405		40			CARBOFURAN (EURADAN) WHOLE WATER SAMPLE	UG/L	Pesticide
76017	81501	7240*		390*		PENTACHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
25321226	81524	1120*		1970*		DICHLOROBENZENE, WHOLE WATER SAMPLE	UG/L	General Organic
25322207	81549	9320*				TETRACHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
26638197	81703	23*	0.005*	10.3*		DICHLOROPROPANE, WHOLE WATER SAMPLE	MG/L	General Organic
7440508	81750	18 ⁺	1300 ^a	2.9		COPPER, INTERSTITIAL WATERFROM SEDIMENTS	UG/L	Metal

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
7440020	81752	1400 ⁺	100	75		NICKEL, INTERSTITIAL WATER FROM SEDIMENTS	UG/L	Metal
7440666	81754	120 ⁺	5000 ^s	95		ZINC, INTERSTITIAL WATER FROM SEDIMENTS	UG/L	Metal
25323891	81853	18000 [*]				TRICHLOROETHANE, WHOLE WATER SAMPLE	UG/L	General Organic
7439976	81931	2.4	2.0	2.1		MERCURY (HG) SUSPENDED FRACTION OF WATER	UG/G	Metal
7440666	81933	120 ⁺	5000 ^s	95		ZINC (ZN) SUSPENDED FRACTION OF WATER	UG/G	Metal
7439921	81936	82 ⁺	15 ^a	220		LEAD (PB) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440439	81937	3.9 ⁺	5.0	43		CADMIUM (CD) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440473	81938		100			CHROMIUM (CR) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440508	81939	18 ⁺	1300 ^a	2.9		COPPER (CU) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440666	81940	120 ⁺	5000 ^s	95		ZINC (ZN) DISSOLVED CATIONIC SPECIES	UG/L	Metal
7440473	81941		100			CHROMIUM (CR) DISSOLVED ANIONIC SPECIES	UG/L	Metal
7440508	81942	18 ⁺	1300 ^a	2.9		COPPER (CU) DISSOLVED ANIONIC SPECIES	UG/L	Metal
7440666	81943	120 ⁺	5000 ^s	95		ZINC (ZN) DISSOLVED ANIONIC SPECIES	UG/L	Metal
	82078				50 ^l	TURBIDITY, FIELD	NTU	Physical
	82079				50 ^l	TURBIDITY, LAB	NTU	Physical
88857	82226		7.0			2 SECONDARY BUTYL 4,6-DINITROPHENOL	UG/L	Pesticide
16887006	82295	860000	250000 ^s			CHLORIDE DISSOLVED AS CL IN WATER	UG/L	General Inorganic
72435	82350		40			METHOXYCHLOR, DISSOLVED IN WATER	UG/L	Pesticide
72435	82351		40			METHOXYCHLOR, SUSPENDED IN WATER	UG/L	Pesticide
115297	82354	0.22		0.034		ENDOSULFAN, DISSOLVED IN WATER	UG/L	Pesticide

C.A.S. Number	STORET Code	FRESH ACUTE	DRINKING WATER	MARINE ACUTE	OTHER	PARAMETER DESCRIPTION	UNITS	CATEGORY
115297	82355	0.22		0.034		ENDOSULFAN, SUSPENDED IN WATER	UG/L	Pesticide
57125	82573	0.022	0.2	0.001		CYANIDE/CHLORINATION IN WATER	MG/L	General Inorganic
1646873	82586		4.0			ALDICARB SULFOXIDE, WATER, TOTAL RECOVERABLE	UG/L	General Organic
1646884	82587		2.0			ALDICARB SULFONE, WHOLE WATER, TOTAL RECOVERABLE	UG/L	General Organic
23135220	82613		200			OXAMYL, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
1563662	82615		40			CARBOFURAN, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
116063	82619		3.0			ALDICARB, WHOLE WATER, TOTAL RECOVERABLE	UG/L	Pesticide
33213659	82624	0.22		0.034		ENDOSULFAN, BETA, WH WATER, TOTAL RECOVERABLE	UG/L	Pesticide
96128	82625		0.2			DIBROMOCHLOROPROPANE, WATER, TOTAL RECOVERABLE	UG/L	Pesticide
7440382	82702	360	50	69		ARSENIC, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440393	82703		2			BARIUM, FIELD ACIDIFIED, DECANTED, WATER	MG/L	Metal
7440417	82704	130 [*]	4.0			BERYLLIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440439	82705	3.9 ⁺	5.0	43		CADMIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440473	82706		100			CHROMIUM, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440508	82708	18 ⁺	1300 ^a	2.9		COPPER, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7439921	82711	82 ⁺	15 ^a	220		LEAD, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7439976	82713	2.4	2.0	2.1		MERCURY, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440020	82715	1400 ⁺	100	75		NICKEL, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440224	82716	4.1 ⁺	100 ^s	0.12		SILVER, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal
7440666	82719	120 ⁺	5000 ^s	95		ZINC, FIELD ACIDIFIED, DECANTED, WATER	UG/L	Metal

Footnote Key:

*Insufficient Data to Develop Criteria. Value Presented is the L.O.E.L. - Lowest Observed Effect Level.

+Hardness Dependent Criteria (100 mg/L CaCO₃ Used).

***pH Dependent Criteria (7.8 pH Used).

=Rule of thumb criterion used by the NPS Air Quality Division for determining sensitivity to acid deposition.

^Freshwater bathing criterion, EPA geometric mean based on at least 5 samples equally spaced over a 30-day period; Enterococci marine water bathing criterion 35 CFU/100 ml.

#EPA freshwater aquatic life chronic criterion; marine criterion is ≤ 6.5 , ≥ 8.5 .

!Arizona state standard.

^aEPA action level, 40 CFR 141.80.

^bCalifornia and Florida state bathing water standards.

^cA Compilation of Water Quality Goals, California Regional Water Quality Control Board Central Valley Region, Sacramento, California, September, 1991.

^mTotal coliform drinking water maximum contaminant level (1 cfu/100ml or 1 mpn/100ml) was not used in water quality criteria comparisons.

^pProposed Criterion.

^rAverage annual concentration assumed to produce a total body or organ dose of 4 mrem/year, 40 CFR 141.16.

^sEPA National Secondary Drinking Water Regulation, 40 CFR 143.

^tThe maximum contaminant level for the sum of the concentrations of trihalomethanes is 100 µg/L, 40 CFR 141.12.

^uColdwater criterion one day minimum; warmwater criterion seven day mean minimum.

Appendix G

Inventory Data Evaluation and Analysis (IDEA) Servicewide Inventory and Monitoring Program "Level I" Parameter Groups

The following table provides the Servicewide Inventory and Monitoring Program's "Level I" water quality inventory parameter groups (National Park Service 1993). In order to determine the presence and/or absence of data for each of these parameter groups in the park, the parameter groups had to be defined by STORET parameter codes. This table provides the STORET codes and parameter descriptions for each parameter comprising one of the Servicewide Inventory and Monitoring Program's "Level I" water quality parameter groups. Additional parameters could have been incorporated into each group, but an effort was made to represent each group with the parameters deemed to most likely occur in STORET and parks. The Toxic Elements Parameter Group was defined as the EPA's Clean Water Act Section 304(a) Priority Toxic Pollutants (40 CFR 131.36). Parameters are listed in ascending order of STORET code within each parameter group. It is important to note that similar parameters often have non-consecutive codes. Consequently, scanning the entire list is necessary to find all the parameters of a particular type (eg. lead, copper, etc.). Refer to the Parameter Period of Record Tabulation to obtain the STORET code for any parameter measured in the park.

STORET Code	Water Temperature Parameter Group	C.A.S. Number
00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)	-
00011	TEMPERATURE, WATER (DEGREES FAHRENHEIT)	-
STORET Code	Flow Parameter Group ¹	C.A.S. Number
00056	FLOW RATE, GALLONS/DAY	-
00058	FLOW RATE, GALLONS/MIN.	-
00059	FLOW RATE, INSTANTANEOUS, GALLONS/MINUTE	-
00060	FLOW, STREAM, MEAN DAILY CFS	-
00061	FLOW, STREAM, INSTANTANEOUS CFS	-
00065	STAGE, STREAM (FEET)	-
00067	TIDE STAGE CODE	-
00072	STAGE, STREAM (METERS)	-

¹Tide stage is included in the Flow Parameter Group for coastal parks.

STORET Code	Clarity/Turbidity Parameter Group	C.A.S. Number
00070	TURBIDITY, (JACKSON CANDLE UNITS)	-
00075	TURBIDITY, HELLIGE (PPM AS SILICON DIOXIDE)	-
00076	TURBIDITY, HACH TURBIDIMETER (FORMAZIN TURB UNIT)	-
00077	TRANSPARENCY, SECCHI DISC (INCHES)	-
00078	TRANSPARENCY, SECCHI DISC (METERS)	-
00530	RESIDUE, TOTAL NONFILTRABLE (MG/L)	-
82078	TURBIDITY, FIELD NEPHELOMETRIC TURBIDITY UNITS NTU	-
82079	TURBIDITY, LAB NEPHELOMETRIC TURBIDITY UNITS, NTU	-
STORET Code	Conductivity Parameter Group	C.A.S. Number
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)	-
00095	SPECIFIC CONDUCTANCE (UMHOS/CM @ 25C)	-
00096	SALINITY AT 25 DEGREES C (MG/ML)	-
00480	SALINITY - PARTS PER THOUSAND	-
STORET Code	Dissolved Oxygen Parameter Group	C.A.S. Number
00299	OXYGEN, DISSOLVED, ANALYSIS BY PROBE (MG/L)	7782447
00300	OXYGEN, DISSOLVED (MG/L)	7782447
00301	OXYGEN, DISSOLVED, PERCENT OF SATURATION	7782447
00389	OXYGEN, DISSOLVED, LAB ANAL. BY PROBE OF FIELD SAMPLE (MG/L)	7782447
STORET Code	pH Parameter Group	C.A.S. Number
00400	PH (STANDARD UNITS)	-
00403	PH, LAB (STANDARD UNITS)	-
00406	PH, FIELD (STANDARD UNITS)	-

STORET Code	Alkalinity Parameter Group	C.A.S. Number
00409	ALKALINITY, TOTAL, LOW LEVEL GRAN ANALYSIS (μ EQ/L)	471341
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)	471341
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	77098
00430	ALKALINITY, CARBONATE (MG/L AS CaCO ₃)	471341
00435	ACIDITY, TOTAL (MG/L AS CaCO ₃)	471341
00440	BICARBONATE ION (MG/L AS HCO ₃)	71523
00445	CARBONATE ION (MG/L AS CO ₃)	3812326
STORET Code	Nitrate/Nitrogen Parameter Group	C.A.S. Number
00600	NITROGEN, TOTAL (MG/L AS N)	17778880
00602	NITROGEN, DISSOLVED (MG/L AS N)	17778880
00605	NITROGEN, ORGANIC, TOTAL (MG/L AS N)	17778880
00607	NITROGEN, ORGANIC, DISSOLVED (MG/L AS N)	17778880
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)	17778880
00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	17778880
00612	AMMONIA, UNIONIZED (MG/L AS N)	7664417
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	17778880
00620	NITRATE NITROGEN, TOTAL (MG/L AS N)	17778880
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)	17778880
00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	17778880
00630	NITRITE PLUS NITRATE, TOTAL 1 DET. (MG/L AS N)	17778880
00631	NITRITE PLUS NITRATE, DISSOLVED 1 DET. (MG/L AS N)	17778880
71845	NITROGEN, AMMONIA, TOTAL (MG/L AS NH ₄)	14798039
71846	NITROGEN, AMMONIA, DISSOLVED (MG/L AS NH ₄)	14798039
71850	NITRATE NITROGEN, TOTAL (MG/L AS NO ₃)	14797558
71851	NITRATE NITROGEN, DISSOLVED (MG/L AS NO ₃)	14797558
71855	NITRITE NITROGEN, TOTAL (MG/L AS NO ₂)	14797650
71856	NITRITE NITROGEN, DISSOLVED (MG/L AS NO ₂)	14797650

STORET Code	Phosphate/Phosphorus Parameter Group	C.A.S. Number
00650	PHOSPHATE, TOTAL (MG/L AS PO4)	14265442
00655	PHOSPHATE, POLY (MG/L AS PO4)	14265442
00660	PHOSPHATE, ORTHO (MG/L AS PO4)	14265442
00665	PHOSPHORUS, TOTAL (MG/L AS P)	7723140
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	7723140
00670	PHOSPHORUS, TOTAL ORGANIC (MG/L AS P)	7723140
00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P)	7723140
70505	PHOSPHORUS, TOTAL, COLORIMETRIC METHOD (MG/L AS P)	7723140
70507	PHOSPHORUS, IN TOTAL ORTHOPHOSPHATE (MG/L AS P)	7723140
STORET Code	Sulfates/Total Dissolved Solids/Hardness Parameter Group	C.A.S. Number
00900	HARDNESS, TOTAL (MG/L AS CaCO3)	471341
00945	SULFATE, TOTAL (MG/L AS SO4)	14808798
00946	SULFATE, DISSOLVED (MG/L AS SO4)	14808798
70300	RESIDUE, TOTAL FILTRABLE (DRIED AT 180C), (MG/L)	-
STORET Code	Chlorophyll Parameter Group	C.A.S. Number
32209	CHLOROPHYLL A (UG/L) FLUOROMETRIC CORRECTED	479618
32210	CHLOROPHYLL A (UG/L) TRICHROMATIC UNCORRECTED	479618
32211	CHLOROPHYLL A (UG/L) SPECTROPHOTOMETRIC ACID METH.	479618
32217	CHLOROPHYLL A (UG/L) FLUOROMETRIC UNCORRECTED	479618
32223	CHLOROPHYLL A (MG/M2) SPECTROPHOTOMETRIC CORRECTED	479618
32228	CHLOROPHYLL A (MG/M2) PERIPHYTON SPECTRO.	479618
32229	CHLOROPHYLL A (MG/M2) FLUOR. CORRECTED, SUBSTRATER	479618
32230	CHLOROPHYLL A (MG/L)	479618

STORET Code	Bacteria Parameter Group	C.A.S. Number
00111	RATIO OF FECAL COLIFORM TO FECAL STREPTOCOCCI	-
31501	COLIFORM, TOT, MEMBRANE FILTER, IMMED., M-ENDO MED,35C	-
31503	COLIFORM, TOT, MEMBRANE FILTER, DELAY, M-ENDO MED, 35C	-
31504	COLIFORM, TOT, MEMBRANE FILTER, IMMED., LES-ENDO AGAR, 35C	-
31505	COLIFORM, TOT, MPN, CONFIRMED TEST,35C(TUBE 31506)	-
31506	COLIFORM, TOT, MPN, CONFIRMED TEST, TUBE CONFIG.	-
31507	COLIFORM, TOT, MPN, COMPLETED TEST,35C(TUBE 31508)	-
31508	COLIFORM, TOT, MPN, COMPLETED TEST, TUBE CONFIG.	-
31613	FECAL COLIFORM, MEMBR, FILTER,M-FC AGAR,44.5C,24HR	-
31614	FECAL COLIFORM, MPN, TUBE CONFIGURATION	-
31615	FECAL COLIFORM, MPN, EC MED, 44.5C (TUBE 31614)	-
31616	FECAL COLIFORM, MEMBR FILTER, M-FC BROTH, 44.5C	-
31617	FECAL COLIFORM, MPN,EIJKMAN TEST,44.5C(TUBE 31618)	-
31625	FECAL COLIFORM, MF, M-FC, 0.7 UM	-
31648	E. COLI - MTEC-MF	-
31649	ENTEROCOCCI- ME-MF	-
31673	FECAL STREPTOCOCCI, MBR FILT, KF AGAR, 35C, 48HR	-
31676	FECAL STREPTOCOCCI, MPN, KF BROTH, TUBE CONFIG.	-
31677	FECAL STREPTOCOCCI, MPN, AD-EVA, 35C (TUBE 31678)	-
31751	PLATE COUNT, TOTAL, TPC AGAR, 35C, 24 HRS	-
61214	FECAL STREPTOCOCCI, GENERAL #/100ML	-
61215	FECAL COLIFORM, GENERAL #/100ML	-
STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants)	C.A.S. Number
00718	CYANIDE, WEAK ACID, DISSOC. WATER, WHOLE (UG/L)	57125
00719	CYANIDE, FREE, IN WATER & WASTEWATERS, HBG (UG/L)	57125
00720	CYANIDE, TOTAL (MG/L AS CN)	57125
00722	CYANIDE, FREE (AMENABLE TO CHLORINATION) (MG/L)	57125

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
00723	CYANIDE, DISSOLVED STD METHOD (UG/L)	57125
00724	CYANIDE COMPLEXED TO A RANGE OF COMPNDS (UG/L)	57125
00969	CHRYBOTILE ASBESTOS FIBERS/LITER	1332214
00973	AMPHIBOLE ASBESTOS FIBERS/LITER	1332214
00976	AMBIGUOUS ASBESTOS FIBERS/LITER	1332214
00977	NON-AMPHIBOLE NON-CHRYBOTILE ASBESTOS FIBERS/LITER	1332214
00978	ARSENIC, TOTAL RECOVERABLE IN WATER AS AS	7440382
00981	SELENIUM, TOTAL RECOVERABLE IN WATER AS SE (UG/L)	7782492
00982	THALLIUM, TOTAL RECOVERABLE IN WATER AS (UG/L)	7440280
00990	SELENITE, TOTAL RECOVERABLE INORGANIC (UG/L)	7782492
00991	ARSENIC, TOTAL RECOVER. TRIVALENT INORGANIC (UG/L)	7440382
00995	ARSENIC, INORGANIC DISSOLVED (UG/L AS AS)	7440382
00996	ARSENIC, INORGANIC SUSPENDE (UG/L AS AS)	7440382
00997	ARSENIC, INORGANIC TOTAL (UG/L AS AS)	7440382
00998	BERYLLIUM, TOTAL RECOVERABLE IN WATER AS BE (UG/L)	7440417
01000	ARSENIC, DISSOLVED (UG/L AS AS)	7440382
01001	ARSENIC, SUSPENDE (UG/L AS AS)	7440382
01002	ARSENIC, TOTAL (UG/L AS AS)	7440382
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	7440417
01011	BERYLLIUM, SUSPENDE (UG/L AS BE)	7440417
01012	BERYLLIUM, TOTAL (UG/L AS BE)	7440417
01025	CADMIUM, DISSOLVED (UG/L AS CD)	7440439
01026	CADMIUM, SUSPENDE (UG/L AS CD)	7440439
01027	CADMIUM, TOTAL (UG/L AS CD)	7440439
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	7440473
01031	CHROMIUM, SUSPENDE (UG/L AS CR)	7440473
01032	CHROMIUM, HEXVALENT (UG/L AS CR)	7440473
01033	CHROMIUM, TRI-VAL (UG/L AS CR)	16065831
01034	CHROMIUM, TOTAL (UG/L AS CR)	7440473

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01040	COPPER, DISSOLVED (UG/L AS CU)	7440508
01041	COPPER, SUSPENDED (UG/L AS CU)	7440508
01042	COPPER, TOTAL (UG/L AS CU)	7440508
01049	LEAD, DISSOLVED (UG/L AS PB)	7439921
01050	LEAD, SUSPENDED (UG/L AS PB)	7439921
01051	LEAD, TOTAL (UG/L AS PB)	7439921
01057	THALLIUM, DISSOLVED (UG/L AS TL)	7440280
01058	THALLIUM, SUSPENDED (UG/L AS TL)	7440280
01059	THALLIUM, TOTAL (UG/L AS TL)	7440280
01065	NICKEL, DISSOLVED (UG/L AS NI)	7440020
01066	NICKEL, SUSPENDED (UG/L AS NI)	7440020
01067	NICKEL, TOTAL (UG/L AS NI)	7440020
01074	NICKEL, TOTAL RECOVERABLE IN WATER AS NI (UG/L)	7440020
01075	SILVER, DISSOLVED (UG/L AS AG)	7440224
01076	SILVER, SUSPENDED (UG/L AS AG)	7440224
01077	SILVER, TOTAL (UG/L AS AG)	7440224
01079	SILVER, TOTAL RECOVERABLE IN WATER AS AG (UG/L)	7440224
01089	COPPER AS SUSPENDED BLACK OXIDE IN WATER (MG/L)	7440508
01090	ZINC, DISSOLVED (UG/L AS ZN)	7440666
01091	ZINC, SUSPENDED (UG/L ZN)	7440666
01092	ZINC, TOTAL (UG/L AS ZN)	7440666
01094	ZINC, TOTAL RECOVERABLE IN WATER AS ZN (UG/L)	7440666
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	7440360
01096	ANTIMONY, SUSPENDED (UG/L AS SB)	7440360
01097	ANTIMONY, TOTAL (UG/L AS SB)	7440360
01113	CADMIUM, TOTAL RECOVERABLE IN WATER AS CD (UG/L)	7440439
01114	LEAD, TOTAL RECOVERABLE IN WATER AS PB (UG/L)	7439921
01118	CHROMIUM, TOTAL RECOVERABLE IN WATER AS CR (UG/L)	7440473
01119	COPPER, TOTAL RECOVERABLE IN WATER AS CU (UG/L)	7440508

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01124	THALLIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	7440280
01128	THALLIUM, TOTAL RECOVERABLE <95%, UG/L AS TL	7440280
01138	SELENIUM, IN WATER, LBS/DAY	7782492
01145	SELENIUM, DISSOLVED (UG/L AS SE)	7782492
01146	SELENIUM, SUSPENDED (UG/L AS SE)	7782492
01147	SELENIUM, TOTAL (UG/L AS SE)	7782492
01167	SELENIUM, ACID SOLUBLE, WATER, WHOLE (UG/L)	7782492
01220	CHROMIUM, HEXAVALENT, DISSOLVED IN (UG/L AS CR)	18540299
01252	ARSENIC, LB/DAY/CFS STREAM FLOW	7440382
01253	CADMIUM, LB/DAY/CFS STREAM FLOW	7440439
01254	CHROMIUM, TOTAL (LBS/DAY/CFS STREAM FLOW)	7740473
01255	CHROMIUM, HEXAVALENT, LB/DAY/CFS STREAM FLOW	18540299
01256	COPPER, LB/DAY/CFS STREAM FLOW	7440508
01257	CYANIDE LB/DAY/CFS STREAM FLOW	57125
01259	LEAD, LB/DAY/CFS STREAM FLOW	7439921
01260	MERCURY, LB/DAY/CFS STREAM FLOW	7439976
01261	NICKEL, LB/DAY/CFS STREAM FLOW	7440020
01263	SILVER, LB/DAY/CFS STREAM FLOW	7440224
01264	ZINC LB/DAY/CFS STREAM FLOW	7440666
01268	ANTIMONY, (SB), WATER, TOTAL RECOVERABLE (UG/L)	7440360
01291	CYANIDE, FILTERABLE, TOTAL IN WATER (UG/L)	57125
01303	ZINC, POTENTIALLY DISSOLVED WATER (MG/L)	7440666
01304	SILVER, POTENTIALLY DISSOLVED WATER (MG/L)	7440224
01306	COPPER, POTENTIALLY DISSOLVED WATER (MG/L)	7440508
01307	CHROMIUM, HEXAVALENT, POTENT. DISS. WATER (MG/L)	18540299
01309	ARSENIC, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440382
01312	BERYLLIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440417
01313	CADMIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440439

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
01314	CHROMIUM, TRIVALENT, POTENT., DISS., WATER (MG/L)	16065831
01318	LEAD, POTENTIALLY, DISSOLVED, WATER (MG/L)	7439921
01321	MERCURY, POTENTIALLY, DISSOLVED, WATER (MG/L)	7439976
01322	NICKEL, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440020
01323	SELENIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7782492
01324	THALLIUM, POTENTIALLY, DISSOLVED, WATER (MG/L)	7440280
01523	SILVER, IONIC (UG/L)	7440224
22675	SELENIUM, DISSOLVED ORGANIC (UG/L)	7782492
22676	SELENIUM, HEXAVALENT, DISSOLVED (UG/L)	7782492
22677	SELENIUM, TETRAVALENT, DISSOLVED	7782492
22678	ARSENIC, DISSOLVED ORGANIC (UG/L)	7440382
22679	ARSENIC, PENTAVALENT, DISSOLVED (UG/L)	7440382
22680	ARSENIC, TRIVALENT, DISSOLVED (UG/L)	7440382
30197	2-CHLOROETHYL VINYL ETHER, WATER, WHL, RECOVER (UG/L)	110758
30201	CHLOROMETHANE, WATER, WHOLE, RECOVERABLE (UG/L)	74873
30202	BROMOMETHANE, WATER, WHOLE, RECOVERABLE (UG/L)	74839
32003	CARBON CHLOROFORM AND CARBON ALCOHOL EXT. (UG/L)	67663
32005	CARBON CHLOROFORM EXTRACTABLES (UG/L)	67663
32021	CARBON CHLOROFORM EXTRACTS, ETHER INSOLUBLE (UG/L)	67663
32022	CARBON CHLOROFORM EXTRACTS, WATER SOLUBLES (UG/L)	67663
32101	BROMODICHLOROMETHANE, WHOLE WATER (UG/L)	75274
32102	CARBON TETRACHLORIDE, WHOLE WATER, (UG/L)	56235
32103	1,2-DICHLOROETHANE, WHOLE WATER (UG/L)	107062
32104	BROMOFORM, WHOLE WATER, (UG/L)	75252
32105	DIBROMOCHLOROMETHANE, WHOLE WATER, (UG/L)	124481
32106	CHLOROFORM, WHOLE WATER (UG/L)	67663
32260	CARBON TETRACHLORIDE EXTRACTABLES (MG/L)	56235
32270	CHLOROFORM EXTRACTABLES TOTAL IN MG PER LITER	67663

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34010	TOLUENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	108883
34030	BENZENE IN WTR SMPLE GC-MS, HEXADECONE EXT. (UG/L)	71432
34198	BHC-DELTA, WATER, WHOLE (LBS/DAY)	319868
34200	ACENAPHTHYLENE, TOTAL (UG/L)	208968
34201	ACENAPHTHYLENE, DISSOLVED (UG/L)	208968
34202	ACENAPHTHYLENE, SUSPENDEED (UG/L)	208968
34205	ACENAPHTHENE, TOTAL (UG/L)	83329
34206	ACENAPHTHENE, DISSOLVED (UG/L)	83329
34207	ACENAPHTHENE, SUSPENDEED (UG/L)	83329
34210	ACROLEIN, TOTAL (UG/L)	107028
34211	ACROLEIN, DISSOLVED (UG/L)	107028
34212	ACROLEIN, SUSPENDEED (UG/L)	107028
34215	ACRYLONITRILE, TOTAL (UG/L)	107131
34216	ACRYLONITRILE, DISSOLVED (UG/L)	107131
34217	ACRYLONITRILE, SUSPENDEED (UG/L)	107131
34220	ANTHRACENE, TOTAL (UG/L)	120127
34221	ANTHRACENE, DISSOLVED (UG/L)	120127
34222	ANTHRACENE, SUSPENDEED (UG/L)	120127
34225	ASBESTOS (FIBROUS) TOTAL (UG/L)	1332214
34226	ASBESTOS (FIBROUS) DISSOLVED (UG/L)	1332214
34227	ASBESTOS (FIBROUS) SUSPENDEED (UG/L)	1332214
34230	BENZO(B)FLUORANTHENE, WHOLE WATER (UG/L)	205992
34231	BENZO(B)FLUORANTHENE, DISSOLVED (UG/L)	205992
34232	BENZO(B)FLUORANTHENE, SUSPENDEED (UG/L)	205992
34235	BENZENE, DISSOLVED (UG/L)	71432
34236	BENZENE, SUSPENDEED (UG/L)	71432
34239	BENZIDINE, DISSOLVED (UG/L)	92875
34240	BENZIDINE, SUSPENDEED (UG/L)	92875

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34242	BENZO(K)FLUORANTHENE, TOTAL (UG/L)	207089
34243	BENZO(K)FLUORANTHENE, DISSOLVED (UG/L)	207089
34244	BENZO(K)FLUORANTHENE, SUSPENDED (UG/L)	207089
34247	BENZO-A-PYRENE, TOTAL (UG/L)	50328
34248	BENZO-A-PYRENE, DISSOLVED (UG/L)	50328
34249	BENZO-A-PYRENE, SUSPENDED (UG/L)	50328
34253	A-BHC-ALPHA, DISSOLVED (UG/L)	319846
34254	A-BHC-ALPHA, SUSPENDED (UG/L)	319846
34255	B-BHC-BETA, DISSOLVED (UG/L)	319857
34256	B-BHC-BETA, SUSPENDED (UG/L)	319857
34259	DELTA BENZENE HEXACHLORIDE, TOTAL (UG/L)	319868
34260	DELTA BENZENE HEXACHLORIDE, DISSOLVED (UG/L)	319868
34261	DELTA BENZENE HEXACHLORIDE, SUSPENDED (UG/L)	319868
34265	R-BHC (LINDANE) GAMMA, DISSOLVED (UG/L)	58899
34266	R-BHC (LINDANE) GAMMA, SUSPENDED (UG/L)	58899
34273	BIS (2-CHLOROETHYL) ETHER, TOTAL (UG/L)	111444
34274	BIS (2-CHLOROETHYL) ETHER, DISSOLVED (UG/L)	111444
34275	BIS (2-CHLOROETHYL) ETHER, SUSPENDED (UG/L)	111444
34278	BIS (2-CHLOROETHOXY) METHANE, TOTAL (UG/L)	111911
34279	BIS (2-CHLOROETHOXY) METHANE, DISSOLVED (UG/L)	111911
34280	BIS (2-CHLOROETHOXY) METHANE, SUSPENDED (UG/L)	111911
34288	BROMOFORM, DISSOLVED (UG/L)	75252
34289	BROMOFORM, SUSPENDED (UG/L)	75252
34292	N-BUTYL BENZYL PHTHALATE, WHOLE WATER (UG/L)	85687
34293	N-BUTYL BENZYL PHTHALATE, DISSOLVED (UG/L)	85687
34294	N-BUTYL BENZYL PHTHALATE, SUSPENDED (UG/L)	85687
34297	CARBON TETRACHLORIDE, DISSOLVED (UG/L)	56235
34298	CARBON TETRACHLORIDE, SUSPENDED (UG/L)	56235

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34301	CHLOROBENZENE, TOTAL (UG/L)	108907
34302	CHLOROBENZENE, DISSOLVED (UG/L)	108907
34303	CHLOROBENZENE, SUSPENDED (UG/L)	108907
34306	CHLORODIBROMOMETHANE, TOTAL (UG/L)	124481
34307	CHLORODIBROMOMETHANE, DISSOLVED (UG/L)	124481
34308	CHLORODIBROMOMETHANE, SUSPENDED (UG/L)	124481
34311	CHLOROETHANE, TOTAL (UG/L)	75003
34312	CHLOROETHANE, DISSOLVED (UG/L)	75003
34313	CHLOROETHANE, SUSPENDED (UG/L)	75003
34316	CHLOROFORM, DISSOLVED (UG/L)	67663
34317	CHLOROFORM, SUSPENDED (UG/L)	67663
34320	CHRYSENE, TOTAL (UG/L)	218019
34321	CHRYSENE, DISSOLVED (UG/L)	218019
34322	CHRYSENE, SUSPENDED (UG/L)	218019
34325	CYANIDE, SUSPENDED (MG/L)	57125
34327	DI-N-BUTYL PHTHALATE, DISSOLVED (UG/L)	84742
34328	DICHLOROBROMOMETHANE, DISSOLVED (UG/L)	75274
34329	DICHLOROBROMOMETHANE, SUSPENDED (UG/L)	75274
34336	DIETHYL PHTHALATE, TOTAL (UG/L)	84662
34337	DIETHYL PHTHALATE, DISSOLVED (UG/L)	84662
34338	DIETHYL PHTHALATE, SUSPENDED (UG/L)	84662
34341	DIMETHYL PHTHALATE, TOTAL (UG/L)	131113
34342	DIMETHYL PHTHALATE, DISSOLVED (UG/L)	131113
34343	DIMETHYL PHTHALATE, SUSPENDED (UG/L)	131113
34346	1,2-DIPHENYLHYDRAZINE, TOTAL (UG/L)	122667
34347	1,2-DIPHENYLHYDRAZINE, DISSOLVED (UG/L)	122667
34348	1,2-DIPHENYLHYDRAZINE, SUSPENDED (UG/L)	122667
34351	ENDOSULFAN SULFATE, TOTAL (UG/L)	1031078

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34352	ENDOSULFAN SULFATE, DISSOLVED (UG/L)	1031078
34353	ENDOSULFAN SULFATE, SUSPENDED (UG/L)	1031078
34356	ENDOSULFAN, BETA, TOTAL (UG/L)	33213659
34357	ENDOSULFAN, BETA, DISSOLVED (UG/L)	33213659
34358	ENDOSULFAN, BETA, SUSPENDED (UG/L)	33213659
34361	ENDOSULFAN, ALPHA, TOTAL (UG/L)	959988
34362	ENDOSULFAN, ALPHA, DISSOLVED (UG/L)	959988
34363	ENDOSULFAN, ALPHA, SUSPENDED (UG/L)	959988
34371	ETHYLBENZENE, TOTAL (UG/L)	100414
34372	ETHYLBENZENE, DISSOLVED (UG/L)	100414
34373	ETHYLBENZENE, SUSPENDED (UG/L)	100414
34376	FLUORANTHENE, TOTAL (UG/L)	206440
34377	FLUORANTHENE, DISSOLVED (UG/L)	206440
34378	FLUORANTHENE, SUSPENDED (UG/L)	206440
34381	FLUORENE, TOTAL (UG/L)	86737
34382	FLUORENE, DISSOLVED (UG/L)	86737
34383	FLUORENE, SUSPENDED (UG/L)	86737
34386	HEXACHLOROCYCLOPENTADIENE, TOTAL (UG/L)	77474
34387	HEXACHLOROCYCLOPENTADIENE, DISSOLVED (UG/L)	77474
34388	HEXACHLOROCYCLOPENTADIENE, SUSPENDED (UG/L)	77474
34391	HEXACHLOROBUTADIENE, TOTAL (UG/L)	87683
34392	HEXACHLOROBUTADIENE, DISSOLVED (UG/L)	87683
34393	HEXACHLOROBUTADIENE, SUSPENDED (UG/L)	87683
34396	HEXACHLOROETHANE, TOTAL (UG/L)	67721
34397	HEXACHLOROETHANE, DISSOLVED (UG/L)	67721
34398	HEXACHLOROETHANE, SUSPENDED (UG/L)	67721
34401	HEXACHLOROBENZENE, DISSOLVED (UG/L)	118741
34402	HEXACHLOROBENZENE, SUSPENDED (UG/L)	118741

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34403	INDENO (1,2,3-CD) PYRENE, TOTAL (UG/L)	193395
34404	INDENO (1,2,3-CD) PYRENE, DISSOLVED (UG/L)	193395
34405	INDENO (1,2,3-CD) PYRENE, SUSPENDED (UG/L)	193395
34408	ISOPHORONE, TOTAL (UG/L)	78591
34409	ISOPHORONE, DISSOLVED (UG/L)	78591
34410	ISOPHORONE, SUSPENDED (UG/L)	78591
34413	METHYL BROMIDE, TOTAL (UG/L)	74839
34414	METHYL BROMIDE, DISSOLVED (UG/L)	74839
34415	METHYL BROMIDE, SUSPENDED (UG/L)	74839
34418	METHYL CHLORIDE, TOTAL (UG/L)	74873
34419	METHYL CHLORIDE, DISSOLVED (UG/L)	74873
34420	METHYL CHLORIDE, SUSPENDED (UG/L)	74873
34423	METHYLENE CHLORIDE, TOTAL (UG/L)	75092
34424	METHYLENE CHLORIDE, DISSOLVED (UG/L)	75092
34425	METHYLENE CHLORIDE, SUSPENDED (UG/L)	75092
34428	N-NITROSODI-N-PROPYLAMINE, TOTAL (UG/L)	621647
34429	N-NITROSODI-N-PROPYLAMINE, DISSOLVED (UG/L)	621647
34430	N-NITROSODI-N-PROPYLAMINE, SUSPENDED (UG/L)	621647
34433	N-NITROSODIPHENYLAMINE, TOTAL (UG/L)	86306
34434	N-NITROSODIPHENYLAMINE, DISSOLVED (UG/L)	86306
34435	N-NITROSODIPHENYLAMINE, SUSPENDED (UG/L)	86306
34438	N-NITROSODIMETHYLAMINE, TOTAL (UG/L)	62759
34439	N-NITROSODIMETHYLAMINE, DISSOLVED (UG/L)	62759
34440	N-NITROSODIMETHYLAMINE, SUSPENDED (UG/L)	62759
34443	NAPHTHALENE, DISSOLVED (UG/L)	91203
34444	NAPHTHALENE, SUSPENDED (UG/L)	91203
34447	NITROBENZENE, TOTAL (UG/L)	98953
34448	NITROBENZENE, DISSOLVED (UG/L)	98953

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34449	NITROBENZENE, SUSPENDED (UG/L)	98953
34452	PARACHLOROMETA CRESOL, TOTAL (UG/L)	59507
34453	PARACHLOROMETA CRESOL, DISSOLVED (UG/L)	59507
34454	PARACHLOROMETA CRESOL, SUSPENDED (UG/L)	59507
34457	PCB - 1242, DISSOLVED (UG/L)	53469219
34458	PCB - 1242, SUSPENDED (UG/L)	53469219
34459	PCP (PENTACHLOROPHENOL), DISSOLVED (UG/L)	87865
34460	PCP (PENTACHLOROPHENOL), SUSPENDED (UG/L)	87865
34461	PHENANTHRENE, TOTAL (UG/L)	85018
34462	PHENANTHRENE, DISSOLVED (UG/L)	85018
34463	PHENANTHRENE, SUSPENDED (UG/L)	85018
34466	PHENOL, DISSOLVED (UG/L)	108952
34467	PHENOL, SUSPENDED (UG/L)	108952
34469	PYRENE, TOTAL (UG/L)	129000
34470	PYRENE, DISSOLVED (UG/L)	129000
34471	PYRENE, SUSPENDED (UG/L)	129000
34475	TETRACHLOROETHYLENE, TOTAL (UG/L)	127184
34476	TETRACHLOROETHYLENE, DISSOLVED (UG/L)	127184
34477	TETRACHLOROETHYLENE, SUSPENDED (UG/L)	127184
34481	TOLUENE, DISSOLVED (UG/L)	108883
34482	TOLUENE, SUSPENDED (UG/L)	108883
34485	TRICHLOROETHYLENE, DISSOLVED (UG/L)	79016
34486	TRICHLOROETHYLENE, SUSPENDED (UG/L)	79016
34493	VINYL CHLORIDE, DISSOLVED (UG/L)	75014
34494	VINYL CHLORIDE, SUSPENDED (UG/L)	75014
34496	1,1-DICHLOROETHANE, TOTAL (UG/L)	75343
34497	1,1-DICHLOROETHANE, DISSOLVED (UG/L)	75343
34498	1,1-DICHLOROETHANE, SUSPENDED (UG/L)	75343

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34501	1,1-DICHLOROETHYLENE, TOTAL (UG/L)	75354
34502	1,1-DICHLOROETHYLENE, DISSOLVED (UG/L)	75354
34503	1,1-DICHLOROETHYLENE, SUSPENDED (UG/L)	75354
34506	1,1,1-TRICHLOROETHANE, TOTAL (UG/L)	71556
34507	1,1,1-TRICHLOROETHANE, DISSOLVED (UG/L)	71556
34508	1,1,1-TRICHLOROETHANE, SUSPENDED (UG/L)	71556
34511	1,1,2-TRICHLOROETHANE, TOTAL (UG/L)	79005
34512	1,1,2-TRICHLOROETHANE, DISSOLVED (UG/L)	79005
34513	1,1,2-TRICHLOROETHANE, SUSPENDED (UG/L)	79005
34516	1,1,2,2-TETRACHLOROETHANE, TOTAL (UG/L)	79345
34517	1,1,2,2-TETRACHLOROETHANE, DISSOLVED (UG/L)	79345
34518	1,1,2,2-TETRACHLOROETHANE, SUSPENDED (UG/L)	79345
34521	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, TOTAL (UG/L)	191242
34522	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, DISS. (UG/L)	191242
34523	BENZO(GHI)PERYLENE1,12-BENZOPERYLENE, SUSP. (UG/L)	191242
34526	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, TOTAL (UG/L)	56553
34527	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, DISS. (UG/L)	56553
34528	BENZO(A)ANTHRACENE1,2-BENZANTHRACENE, SUSP. (UG/L)	56553
34531	1,2-DICHLOROETHANE, TOTAL (UG/L)	107062
34532	1,2-DICHLOROETHANE, DISSOLVED (UG/L)	107062
34533	1,2-DICHLOROETHANE, SUSPENDED (UG/L)	107062
34536	1,2-DICHLOROBENZENE, TOTAL (UG/L)	95501
34537	1,2-DICHLOROBENZENE, DISSOLVED (UG/L)	95501
34538	1,2-DICHLOROBENZENE, SUSPENDED (UG/L)	95501
34541	1,2-DICHLOROPROPANE, TOTAL (UG/L)	78875
34542	1,2-DICHLOROPROPANE, DISSOLVED (UG/L)	78875
34543	1,2-DICHLOROPROPANE, SUSPENDED (UG/L)	78875
34546	TRANS-1,2-DICHLOROETHENE, TOTAL, IN WATER (UG/L)	156605

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34547	TRANS-1,2-DICHLOROETHENE, DISSOLVED (UG/L)	156605
34548	TRANS-1,2-DICHLOROETHENE, SUSPENDED (UG/L)	156605
34551	1,2,4-TRICHLOROBENZENE, TOTAL (UG/L)	120821
34552	1,2,4-TRICHLOROBENZENE, DISSOLVED (UG/L)	120821
34553	1,2,4-TRICHLOROBENZENE, SUSPENDED (UG/L)	120821
34556	1,2,5,6-DIBENZANTHRACENE, TOTAL (UG/L)	53703
34557	1,2,5,6-DIBENZANTHRACENE, DISSOLVED (UG/L)	53703
34558	1,2,5,6-DIBENZANTHRACENE, SUSPENDED (UG/L)	53703
34561	1,3-DICHLOROPROPENE, TOTAL (UG/L)	542756
34562	1,3-DICHLOROPROPENE, DISSOLVED (UG/L)	542756
34563	1,3-DICHLOROPROPENE, SUSPENDED (UG/L)	542756
34566	1,3-DICHLOROBENZENE, TOTAL (UG/L)	541731
34567	1,3-DICHLOROBENZENE, DISSOLVED (UG/L)	541731
34568	1,3-DICHLOROBENZENE, SUSPENDED (UG/L)	541731
34571	1,4-DICHLOROBENZENE, TOTAL (UG/L)	106467
34572	1,4-DICHLOROBENZENE, DISSOLVED (UG/L)	106467
34573	1,4-DICHLOROBENZENE, SUSPENDED (UG/L)	106467
34576	2-CHLOROETHYL VINYL ETHER, TOTAL (UG/L)	110758
34577	2-CHLOROETHYL VINYL ETHER, DISSOLVED (UG/L)	110758
34578	2-CHLOROETHYL VINYL ETHER, SUSPENDED (UG/L)	110758
34581	2-CHLORONAPHTHALENE, TOTAL (UG/L)	91587
34582	2-CHLORONAPHTHALENE, DISSOLVED (UG/L)	91587
34583	2-CHLORONAPHTHALENE, SUSPENDED (UG/L)	91587
34586	2-CHLOROPHENOL, TOTAL (UG/L)	95578
34587	2-CHLOROPHENOL, DISSOLVED (UG/L)	95578
34588	2-CHLOROPHENOL, SUSPENDED (UG/L)	95578
34591	2-NITROPHENOL, TOTAL (UG/L)	88755
34592	2-NITROPHENOL, DISSOLVED (UG/L)	88755

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34593	2-NITROPHENOL, SUSPENDED (UG/L)	88755
34596	DI-N-OCTYL PHTHALATE, TOTAL (UG/L)	117840
34597	DI-N-OCTYL PHTHALATE, DISSOLVED (UG/L)	117840
34598	DI-N-OCTYL PHTHALATE, SUSPENDED (UG/L)	117840
34601	2,4-DICHLOROPHENOL, TOTAL (UG/L)	120832
34602	2,4-DICHLOROPHENOL, DISSOLVED (UG/L)	120832
34603	2,4-DICHLOROPHENOL, SUSPENDED (UG/L)	120832
34606	2,4-DIMETHYLPHENOL, TOTAL (UG/L)	105679
34607	2,4-DIMETHYLPHENOL, DISSOLVED (UG/L)	105679
34608	2,4-DIMETHYLPHENOL, SUSPENDED (UG/L)	105679
34611	2,4-DINITROTOLUENE, TOTAL (UG/L)	121142
34612	2,4-DINITROTOLUENE, DISSOLVED (UG/L)	121142
34613	2,4-DINITROTOLUENE, SUSPENDED (UG/L)	121142
34616	2,4-DINITROPHENOL, TOTAL (UG/L)	51285
34617	2,4-DINITROPHENOL, DISSOLVED (UG/L)	51285
34618	2,4-DINITROPHENOL, SUSPENDED (UG/L)	51285
34621	2,4,6-TRICHLOROPHENOL, TOTAL (UG/L)	88062
34622	2,4,6-TRICHLOROPHENOL, DISSOLVED (UG/L)	88062
34623	2,4,6-TRICHLOROPHENOL, SUSPENDED (UG/L)	88062
34626	2,6-DINITROTOLUENE, TOTAL (UG/L)	606202
34627	2,6-DINITROTOLUENE, DISSOLVED (UG/L)	606202
34628	2,6-DINITROTOLUENE, SUSPENDED (UG/L)	606202
34631	3,3'-DICHLOROBENZIDINE, TOTAL (UG/L)	91941
34632	3,3'-DICHLOROBENZIDINE, DISSOLVED (UG/L)	91941
34633	3,3'-DICHLOROBENZIDINE, SUSPENDED (UG/L)	91941
34636	4-BROMOPHENYL PHENYL ETHER, TOTAL (UG/L)	101553
34637	4-BROMOPHENYL PHENYL ETHER, DISSOLVED (UG/L)	101553
34638	4-BROMOPHENYL PHENYL ETHER, SUSPENDED (UG/L)	101553

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34641	4-CHLOROPHENYL PHENYL ETHER, TOTAL (UG/L)	7005723
34642	4-CHLOROPHENYL PHENYL ETHER, DISSOLVED (UG/L)	7005723
34643	4-CHLOROPHENYL PHENYL ETHER, SUSPENDED (UG/L)	7005723
34646	4-NITROPHENOL, TOTAL (UG/L)	100027
34647	4-NITROPHENOL, DISSOLVED (UG/L)	100027
34648	4-NITROPHENOL, SUSPENDED (UG/L)	100027
34651	P,P'-DDD, DISSOLVED (UG/L)	72548
34652	P,P'-DDD, SUSPENDED (UG/L)	72548
34653	P,P'-DDE, DISSOLVED (UG/L)	72559
34654	P,P'-DDE, SUSPENDED (UG/L)	72559
34655	P,P'-DDT, DISSOLVED (UG/L)	50293
34656	P,P'-DDT, SUSPENDED (UG/L)	50293
34657	DNOC (4,6-DINITRO-ORTHO-CRESOL), TOTAL (UG/L)	534521
34658	DNOC (4,6-DINITRO-ORTHO-CRESOL), DISSOLVED (UG/L)	534521
34659	DNOC (4,6-DINITRO-ORTHO-CRESOL), SUSPENDED (UG/L)	534521
34662	PCB - 1221, DISSOLVED (UG/L)	11104282
34663	PCB - 1221, SUSPENDED (UG/L)	11104282
34665	PCB - 1232, DISSOLVED (UG/L)	11141165
34666	PCB - 1232, SUSPENDED (UG/L)	11141165
34671	PCB - 1016, TOTAL (UG/L)	12674112
34672	PCB - 1016, DISSOLVED (UG/L)	12674112
34673	PCB - 1016, SUSPENDED (UG/L)	12674112
34675	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD),TOT(UG/L)	1746016
34676	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)DISS(UG/L)	1746016
34677	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)SUSP(UG/L)	1746016
34694	PHENOL(C6H5OH)-SINGLE COMPOUND TOTAL (UG/L)	108952
34696	NAPHTHALENE, TOTAL (UG/L)	91203
34750	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)TOT(PG/L)	1746016

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
34751	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)DISS(PG/L)	1746016
34752	2,3,7,8-TETRACHLORODIBENZO-PDIOXIN(TCDD)SUSP(PG/L)	1746016
39032	PCP (PENTACHLOROPHENOL) WHOLE WATER SAMPLE (UG/L)	87865
39039	HEXACHLOROBENZENE WATER SAMPLE,ELECTRON CPT (UG/L)	118741
39100	BIS(2-ETHYLHEXYL) PHTHALATE, WHOLE WATER (UG/L)	117817
39103	BIS(2-ETHYLHEXYL) PHTHALATE, DISSOLVED, (UG/L)	117817
39104	BIS(2-ETHYLHEXYL) PHTHALATE, SUSPENDED, (UG/L)	117817
39107	PHTHALATES,DIETHYLHEXYL SUS.FRAC.WTR DWT (MG/KG)	117817
39110	DI-N-BUTYL PHTHALATE, WHOLE WATER (UG/L)	84742
39114	DI-N-BUTYL PHTHALATE, SUSPENDED (UG/L)	84742
39115	PHTHALATES,DIBUTYL SUS.FRAC.WATER DWT (UG/KG)	84742
39120	BENZIDINE IN WHOLE WATER SAMPLE (UG/L)	92875
39175	VINYL CHLORIDE-WHOLE WATER SAMPLE (UG/L)	75014
39180	TRICHLOROETHYLENE-WHOLE WATER SAMPLE (UG/L)	79016
39300	P,P' DDT IN WHOLE WATER SAMPLE (UG/L)	50293
39310	P,P' DDD IN WHOLE WATER SAMPLE (UG/L)	72548
39320	P,P' DDE IN WHOLE WATER SAMPLE (UG/L)	72559
39330	ALDRIN IN WHOLE WATER SAMPLE (UG/L)	309002
39331	ALDRIN IN FILT. FRAC. OF WAT. SAMP. (UG/L)	309002
39332	ALDRIN IN SUSP. FRAC. OF WAT. SAMP. (UG/L)	309002
39336	BHC-ALPHA, WATER, WHOLE (LBS/DAY)	319846
39337	ALPHA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	319846
39338	BETA BENZENE HEXACHLORIDE IN WHOLE WATER (UG/L)	319857
39340	GAMMA-BHC(LINDANE), WHOLE WATER (UG/L)	58899
39341	GAMMA-BHC(LINDANE), DISSOLVED (UG/L)	58899
39342	GAMMA-BHC(LINDANE), SUSPENDED (UG/L)	58899
39344	BHC-GAMMA, WATER, WHOLE (LBS/DAY)	58899
39350	CHLORDANE(TECH MIX & METABS), WHOLE WATER (UG/L)	57749

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
39352	CHLORDANE(TECH MIX & METABS), DISSOLVED (UG/L)	57749
39353	CHLORDANE(TECH MIX & METABS), SUSPENDED (UG/L)	57749
39360	DDD IN WHOLE WATER SAMPLE (UG/L)	72548
39361	DDD IN FILT. FRAC. OF WATER SMAPLE (UG/L)	72548
39362	DDD IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72548
39365	DDE IN WHOLE WATER SAMPLE (UG/L)	72559
39366	DDE IN FILT. FRAC. OF WATER SAMPLE (UG/L)	72559
39367	DDE IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72559
39370	DDT IN WHOLE WATER SAMPLE (UG/L)	50293
39371	DDT IN FILT. FRAC. OF WATER SAMPLE (UG/L)	50293
39372	DDT IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	50293
39380	DIELDRIN IN WHOLE WATER SAMPLE (UG/L)	60571
39381	DIELDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	60571
39382	DIELDRIN IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	60571
39390	ENDRIN IN WHOLE WATER SAMPLE (UG/L)	72208
39391	ENDRIN IN FILT. FRAC. OF WATER SAMPLE (UG/L)	72208
39392	ENDRIN IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	72208
39400	TOXAPHENE IN WHOLE WATER SAMPLE (UG/L)	8001352
39401	TOXAPHENE IN FILT. FRAC. OF WATER SAMPLE (UG/L)	8001352
39402	TOXAPHENE IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	8001352
39410	HEPTACHLOR IN WHOLE WATER SAMPLE (UG/L)	76448
39411	HEPTACHLOR IN FILT. FRAC. OF WATER SAMPLE (UG/L)	76448
39412	HEPTACHLOR IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	76448
39420	HEPTACHLOR EPOXIDE IN WHOLE WATER SAMPLE (UG/L)	1024573
39421	HEPTACHLOR EPOXIDE IN FILT. FRAC. WAT. SAM. (UG/L)	1024573
39422	HEPTACHLOR EPOXIDE IN SUSP. FRAC. WAT. SAM. (UG/L)	1024573
39488	PCB - 1221 IN THE WHOLE WATER SAMPLE (UG/L)	11104282
39492	PCB - 1232 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11141165

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
39496	PCB - 1242 PCB SERIES WHOLE WATER SAMPLE (UG/L)	53469219
39500	PCB - 1248 PCB SERIES WHOLE WATER SAMPLE (UG/L)	12672296
39501	PCB - 1248 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	12672296
39502	PCB - 1248 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	12672296
39504	PCB - 1254 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11097691
39505	PCB - 1254 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	11097691
39506	PCB - 1254 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	11097691
39508	PCB - 1260 PCB SERIES WHOLE WATER SAMPLE (UG/L)	11096825
39509	PCB - 1260 IN FILT. FRAC. OF WATER SAMPLE (UG/L)	11096825
39510	PCB - 1260 IN SUSP. FRAC. OF WATER SAMPLE (UG/L)	11096825
39700	HEXACHLOROBENZENE IN WHOLE WATER SAMPLE (UG/L)	118741
39702	HEXACHLOROBUTADIENE IN WHOLE WATER SAMPLE (UG/L)	87683
39782	LINDANE IN WHOLE WATER SAMPLE (UG/L)	58899
39920	DNOC IN WHOLE WATER SAMPLE (UG/L)	534521
46322	LINDANE PLUS ISOMERS IN WHOLE WATER SAMPLE (UG/L)	58899
46323	DELTA-BHC IN WHOLE WATER SAMPLE (UG/L)	319868
46326	HEPTACHLOR AND METABOLITES IN WH. H2O SAMP. (UG/L)	76448
46479	CYANIDE, DISSOLVED, WATER (UG/L)	57125
46551	ARSENIC, FIELD ACIDIFIED W/HNO3, LAB FILT. (UG/L)	7440382
46559	CADMIUM, FIELD ACIDIFIED-HNO3-LAB FILTER (UG/L-CD)	7440439
46560	CHROMIUM, FIELD ACIDIFIED-HNO3-LAB FILT. (UG/L-CR)	7440473
46562	COPPER, FIELD ACIDIFIED-HNO3-LAB FILTER. (UG/L-CU)	7440508
46564	LEAD, FIELD ACIDIFIED-HNO3-LAB FILTERED (UG/L-PB)	7439921
46566	SILVER, FIELD ACIDIFIED-HNO3-LAB FILTER.(UG/L-AG)	7440224
46567	ZINC, EXTRACT. FIELD ACID W/HNO3, LAB FILT. (UG/L)	7440666
70012	PARACHLOROMETA CRESOL, WATER, WHOLE (LBS/DAY)	59507
70017	HEXACHLOROCYCLOPENTADIENE, WATER, WHOLE (LBS/DAY)	77474
70021	LEAD, (TCLP), WATER, TOTAL (MG/L)	7439921

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
71890	MERCURY, DISSOLVED (UG/L AS HG)	7439976
71895	MERCURY, SUSPENDED (UG/L AS HG)	7439976
71900	MERCURY, TOTAL (UG/L AS HG)	7439976
71901	MERCURY, TOTAL RECOVERABLE IN WATER AS HG (UG/L)	7439976
71946	CADMIUM, EXTRACTABLE (UG/L AS CD)	7440439
71947	CHROMIUM, EXTRACTABLE (UG/L AS CR)	7440473
71949	LEAD, EXTRACTABLE (UG/L AS PB)	7439921
71950	ZINC, EXTRACTABLE (UG/L AS ZN)	7440666
71951	COPPER, EXTRACTABLE (UG/L AS CU)	7440508
73063	CHLOROGUAIACOL,4-, TOTAL, WATER (UG/L)	16766306
73522	PROPANE, 2,2'-OXYBIS(1-CHLORO)- TOTAL (UG/L)	108601
77163	1,3-DICHLOROPROPENE-1, WHOLE WATER (UG/L)	542756
77354	1,1-DICHLORO-2,2-DIFLUOROETHANE WHOLE WATER (UG/L)	471432
77771	3-CHLORO-4-HYDROXYBENZOPHENONE, WHOLE WATER (UG/L)	55191203
78113	ETHYL BENZENE WHOLE WATER SAMPLE (UG/L)	100414
78124	BENZENE IN WATER (VOLATILE ANALYSIS) (UG/L)	71432
78131	TOLUENE IN WHOLE WATER (VOLATILE ANALYSIS) (UG/L)	108883
78208	2,4-DINITRO-O-CRESOL IN WHOLE WATER SAMPLE (UG/L)	534521
78247	CHROMIUM, HEXAVALENT, TOTAL RECOVERABLE, WT (UG/L)	18540299
78248	CYANIDE, TOTAL RECOVERABLE, WATER, WHOLE (UG/L)	57125
80357	CHROMIUM, TRIVALENT, DISSOLVED, AS CR	16065831
81208	CYANIDE, FREE (NOT AMEN. TO CHLORINATION) (MG/L)	57125
81210	CYANIDE - STATE OF ILLINOIS (MG/L)	57125
81214	CADMIUM - STATE OF ILLINOIS (MG/L)-COLD	7440439
81215	CHROMIUM - STATE OF ILLINOIS (MG/L), COLD DIGEST	18540299
81216	CHROMIUM(TRI)-STATE OF ILLINOIS (MG/L)-COLD DIGEST	16065831
81217	CHROMIUM, TOTAL - STATE OF ILLINOIS (MG/L) COLD DIGEST	7440473
81218	COPPER, STATE OF ILLINOIS, MG/L, COLD DIGEST	7440508

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
81220	LEAD, STATE OF ILLINOIS, MG/L, COLD DIGEST	7439921
81222	NICKEL - STATE OF ILLINOIS, MG/L, COLD DIGEST	7440020
81223	SILVER, STATE OF ILLINOIS, MG/L, COLD DIGEST	7440224
81224	ZINC - STATE OF ILLINOIS, MG/L, COLD DIGEST	7440666
81642	SILVER (AG) IN WATER POUNDS PER DAY (LBS/DAY)	7440224
81750	COPPER, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440508
81751	LEAD, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7439921
81752	NICKEL, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440020
81753	CADMIUM, INTERSTITIAL WATER FROM SEDIMENT	7440439
81754	ZINC, INTERSTITIAL WATER FROM SEDIMENTS (UG/L)	7440666
81766	HEPTACHLOR EPOXIDE IN EPILITHIC ALGAE SED. (UG/KG)	1024573
81931	MERCURY (HG) SUSPENDED FRACTION OF WATER (UG/G)	7439976
81932	CADMIUM (CD) SUSPENDED FRACTION OF WATER (UG/G)	7440439
81933	ZINC (ZN) SUSPENDED FRACTION OF WATER (UG/G)	7440666
81934	LEAD (PB) SUSPENDED FRACTION OF WATER (UG/G)	7439921
81936	LEAD (PB) DISSOLVED CATIONIC SPECIES (UG/L)	7439921
81937	CADMIUM (CD) DISSOLVED CATIONIC SPECIES (UG/L)	7440439
81938	CHROMIUM, DISSOLVED CATIONIC SPECIES (UG/L)	7440473
81939	COPPER (CU) DISSOLVED CATIONIC SPECIES (UG/L)	7440508
81940	ZINC (ZN) DISSOLVED CATIONIC SPECIES (UG/L)	7440666
81941	CHROMIUM, DISSOLVED ANIONIC SPECIES (UG/L)	7440473
81942	COPPER (CU) DISSOLVED ANIONIC SPECIES (UG/L)	7440508
81943	ZINC (ZN) DISSOLVED ANIONIC SPECIES (UG/L)	7440666
82058	CHROMIUM, TOTAL, PERCENT REMOVAL	7440473
82399	CHROMIUM, HEXA VALENT (KG/BATCH)	18540299
82512	M,P-DICHLOROBENZENE (MEASURES 1,3&1,4) TOT. (UG/L)	541731
82573	CYANIDE/CHLORINATION IN WATER (MG/L)	57125
82621	HEXACHLOROBENZENE, WATER, TOTAL RECOVER. (UG/L)	118741

STORET Code	Toxic Elements (EPA Section 304(a) Priority Toxic Pollutants) cont.-	C.A.S. Number
82622	ENDRIN ALDEHYDE, WH. WATER, TOTAL RECOVER. (UG/L)	7421934
82623	ENDOSULFAN SULFATE, WATER, TOTAL RECOVER. (UG/L)	1031078
82624	ENDOSULFAN, BETA, WH. WATER, TOTAL RECOVER. (UG/L)	33213659
82626	1,2-DIPHENYLHYDRAZINE, WATER, TOTAL RECOVER. (UG/L)	122667
82627	PARACHLOROMETA CRESOL, WATER, TOTAL RECOVER. (UG/L)	59507
82702	ARSENIC, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440382
82704	BERYLLIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440417
82705	CADMIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440439
82706	CHROMIUM, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440473
82708	COPPER, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440508
82711	LEAD, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7439921
82713	MERCURY, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7439976
82715	NICKEL, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440020
82716	SILVER, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440224
82719	ZINC, FIELD ACIDIFIED, DECANTED, WATER (UG/L)	7440666
85006	ZINC, TOTAL - (#/DAY)	7440666
85007	CHROMIUM, TOTAL (#/DAY)	7440473
85010	NICKEL, TOTAL - (#/DAY)	7440020
85013	MERCURY, TOTAL - (#/DAY)	7439976

Appendix H

Literature Cited

- Code of Federal Regulations. 1994. Protection of Environment. 40 CFR Parts 100 to 149. Revised as of July 1, 1994. Published by the Office of the Federal Register, National Archives and Records Administration. U.S. Government Printing Office, Washington, D.C. 20402.
- Gilbert, R. O. 1987. Statistical Methods for Environmental Pollution Monitoring. Van Nostrand Reinhold Co., New York, NY. 320p.
- GKY and Associates. 1990. Dam Inventory Database and Retrieval Software: Final Report. U.S. Environmental Protection Agency, Water Quality Analysis Branch. Under Contract #68-03-3339.
- Kunkle, S. and J. Wilson. 1984. Specific Conductance and pH Measurements in Surface Waters: An Introduction for Park Natural Resource Specialists. Water Resources Field Support Laboratory Report No. 84-3. National Park Service, Water Resources Division, Fort Collins, Colorado 80525. 51p.
- National Park Service. 1993. Strategic Plan for Conducting Baseline Natural Resource Inventories in the National Park Service. National Park Service, Washington Office, Servicewide Inventory and Monitoring Program, Washington, D.C. Unpublished. 17p.
- U.S. Environmental Protection Agency. 1995. Quality Criteria for Water 1995. Final Draft. Office of Water Regulations and Standards, Washington, D.C.
- U.S. Environmental Protection Agency. 1989. STORET User Handbook. U.S. Environmental Protection Agency, Office of Water, Washington, D.C. 20460.
- U.S. Environmental Protection Agency. 1992. Office of Water Environmental and Program Information Systems Compendium. U.S. Environmental Protection Agency, Office of Water, Washington, D.C. 20460. 152p.
- U.S. Environmental Protection Agency. 1993. Technical Description of the Reach File. U.S. Environmental Protection Agency, Office of Water, Washington, D.C. 20460. 23p.
- U.S. Geological Survey. 1982. A U.S. Geological Survey Data Standard: Codes for the Identification of Hydrologic Units in the United States and Caribbean Outlying Areas. Geological Survey Circular 878-A. U.S. Geological Survey, Water Resources Division, Reston, VA. 22092. 115p.
- U.S. Geological Survey 1992. Hydro-Climatic Data Network: A U.S. Geological Survey Streamflow Data Set for the United States for the Study of Climate Variations 1874-1988. Open File Report 92-129/USGS Water Supply Paper No. 2406. U.S. Geological Survey, Water Resources Division, Reston, VA. 22092. 193p.
- Ward, R. C., J. C. Loftis, and G. B. McBride. 1990. Design of Water Quality Monitoring Systems. Van Nostrand Reinhold Co., New York, NY. 231p.

Appendix I

Selected General Water Quality References

- American Public Health Association. 1989. Standard Methods for the Examination of Water and Wastewater (17th ed.). Washington, D.C. 1476p.
- Drever, J. I. 1982. The Geochemistry of Natural Waters. Prentice-Hall, Inc., Englewood Cliffs, NJ. 388p.
- Dunne, T. and L. B. Leopold. 1978. Water in Environmental Planning. W.H. Freeman and Company, San Francisco, CA. 818p.
- Everett, L. G. 1980. Groundwater Monitoring. General Electric Co., Schenectady, NY. 440p.
- Fetter, C. W. 1988. Applied Hydrogeology (2nd ed.). MacMillan Publishing Co., New York, NY. 592p.
- Flora, M. D., T. E. Ricketts, J. Wilson, and S. Kunkle. 1984. Water Quality Criteria: An Overview for Park Natural Resource Specialists. WRFSL Report No. 84-4. National Park Service, Water Resources Field Support Laboratory, Fort Collins, CO. 46p.
- Gilbert, R. O. 1987. Statistical Methods for Environmental Pollution Monitoring. Van Nostrand Reinhold Co., New York, NY. 320p.
- Hem, J. D. 1985. Study and Interpretation of the Chemical Characteristics of Natural Water (3rd ed.). U.S. Geological Survey Water-Supply Paper 2254. U.S. Government Printing Office, Washington, D.C. 263p.
- Kunkle, S., W. S. Johnson, and M. Flora. 1987. Monitoring Stream Water Quality for Land-Use Impacts: A Training Manual for Natural Resource Management Specialists. Water Resources Division, National Park Service, Fort Collins, CO. 102p.
- Kunkle, S. and J. Wilson. 1984. Specific Conductance and pH Measurements in Surface Waters: An Introduction for Park Natural Resource Specialists. Water Resources Field Support Laboratory Report No. 84-3. National Park Service, Water Resources Division, Fort Collins, Colorado 80525. 51p.
- Merritt, R. W., and K. W. Cummins (eds.). 1984. An Introduction to the Aquatic Insects of North America (2nd ed.). Kendall/Hunt Publishing Co., Dubuque, IA. 44p.
- Morel, F. M. 1983. Principles of Aquatic Chemistry. John Wiley & Sons, Inc., New York, NY. 446p.
- Nielsen, D. M. (ed.). 1991. Practical Handbook of Ground-Water Monitoring. Lewis Publishers, Inc. Chelsea, MI. 717p.
- Ponce, S. L. 1980a. Statistical Methods Commonly Used in Water Quality Data Analysis. WSDG Technical Paper WSDG-TP-00001. U.S. Department of Agriculture, Forest Service, Watershed Systems Development Group, Fort Collins, CO. 136p.
- Ponce, S. L. 1980b. Water Quality Monitoring Programs. WSDG Technical Paper WSDG-TP-00002. U.S. Department of Agriculture, Forest Service, Watershed Systems Development Group, Fort Collins, CO. 68p.
- Rand, G. M. and S. R. Petrocelli (eds.). 1985. Fundamentals of Aquatic Toxicology. Hemisphere Publishing Co., New York, NY. 666p.

- Rantz, S. E. and others. 1982. Measurement and Computation of Streamflow: Volume 1. Measurement of Stage and Discharge. Volume 2. Computation of Discharge. U.S. Department of the Interior, Geological Survey Water Supply Paper 2175. 631p.
- Stednick, J.D. and D. M. Gilbert. 1998. Water Quality Inventory Protocol: Riverine Environments. National Park Service, Water Resources Division Technical Report NPS/NRWRD/NRTR-98/177. Fort Collins, CO. 103p.
- Stednick, J. D. 1991. Wildland Water Quality Sampling and Analysis. Academic Press, Inc., San Diego, CA. 217p.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). 1978. Water Quality Surveys: A Guide for the Collection and Interpretation of Water Quality Data. IHD-WHO Working Group on the Quality of Water, Paris, France. 350p.
- U.S. Department of the Interior. 1977. National Handbook of Recommended Methods for Water-Data Acquisition. U.S. Geological Survey, Office of Water-Data Coordination, Reston, VA. 990p.
- U.S. Environmental Protection Agency. 1978. Microbiological Methods for Monitoring the Environment: Water and Wastes. R. H. Border, J. A. Winter, and P. W. Scarpino. EPA-600/8-78-017. Office of Research and Development, Environmental Monitoring Systems Laboratory, Cincinnati, OH. 338p.
- U.S. Environmental Protection Agency. 1979b. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-020. (Revised March 1983). Office of Research and Development, Environmental Monitoring Systems Laboratory, Cincinnati, OH. 460p.
- U.S. Environmental Protection Agency. 1983. Water Quality Standards Handbook. Office of Water Regulations and Standards, Washington, D.C. 218p.
- U.S. Environmental Protection Agency. 1995. Quality Criteria for Water 1995. Final Draft. Office of Water Regulations and Standards, Washington, D.C.
- U.S. Environmental Protection Agency. 1989. Rapid Bioassessment Protocols for Use in Streams and Rivers: Benthic Macroinvertebrates and Fish. J. L. Plafkin, M. T. Barbour, K. D. Porter, S. K. Gross, and R. M. Hughes. EPA-444/4-89-001. Office of Water Regulations and Standards, Assessment and Watershed Protection Division, Washington, D.C. 162p.
- U.S. Environmental Protection Agency. 1990. Macroinvertebrate Field and Laboratory Methods for Evaluating the Biological Integrity of Surface Waters. D. J. Klemm, P. A. Lewis, F. Fulk, and J. M. Lazorchak. EPA-600/4-90-030. Office of Research and Development, Environmental Monitoring Systems Laboratory, Cincinnati, OH. 256p.
- U.S. Environmental Protection Agency. 1991a. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (4th ed.). C. I. Weber, ed. EPA-600/4-90-027. Office of Research and Development, Environmental Monitoring Systems Laboratory, Cincinnati, OH. 293p.

U.S. Environmental Protection Agency. 1991b. Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska. L. H. MacDonald, A. W. Smart, and R. C. Wissmar. EPA-910/9-91-001. Region 10, Seattle, WA. 162p.

U.S. Environmental Protection Agency. 1993. Guide to Federal Water Quality Programs and Information. T. Stuart and N. P. Ross. EPA-230-B-93-001. Office of Strategic Planning and Environmental Data, Environmental Statistics and Information Division. Washington, D.C. 194p.

Verschuere, K. 1983. Handbook of Environmental Data on Organic Chemicals (2nd ed.). Van Nostrand Reinhold Co., New York, NY. 1310p.

Viessman W. and M. J. Hammer. 1985. Water Supply and Pollution Control (4th ed.). Harper and Row, Publishers, Inc. New York, NY. 797p.

Ward, R. C., J. C. Loftis, and G. B. McBride. 1990. Design of Water Quality Monitoring Systems. Van Nostrand Reinhold Co., New York, NY. 231p.

Wetzel, R. G. 1983. Limnology (2nd ed.). Sanders College Publishing, Philadelphia, PA. 767p.



As the nation's principal conservation agency, the Department of the Interior has the responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The Department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.